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Aging and Health Literacy

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Abstract

A recent study comparing older adults' health literacy skills with their satisfaction with health care providers' communication efforts did not find a correlation between the two measures. However, the results were interesting, including the fact that almost 40 percent of participants experienced moderate to severe difficulties in understanding everyday health information as presented in a food label (Newest Vital Sign assessment). This has implications for senior patient engagement in health care, particularly at a time when so many health transactions such as scheduling and records requests, not to mention general health information, are moving to online only format. Librarians should be aware of the issues surrounding health literacy in older adults and work with providers to address those deficits in health care navigation in this population.

Keywords

health literacy; older adults

I have noted the steady rise in interest in health literacy issues over the past several years, as other librarians have. My colleagues and I speculated that there was a connection between health literacy skills of older adults and their satisfaction with communication skills exhibited at their health care provider's office. We set out to prove our theory and completed a study comparing participants' health literacy scores with their general satisfaction with their health care providers. If correct we had planned to present the results in support of continuing education for providers and support staff on health literacy and communication skills. While we could not prove our theory in the end, we did emerge with some interesting data from the study we conducted in the course of the past year.

Librarians have followed developments in the area of health literacy with interest, and sought to provide their own perspective and information-seeking expertise, especially those working in consumer health information. One population that has been identified as being particularly at risk for health literacy deficits has been older adults (Kutner, Greenberg, Jin & Paulsen, 2006). It is also a fact that older adults are also more at risk for chronic and acute conditions (CDC, n.d.). This added risk of not fully understanding health information or knowing when to act on it is particularly unsettling, especially regarding these older adults with chronic conditions. Older adults with limited health literacy and chronic conditions are generally less informed about their health conditions, more likely to stray from drug therapy instructions, and experience more hospitalizations than health literate older adults (Nemmers, Jorge, & Leahy, 2013).

For our study fifty older adults (65 and over) were recruited to participate, mostly via the local public libraries, although a handful of participants were recruited within an

independent living center. The study did not include any demographic characteristics, except age. However, observational evidence indicated that the participants were overwhelmingly female and ethnically divided evenly between African American and white subjects. Participants were economically diverse. We took care to observe any potential dementia or other conditions that might have influenced the participants' responses.

The measurement tool used to assess their health literacy skills was the Newest Vital Sign (NVS), available from Pfizer Inc. at http://www.pfizerhealthliteracy.com/asset/pdf/NVS_Eng/files/nvs_flipbook_english_final.pdf, based on an ice cream label. We judged this tool to be best for our purposes because it is brief and it incorporates the math skills that are so much a part of 21st century health literacy. The questions are not considered especially difficult for people with functional reading and numerical skills. However, comprehension of information in food labels and application of that information to daily health-related tasks have been identified as particularly challenging for people with low health literacy skills. The presentation of the information on the label, especially the numerical data, causes many people confusion, even those with adequate overall literacy skills. Older adults are among those particularly at risk for misinterpreting food label information. (Rothman et al, 2006)

Over 39% of participants in this study found these questions from the Newest Vital Sign to be quite difficult. Even though it has been established that older adults are more likely to exhibit health literacy deficits than other age cohorts (Kutner et al, 2007), it was a surprise to see an intelligent, and even well-educated older adult (based on casual conversations with participants about their backgrounds) struggle with the numerical calculations of calories in a serving.

The-tool we used to assess participants' satisfaction with the communication skills exhibited in their health care providers' offices was the Interpersonal Processes of Care Survey (IPC). (See <http://dgim.ucsf.edu/cadc/cores/measurement/ipcindex.html> for access to the full and abbreviated instruments in English and Spanish.) This validated questionnaire, developed by researchers at the Center for Aging in Diverse Communities at UCSF, contains 29 questions divided into sections, such as "Hurried communication," "Patient-centered decision-making" or "Disrespectful office staff." A 5-point Likert-scale from Never to Always provides the range of potential responses for participants to questions such as, "How often did doctors let you say what you thought was important?" (Stewart, Nápoles-Springer, Gregorich & Santoyo-Olsson, 2007) One drawback of this tool was the absence of a "Not applicable" response, particularly to certain sections such as the "Explained results, medications." In our study, this was the section that was most often pointed out as problematic by our participants, who sometimes stated that they had no recent test results or medications to discuss with their providers. However, it was responses within the "Discrimination" section that participants most often skipped. Presumably, many of the white participants felt that some of these questions did not pertain to them. (This attitude was specifically expressed by several white participants.) Another predominant area of missing responses was situated within the "Patient-centered decision making" section, which raises questions regarding participants' experiences – or lack thereof – with this type of doctor/patient relationship. Still, that kind of conclusion is merely conjecture at this point without further study.

Whatever might be surmised from the missing responses, the predominant tone of the survey results, regardless of health literacy level, was overwhelmingly positive. Most were pleased with their doctors' listening skills, demeanor and respect for them as individuals, with relatively few negative survey responses or comments. See the following figures for representative questions and survey responses.

We were not able to prove any statistical correlation between the two measures. Perhaps the limitations of study sample size and even unconscious sampling bias produced unusually satisfied responses. However, it may also be that limited health literacy skills do not in fact correlate with lower doctor/patient relationship scores. Although the study results were interesting regardless, this is an area that obviously needs further study on a larger sample size.

For now, we can report to our local health care providers that their older patients are, in general, quite happy with their “bedside manners.” We can also verify the existence of substantial health literacy deficits within the local population of older adults. Whatever their general satisfaction with their providers, these limited skills in using health information present roadblocks to any provider efforts to encourage patient engagement, not to mention basic daily self-care especially for persons with chronic conditions such as diabetes. In addition, the trend toward digitization of medical forms and processes, not to mention increasing availability of health information online, presents particular challenges for these older adults (Gruman, 2013). (This study had included the introduction of tablets in the conduct of the assessments. However, this effort was abandoned when it became clear that the participants overwhelmingly preferred completing the paper assessments over the electronic version.) Older adults’ health literacy skills and challenges must be considered carefully in any health care transactions or health-education activities.

Acknowledgments

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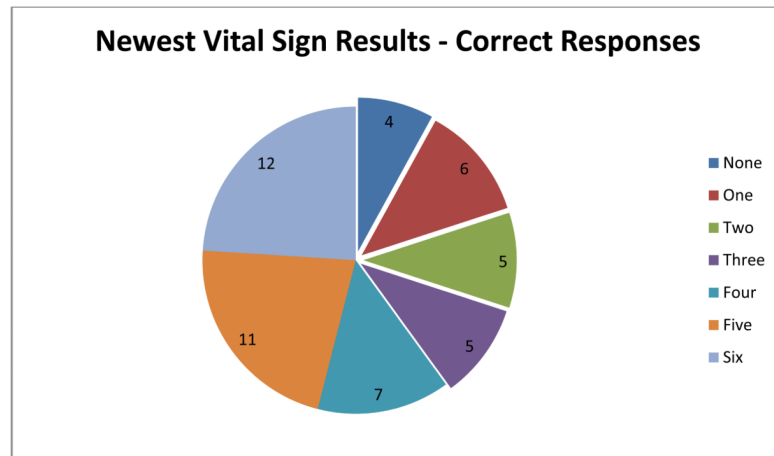


Figure 1.

Frequency of study participants' correct responses on Newest Vital Sign. (Zero to one correct response indicates likelihood of limited literacy; two to three correct responses indicate “possibility” of limited literacy. Over 39% of respondents fell within these two categories.)

Missing Responses - IPC Sections

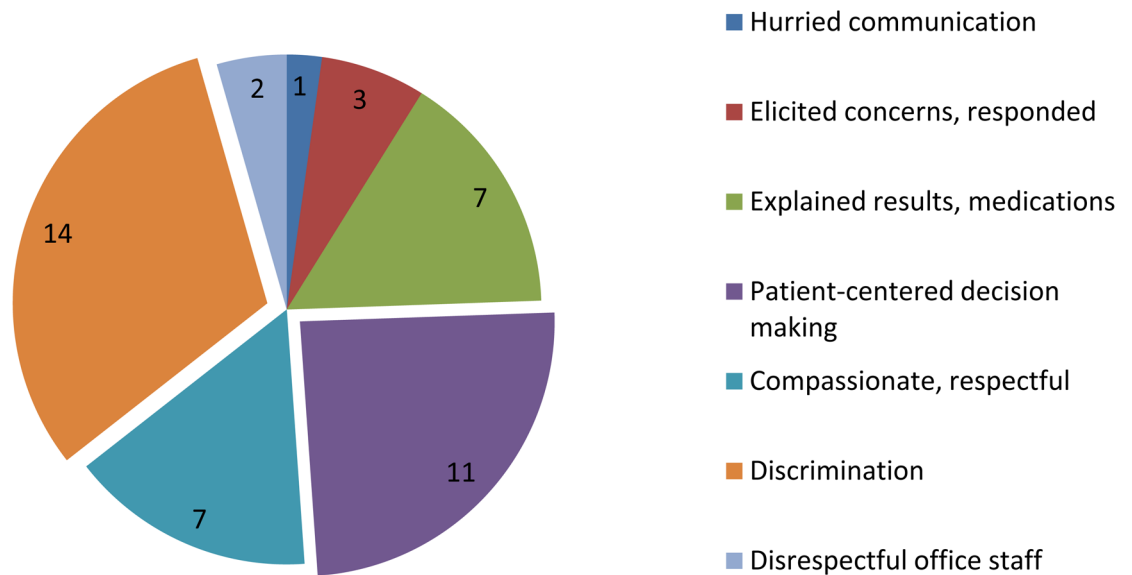


Figure 2.
Frequency of missing responses within IPC survey sections.

How often did doctors use words that were hard to understand?

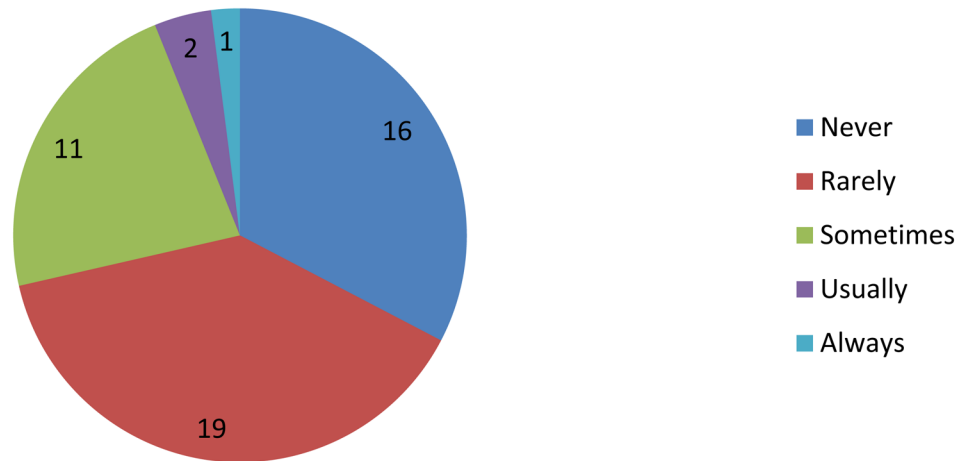


Figure 3. Frequency of responses to “Hurried communication” IPC section, question 2. (One response missing for this question.)

How often did doctors tell you what could happen if you didn't take a medicine that they prescribed for you?

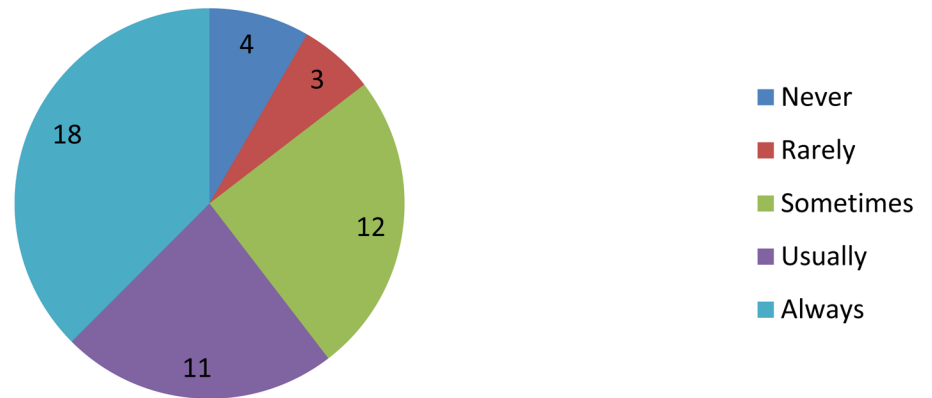


Figure 4.

Frequency of responses to question 3 in IPC section, "Explained results, medications." (Two missing responses for this question.)

How often did doctors ask if you would have any problems following what they recommended?

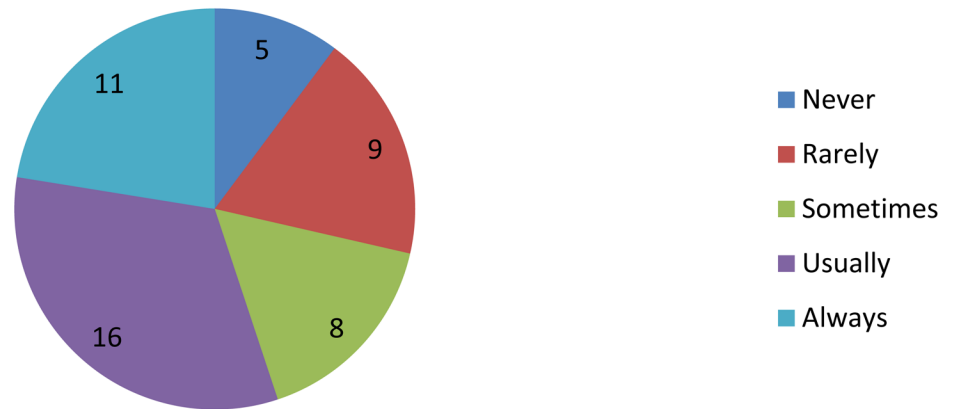


Figure 5.

Frequency of responses to question 1 from IPC "Patient-centered decision making" section.
(One missing response in this section.)

How often did doctors really respect you as a person?

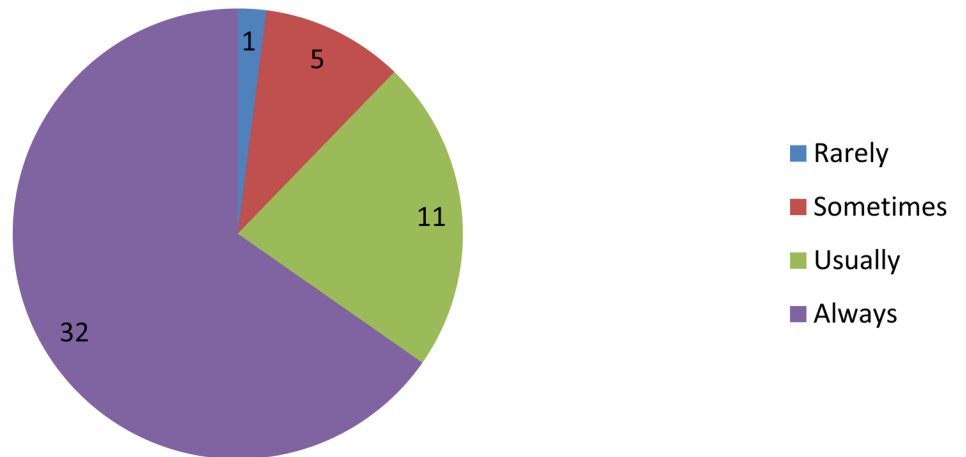


Figure 6. Frequency of responses to question 4 in IPC “Compassionate, respectful” section. (One missing response in this

How often did doctors make assumptions about your income?

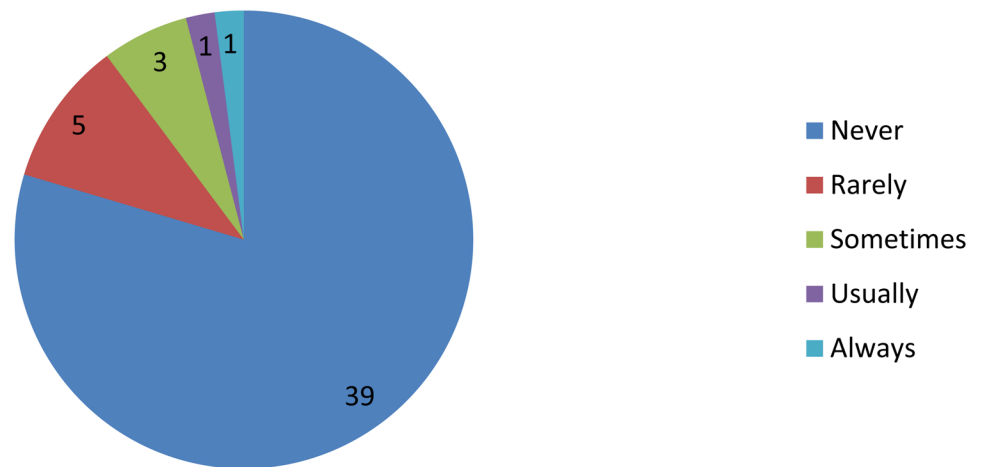


Figure 7. Frequency of responses to question 2 in IPC “Discrimination” section. (One missing response in this section.)

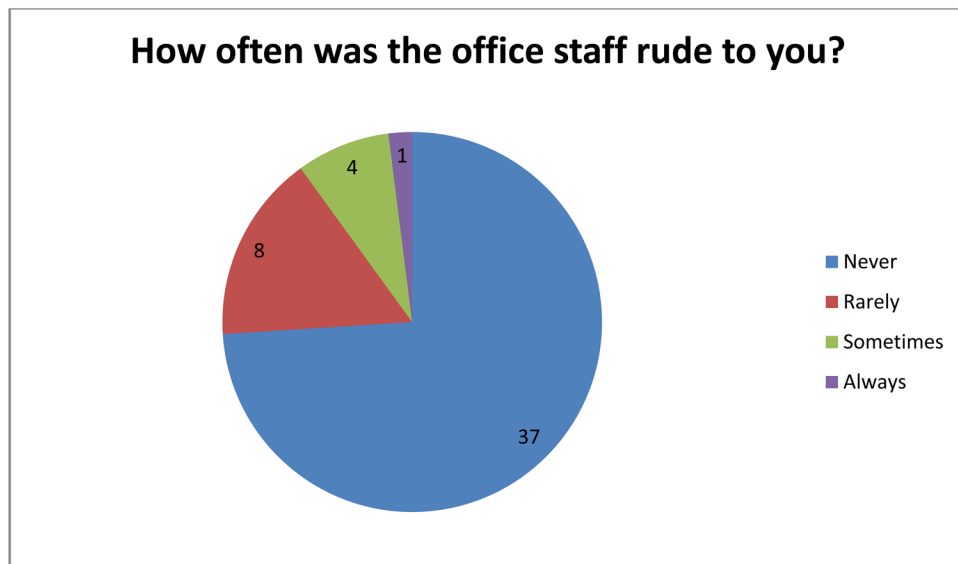


Figure 8.
Frequency of responses to question 1 in IPC “Disrespectful office staff” section.