

# Relationships Among Functional Health Literacy, Asthma Knowledge, and the Ability to Care for Asthmatic Children

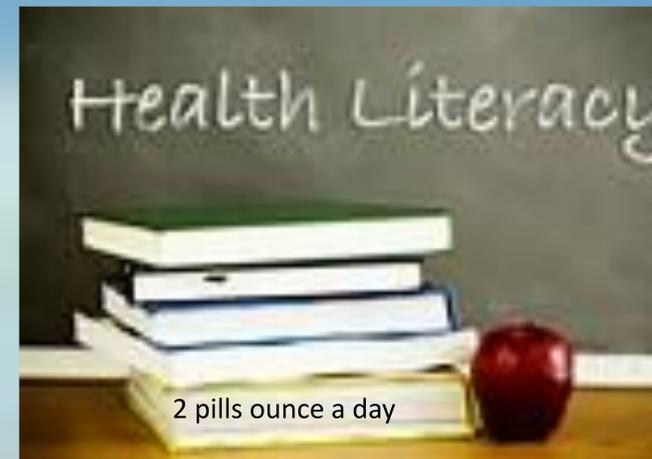


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Despite advances in asthma management, childhood asthma remains one of the highest ranked causes of pediatric hospitalizations and school absences in the United States. Little research has been done with the parents of children with asthma and how the parent's level of health literacy affects the health of the child. Health literacy, a crucial link between health and education, means to process and understand basic health information.



**Orem's Self-Care Deficit Nursing Theory** was utilized to examine the relationships among functional health literacy, asthma knowledge, the ability to care for asthmatic children and sociodemographic factors among rural parent/guardians.



## Findings

### Some of the results of the study:

Does your child have asthma? n=58

#### TOFHLA

Low Level n=8  
Medium Level n=23  
High Level n=27

#### Parent health behavior

Do you smoke? n=21 (36.2%)

#### Parent education

91.4% never attended an asthma education program

Level of FHL a predictor of asthma knowledge

No significant difference between groups

## Research Questions:

1. Does the level of functional health literacy predict asthma knowledge among parent's/caregiver's of children with asthma?
2. Is there a relationship between the level of functional health literacy and parent/caregiver demographic variables (age, income, education completed, race/ethnicity, previous asthma education) of children who have been diagnosed with asthma?
3. Is there a relationship between the level of functional health literacy of parent's/caregiver's and health outcome measures (smokes, emergency department use for asthma related symptoms, hospitalization for asthma related symptoms, unscheduled office visits for asthma related symptoms) of children who have been diagnosed with asthma?

## Methodology

A descriptive correlation design was used examining the relationship between rural parent/guardian's level of formal education and their functional health literacy score (Test of Functional Health Literacy in Adults - TOFHLA), in relation to their capacity to effectively manage their child's asthma (indicated by health status). Sample size was 57. The TOFHLA measures reading comprehension and numeracy skills using real and relevant hospital materials and labeled prescription vials.

## Outcomes

All participants in this study scored at an adequate level of FHL, the findings show that functional health literacy (TOFHLA score) was directly related to asthma knowledge (AQ-P (23) score) among dependent care agents who provide care for children with asthma. The participants in this study who had completed a higher level of education and reported a higher income also had higher health literacy scores and greater asthma knowledge.

## Implications for Nursing

- ❖ Asthma education classes need to be provided for parents and guardians who care for children with asthma
- ❖ Use objective evaluation of the effectiveness of teaching (teach-back strategy)

### Selected Bibliography

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