The Consequences of Seniors Seeking Health Information Using the Internet and Other Sources

Stephanie Medlock, MSc, DVM

Saeid Eslami, PharmD, PhD
Marjan Askari, MSc
Danielle Sent, PhD
Sophia E. de Rooij, MD, PhD
Ameen Abu-Hanna, PhD
National program for care of the elderly

Department of Medical Informatics

KiK

Academic Medical Center
Amsterdam
The Netherlands
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Patient empowerment is important

... but what is patient empowerment?
“Patient empowerment is a process to help people **gain control**, which includes people **taking the initiative**, **solving problems**, and **making decisions**, and can be applied to different settings in health and social care, and self management.”
Empowerment requires information that allows patients to:

- take action
- take the initiative
- solve problems
- make decisions
- gain control

The internet is an effective medium for providing health information.
Context: Patient Empowerment

• Empowering seniors requires providing health information for seniors in a form that they can understand and act upon

• Is the internet an effective medium for providing health information to seniors?
Context: Internet use among seniors in the Netherlands

- 81% of people aged 65-75 years use the internet
- 54% of people aged 65-75 years use the internet for health information (66% of internet users)
- 34% of people >75 years use the internet
- Seniors are the fastest-growing group of internet users
Context: Health information online

• What information sources do seniors use and trust for health information?
• What are the consequences of seniors seeking health information?
• How do seniors feel about this information?
• What actions do they take?

Cyberchondria

I've looked up my symptom on the internet and I think I've got all these life threatening illnesses.
## Methods: Survey development

### Questions from:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of and satisfaction with the internet for health purposes</td>
<td>Taha J, Sharit J, Czaja S. 2009</td>
</tr>
<tr>
<td>Information needs and decision-making style</td>
<td>Rideout VJ, Neuman T, Kitchman M, Brodie M. 2005</td>
</tr>
<tr>
<td>Searching for health information</td>
<td></td>
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<tr>
<td>Use and perception of internet for health-related purposes in Germany</td>
<td></td>
</tr>
<tr>
<td>Information-seeking related to fall prevention</td>
<td></td>
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</tbody>
</table>
Methods: Study population

- Online survey
- Seniors that use the internet
- Invitations by email (298 email addresses)
Results: Survey response

- 118 responses (~40%)
- 100 completed at least one question from this section (34%)
- 86 completed all questions (29%)
- Mean age was 72 years (range 49-94 years) and 85% were age 65 and older
- No difference using all responses, only complete, and only >65
Results: Sources of health information

• 85% use the internet for health information, 54% use it “a fair amount” or “a lot.”

• Those who use the internet for health information reported higher use of all other resources as well

• 44% said the internet is their preferred source of health information
  – 36% other sources
  – 17% only health professionals
Results: Consequences

As a result of the information I found, I have:

<table>
<thead>
<tr>
<th>Action</th>
<th>never/once</th>
<th>sometimes/often</th>
</tr>
</thead>
<tbody>
<tr>
<td>decided to go to the doctor</td>
<td>66%</td>
<td>34%</td>
</tr>
<tr>
<td>decided <em>not</em> to go to the doctor</td>
<td>81%</td>
<td>19%</td>
</tr>
<tr>
<td>discussed the information with a doctor</td>
<td>70%</td>
<td>30%</td>
</tr>
<tr>
<td>made lifestyle changes</td>
<td>49%</td>
<td>51%</td>
</tr>
<tr>
<td>changed my medicine without consulting a doctor</td>
<td>97%</td>
<td>3%</td>
</tr>
</tbody>
</table>
Results: Consequences

As a result of the information I found, I have:

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>questioned a diagnosis</td>
<td>59%</td>
<td>41%</td>
</tr>
<tr>
<td>questioned a treatment</td>
<td>64%</td>
<td>36%</td>
</tr>
<tr>
<td>felt anxiety</td>
<td>64%</td>
<td>36%</td>
</tr>
<tr>
<td>felt reassured</td>
<td>45%</td>
<td>54%</td>
</tr>
<tr>
<td>felt more confused</td>
<td>66%</td>
<td>34%</td>
</tr>
<tr>
<td>felt more knowledgeable</td>
<td>43%</td>
<td>58%</td>
</tr>
</tbody>
</table>
Results: Correlation with internet use

Both feeling anxious *and* feeling reassured were correlated with higher internet use

*But*…

this association became non-significant when corrected for use of information resources in general
Main findings

- 85% used the internet for health information, and 54% use it “a fair amount” or “a lot.”

- Mostly did not act on the information
  - lifestyle changes were an exception

- Both feelings of anxiety and reassurance were correlated with internet use
  - but not when corrected for higher use of all resources
Implications

- Seniors are using the internet for health information
- Future surveys need to ask about both positive and negative consequences
- Translating knowledge into action may provide opportunities to empower seniors in maintaining their health
Limitations

- We intentionally surveyed only internet users
- Only 18 of the seniors in our survey did not use the internet for health information
  - only 7 of those used other information resources
- Some risk of social desirability bias, positivity effect
- Respondents may know each other
Future work

• Repeat the survey with a larger population, including non-internet users.

• Study *how* seniors use the internet for health information: what do they search for and do they find good information?

• Investigate barriers to action, to help seniors gain control in the health care process.
Conclusions

• Seniors are using the internet for health information

• Use is associated with an increase in both positive and negative consequences

• Except lifestyle changes, most did not act on the information they found

This is an opportunity to increase empowerment of seniors.