

Assessing food insecurity: What nurses should know

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Abstract:

A female patient with diabetes was treated in the ED after repeated episodes of hypoglycemia without an obvious cause. A nursing assessment revealed that she knows how she should eat to manage her blood glucose levels, but by the middle of the month, she does not have the financial means to purchase both food and medication. When faced with a choice between food and insulin, she thought it was best to choose insulin and limit herself to one meal a day. She is experiencing food insecurity, a patient scenario that is not uncommon. This article describes a quality improvement (QI) project to determine the level of knowledge about food insecurity among acute care nurses and how they are addressing it in their patients.

Keywords: food insecurity | nursing | communities | assessment

Article:

A female patient with diabetes was treated in the ED after repeated episodes of hypoglycemia without an obvious cause. A nursing assessment revealed that she knows how she should eat to manage her blood glucose levels, but by the middle of the month, she does not have the financial means to purchase both food and medication. When faced with a choice between food and insulin, she thought it was best to choose insulin and limit herself to one meal a day. She is experiencing food insecurity, a patient scenario that is not uncommon. This article describes a quality improvement (QI) project to determine the level of knowledge about food insecurity among acute care nurses and how they are addressing it in their patients.

Background

According to the US Department of Agriculture, food insecurity can refer to a lack of food, fewer healthy food options, and inconsistent food consumption. Annually, it affects 12.9 million children in the US. In 2019, an estimated 35 million individuals experienced food insecurity in the US. Due to SARS-CoV-2, the virus that causes the COVID-19 pandemic, this

figure was estimated to exceed 50 million individuals in 2020. Food insecurity occurs most frequently among Black and Hispanic Americans and in single-mother households. According to the American Hospital Association, food insecurity increases the need for healthcare interventions and leads to an increase in hospital admissions. Adults experiencing food insecurity are at an increased risk for chronic illnesses, and children are more likely to have developmental delays. Additionally, poor nutrition, which is associated with food insecurity, is the fourth leading cause of death in the US and adversely affects more individuals than cigarettes.

A 2012 study found that healthcare professionals rarely assessed for food insecurity in pediatric outpatient populations, but that most were willing to assess for it if given the tools to do so. As frontline healthcare workers, nurses are in an ideal position to help communities and improve patient outcomes by assessing for food insecurity and recommending appropriate resources. Given the magnitude of this problem, nurses should understand the link between food insecurity and poor health outcomes, consider patients who may be experiencing it, and plan interventions accordingly.

Project Design

As part of the authors' QI project, a four-item questionnaire was administered to nurses working in an acute care setting to assess their knowledge of food insecurity and determine whether they assessed their patients for it (see Food insecurity questionnaire for nurses). The items were developed from anecdotal experiences in patient care, investigation of multiple community resources that provide food and support, and an online search of food insecurity. The questionnaire, which consisted of four yes-or-no questions, was distributed to nurses from various hospital units and completed anonymously by 22 participants.

Based on their responses, these nurses had no prior knowledge of food insecurity and were not routinely assessing their patients for it. Only one of the nurses was familiar with the term. Several respondents stated that they had no knowledge of resources for food insecurity and would not know what to do if they encountered a patient who reported it. The responses revealed that more education is needed regarding nursing knowledge about food insecurity, its impact on health outcomes, and nurses' roles in caring for patients experiencing it.

Nursing Considerations

In a 2006 survey of 288 NPs, less than one-third of the respondents understood the meaning of food insecurity. Education on food insecurity and the associated vocabulary such as “food deserts” is crucial. Food deserts are generally understood to be a neighborhood or area where low-income residents have limited access and/or transportation to healthy food sources such as grocery stores and farmers' markets. An unhealthy diet due to limited healthy options for food can lead to diabetes, obesity, anemia, tooth decay, asthma, developmental delays, difficulty focusing, increased emotional distress, and behavioral health issues. Understanding this term and where food deserts may be in a community is an important part of patient care. Interactive tools are available to demonstrate community impact, including how to locate food deserts.

Once they understand food insecurity, nurses can assess patients upon admission, but they may be uncomfortable or unsure of how to do so. However, a 2018 pilot study demonstrated that

patients are willing to discuss food insecurities even if they are uncomfortable doing so. The pilot study authors identified questions for healthcare professionals based on a literature review. These were similar to the Hunger Vital Sign tool, a validated screening tool used to identify food insecurity that can be used to assess patients throughout their hospital stay. It consists of the following two statements, which can be answered “sometimes true,” “often true,” or “never true.” Answering “sometimes true” and/or “often true” on either question indicates risk for food insecurity.

- “During the last 12 months, I have been worried whether my food will run out before I get money to buy more.”
- “During the last 12 months, the food we bought just didn't last, and we didn't have money to get more.”

Adding an item on food insecurity to the electronic health record represents one way to ensure that all patients are assessed for food insecurity. This may aid in planning interventions and recommending resources.

Once patients experiencing food insecurity have been identified, the healthcare staff should develop interventions tailored to the individual patient's needs. While referrals to in-house resources, such as case managers, dietitians, and social workers, are appropriate, knowledge of additional resources is crucial. As such, nurses should be aware of local community resources, as well as state and federal programs to support nutrition. Examples include congregate meal sites, which are federally funded, community-based meal sites that take into account the unique nutrition and healthcare needs of older adults; the Special Supplemental Nutrition Program for Women, Infants, and Children; and the Supplemental Nutrition Assistance Program. Similarly, patient education on the connection between food and health is vital. Nutrition and cooking demonstrations; education on low-sodium, low-sugar, and high-protein food choices; and budgeting classes may benefit many patients. Culinary medicine is an emerging, hands-on approach to teaching patients the importance of healthy eating that combines the “art of cooking with the science of medicine.” It encompasses various methods and an interdisciplinary team consisting of a chef, a dietitian, and a clinician to educate patients on low-cost, healthy recipes to improve overall health.

For recently discharged patients who reported limited access to food, the nursing staff may work with their facility to provide emergency food boxes, bags, and/or frozen meals. The Rush Surplus Project is an innovative program geared toward food insecurity that redistributes unused food from hospital cafeterias to those in need. Following its success, the nurses who created the program produced a guide to replicating it in other hospitals.

Many hospitals have also started to use community gardens to provide fresh produce to those in need as well as to build rapport with neighboring communities. As of 2015, there were 110 healthcare-based gardens in the US, and the areas served by these gardens reported lower rates of obesity. For example, Western Maryland Health Services recently utilized local prisons, day-care centers, and local businesses to develop a successful garden and provide food and education on the value of fresh produce.

Conclusions

Nurses can help care for their communities by assessing for and addressing food insecurity in their patients. While completing intake forms during patient admission, they are well positioned to assess patients' food insecurity status and offer interventions. However, more education is

needed to help nurses understand food insecurity, including assessments and interventions. Additional research is necessary regarding food insecurity, its impact on health outcomes, and the role of nurses in assisting patients. Armed with more information about food insecurity, nurses can come together, implement strategies to serve their patients, and improve community health.

Food insecurity questionnaire for nurses

Do you know what food insecurity means? If yes, please explain.

Do you assess your patients for food insecurities? If yes, please explain.

Do you know about resources for food insecurities? If yes, please explain.

If your patient had food insecurities would you know what to do? If yes, please explain.

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