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Invited Commentary

Simply speaking: The importance of health literacy for patient outcomes



Health literacy is “the degree to which an individual has the capacity to obtain, communicate, process, and understand basic health information and services to make appropriate health decisions,” as defined by the Patient Protection and Affordable Care Act of 2010.¹ Health literacy can include a variety of skills, including understanding prescription labels on medications, reading and appropriately filling out medical forms in doctors’ offices, and actively participating in the informed consent process for medical and surgical procedures. These skills often prove essential to successfully navigating healthcare.

In their manuscript, Dr. Baker and colleagues evaluate the relationship between health literacy and surgical outcomes, namely emergency department visits and hospital readmissions.² This work is timely, as these outcomes are costly to both patients and hospital systems and have gained the attention of various healthcare stakeholders nationwide, especially after the implementation of the Affordable Care Act’s Hospital Readmissions Reduction Program in 2010.^{3,4} In a population of Veterans Affairs patients across four sites, low health literacy was associated with increased rates of readmission and post-discharge complications, but there was no difference in length of stay or emergency department visits. In a study by Wright et al. of elective surgery patients undergoing major abdominal surgery at a single institution, low health literacy patients had a longer length of stay but no difference in readmissions.⁵ It remains unknown which factors may impact these differing findings – in addition to different study populations, there may be substantial differences in discharge processes that are important to understanding the results when comparing studies.

There are multiple tools used to measure health literacy, and the authors here used the 3-question Brief Health Literacy Screen.⁶ This tool asks patients about their confidence in filling out medical forms, their frequency of needing assistance with reading hospital materials, and their frequency of having problems learning about their medical conditions because of difficulties with understanding written materials.⁷ The benefit of this instrument is that it is not time-consuming and can be practically and broadly implemented in a surgical practice. Yet there is no standard for how to classify the patient responses, which the authors acknowledge in their discussion. The Brief Health Literacy Screen is also not as widely validated as the Test of Functional Health Literacy in Adults which assesses a patient’s reading comprehension and numerical abilities.⁸ Though this is the gold standard for assessing health literacy, it can take over 20 minutes to administer and may not be convenient for administration in a surgical practice. In order for the surgical community to understand and impact the effects of health

literacy on patient experience and outcomes, agreed-upon tools and definitions are needed. It will be important to strike a balance between feasibility of incorporating such a tool into the clinical space and assessing all the components of health literacy that are available.

The authors astutely suggest that there is an opportunity to identify patients with low health literacy prior to surgery. This would potentially provide a method for targeting interventions towards highest risk patients in the setting of limited resources. It is easy to imagine a myriad of interventions that may then be used to better support patients – from enhanced preoperative education to enhanced post-discharge in-home support or frequent post-discharge follow-up. This study included both elective and emergency general surgery patients, and the relationship between health literacy and emergency surgery remains unknown. Similar emphasis on surgeon involvement and targeted interventions were identified in a review of health literacy in breast cancer patients.⁹ We do not yet have enough information to understand all the factors that influence the relationship between low health literacy and postoperative outcomes, and future research should focus on identifying interventions and evaluating implementation.

Health literacy has been shown to be lower in older patients and those with worse overall health across different populations.^{2,5,10} Although this study’s population was based in Veterans Affairs hospitals, which may be unique in many ways, it is important to consider why older and more comorbid patients might have lower health literacy. On one hand, they have lived longer and likely had more interactions with the health system, so one could hypothesize that they would have more practice and greater health literacy. An alternative explanation is that the more comorbidities patients have and the more they interact with the health system, the more overwhelming healthcare becomes. It is not difficult to understand that a young 22-year old with no medical problems would likely have greater comfort filling out medical forms than their 72-year old counterpart with six comorbid diagnoses and ten medications. There may also exist generational differences in health literacy educational efforts at the community level. The potential that patient-reported health literacy may be inversely proportional to the need for health literacy and associated with worse outcomes should be a call to action for the healthcare community.

The authors have done an excellent job in demonstrating a plausible link between low health literacy and quality outcomes in surgery, as well as mindfully acknowledging important confounders (e.g. SES, education level) that could not be accounted for in their analyses. This study provides a solid foundation that should prompt

additional future research on interventions that can promote health literate care and reduce readmissions in surgical patients.

Declaration of competing interest

Both authors declare no conflict of interest.

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Ariel Nehemiah¹

Department of Surgery, University of Pennsylvania Health System,
Philadelphia, PA, USA

E-mail address: ariel.nehemiah@pennmedicine.upenn.edu.

Caroline E. Reinke*

Department of Surgery, Carolinas Medical Center, Charlotte, NC, USA

* Corresponding author. 1025 Morehead Medical Plaza, Suite 300,
Charlotte, NC, 28204, , USA.

E-mail address: Caroline.e.reinke@atriumhealth.org (C.E. Reinke).

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¹ 3400 Spruce Street, 4 Maloney Philadelphia, PA 19104.