Level of Health Literacy and Parent/Guardian Asthma Knowledge

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Discuss health literacy and its importance in health care
Demonstrate the use on nursing theory to frame nursing research
Present the findings of parent’s level of health literacy and asthma knowledge
Present the relevance of assessing for level of health literacy
Health literacy is the degree to which an individual has the capacity to gain, process, and understand basic health information, such as reading a medication bottle, measuring the correct dose, completing a health record, or reporting to the right appointment.

The capacity to read and write constitutes a basic premise in health education.

This study focused on the impact of health literacy of parents or caregivers on their knowledge about asthma and the ability to manage the care of their children who have asthma.

Health literacy represents a crucial link between health and education.
Self-care is a deliberate action performed with the intent of doing well for self or dependent, but the action performed may be inadequate due to lack of knowledge and skills.

Dependent-care agency can be examined in relation to the skills and knowledge that individuals have to perform actions.

The specific actions of the dependent care agent to provide health care is determined by changes in health of the dependent person.
Parents outside of the hospital setting are expected to be the dependent-care agent for their infant or child diagnosed with asthma.

Cox and Taylor (2005) developed a template using Orem’s theory of self-care deficit nursing theory for articulating necessary actions for achieving asthma symptom control.

Nurses work with the dependent care agent (i.e. parent, guardian, responsible adult) to assess their developed dependent-care capabilities and to identify deficits of knowledge and skills needed to develop dependent care agency (p. 286).
Wilson, et al. (2003): The inability to read health materials can have a direct negative impact on one’s self-care agency or dependent care agency.

Apter, et al. (2006): Numeracy is necessary to measure the participants’ ability to use mathematical principles to carry out asthma self-care activities adapted from instructions commonly given to patients.

Rosenthal, et al. (2007): Low literacy has been linked with lower receipt of preventive services, increased hospitalization and poor self-reported health status.
Methodology

Data Collection

- Predictive variable: Parent or guardian’s level of functional health literacy,
- Criterion variables:
  - Parent or guardian’s asthma knowledge
  - Capacity to manage their child’s asthma
  - Demographics
- A descriptive correlational design
- Sample size 60
- Rural areas in 3 states in US – New York, Virginia, North Carolina
Data Collection Tools

- Demographic Information Questionnaire
- Test of Functional health Literacy in Adults (TOFHLA)
  - Reading comprehension (50 items)
  - Numeracy (17 items)
  - Time to administer 22 minutes
- Asthma Knowledge - Parent (AKP) survey
  - 23 general asthma knowledge questions
Sample Characteristics

- 58 Participants, 57 female 1 male
- White (not Hispanic) 48 (82.7%); African American 6 (10.3%); Hispanic (non-white) 4 (6.9%)
- 55.1% completed high school or GED or Trade-school
- 33% had some college or graduated from college
- 12% had less than high school education
- Only 5 ever attended an asthma education program offered in public schools or health department
Functional Health Literacy and Asthma Knowledge, no SS
Asthma Knowledge and Education Level, no SS
Functional Health Literacy and Nebulizer Use, no SS
Asthma Knowledge and Metered Dose Inhaler (MDI), no SS
Close in Statistical Significance were:
- Functional Health Literacy and Income
- Functional Health Literacy and use of the nebulizer and peak flow meter
Predictive variable: Parent or guardian’s level of functional health literacy,

Criterion variables:
- Parent or guardian’s asthma knowledge
- Capacity to manage their child’s asthma
- Demographics

A descriptive correlational design

Sample size 60

Rural areas in 3 states in US – New York, Virginia, North Carolina
Analyzed using both correlational and multiple regression techniques.

All participants scoring within the adequate level of functional health literacy.

The unexpected failure in being able to recruit participants who scored in the inadequate range of the TOFHLA.

Lower-literacy parents with low literacy skills may not have been able to read and interpret the information on the recruitment flyer.

A notable strength of the recruitment strategy for this study is that 17.2 percent of the sample represented minority populations.
The finding that yielded no participants with a low literacy score is a poignant reminder that illiteracy is silent and unrecognizable, and raises the importance of developing ways to reach and enroll individuals with low literacy into studies such as this.

Nurses must continue to strive to identify knowledge deficits and goals that are mutual and measurable, and then to work with the individual (in this case the parent) to plan interventions to achieve the outcomes that resolve the need.

One method is the teach-back method to ensure understanding of care regimen and warning signs.
Hoover, E. (2009). The effect of functional health literacy and education level on parental asthma knowledge and the health outcomes of their child with asthma. Dissertation SUNY – Binghamton
