

# The Influence of Health-Seeking Behavior on the Health Literacy of Adolescents with Sickle Cell Disease

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# Speaker Disclosure Statement

**\*\*Elizabeth Perry Caldwell, PhD, RN and Libby Rosonet, DNP, RN, CPHON have no industry relationships to disclose.\*\***

# Learning Objectives

- **At the end of this presentation, the learner will be able to :**
  - define health-seeking behaviors of adolescents with SCD  
and
  - describe the influence of health-seeking behaviors on health literacy levels in adolescents with SCD.

# Background

- Between 94% and 98% of children with sickle cell disease (SCD) are living to age 18 years and beyond.
- Significant morbidity and mortality occurs after transfer from pediatric care to adult care
  - **Hypothesis: Health literacy plays a role in this transition.**

# Background

- **Health literacy:** “the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions”. (Ratzan & Parker, 2000)

# Purpose

**The purpose of this study was twofold:**

- a) to explore health-seeking behaviors of adolescents with SCD and
- b) to determine if there are significant differences in health literacy levels of adolescents with SCD based upon health-seeking behaviors.

# Methods

- Cross sectional, descriptive study
- Convenience sampling from large, tertiary care center in Dallas, TX
- **Sample:** 134 Black, non-Hispanic adolescents with SCD between 10-19 years of age
- **Inclusion Criteria:** Diagnosis of one of the four primary genotypes of SCD, English as primary language and age 10-19 years
- **Health Literacy:** Newest Vital Sign (NVS) health literacy instrument

# Results

## Sample

- 134 Black, non-Hispanic adolescents with SCD
  - 71 males (53.4%) and 62 females (46.6%)
- **Mean age:** 14.8 years ( $SD=2.2$ )
- **Age range:** 10.3-18.4 years
- **Mean grade level:** 8.5
- **Mean NVS score:** 2.7 ( $SD=1.6$ )
  - Possibility of “limited” health literacy



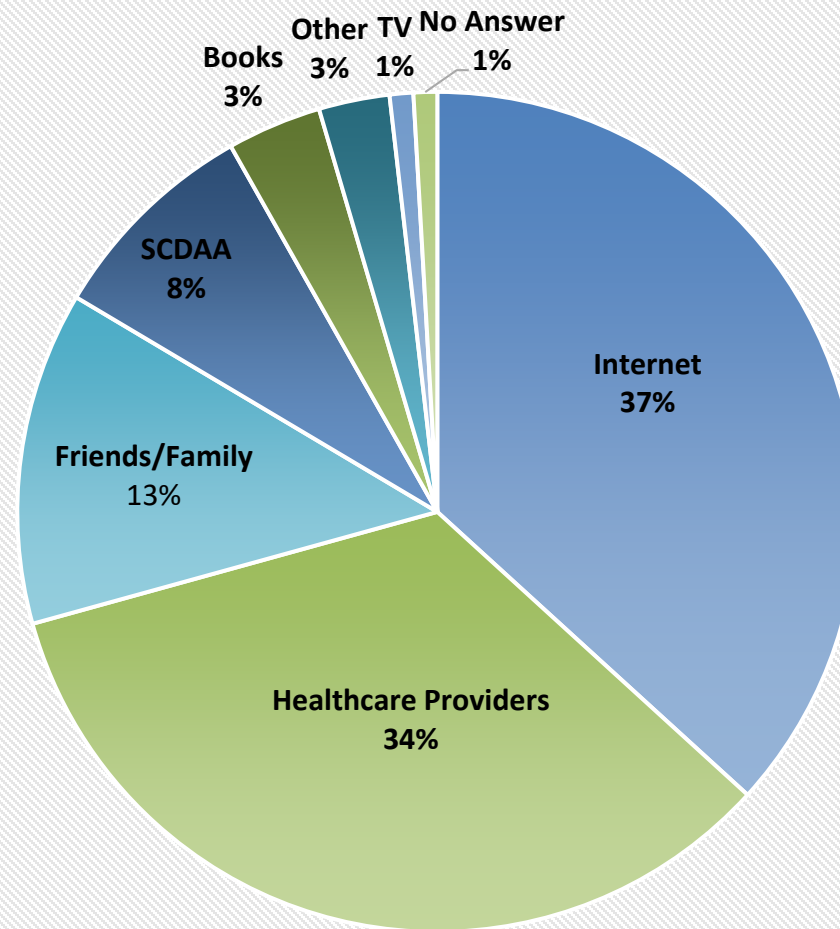
# Results

## Research Question 1: Health-seeking behavior

- When asked “**Where do you go first for health information?**” 110 participants responded.
- The two most common responses were **the Internet** (29.6%; *n*=40) and **health care providers** (27.4%; *n*=37)
- No participants chose “radio” or “magazines”

# Results

## Health Seeking Behavior



# Results

## Research Question 2: Health-seeking behavior and health literacy

- There was ***no difference*** in health literacy scores based on health-seeking behaviors

*NVS Scores Based on Health-Seeking Behaviors*

	Mean ( <i>n</i> )	Standard Deviation
The Internet	2.5 (40)	1.6
Healthcare Providers	2.9 (37)	1.3
Friends and Family	3.2 (14)	1.6
SCDAA	2.1 (9)	1.5
Books	3.3 (4)	2.4
Other	2.3 (3)	1.5

# Discussion

- Different results than previous studies that show African-American adolescents go 1<sup>st</sup> to friends and family (Manganello, 2016)
  - Caregiver health literacy does *NOT* influence adolescent health literacy in adolescents with SCD (also different) (Caldwell, 2019).
  - Perhaps because chronic illness (previously only 12% had chronic illness) leads to more independence and trust with healthcare providers?

# Discussion

- Web-based interventions?
- Healthcare providers' responsibility?
- Role of family and peers?

# Discussion

## •Future Research:

- National sample
- Measure e-Health literacy
- Further evaluation of technology (using smartphones or computers?)
- Development of health and health literacy interventions in adolescents with SCD

# Conclusions

- Adolescents with SCD prefer *the Internet and healthcare providers* as their 1<sup>st</sup> source of health information.
- There is *no relationship* between type of health-seeking behavior and health literacy of adolescents with SCD.
- Future research is indicated to provide more insight into both of these findings.

# Acknowledgements

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