INTRODUCTION

• What is Health Literacy (HL)?
  – Ability to read, write, listen, comprehend, and speak a language (WHO, n.d.)
  – Ability to obtain, process, and understand health information to make informed health decisions (IOM, 2004)

• What role does a nurse play?
  – Provide health information
  – Influence health consumers with how the information is organized, presented, and communicated (Johnson, 2015)

• What is the purpose of the project?
  – Measure the extent to which individualized education based on health literacy levels and preferred methods of learning can affect medication adherence to improve patient outcomes

BACKGROUND/SIGNIFICANCE

• Chronic diseases such as cancer are the most common and expensive health conditions
• 16.9 million individuals living in the US with cancer in 2019 (ACS, 2020)
• 90% of the $3.5 trillion in healthcare spending is from chronic and mental health conditions (CDC, n.d.)
• Estimated $174 billion will be spent on the cost of cancer in 2020 (NCI, n.d.)
• Poor HL equals poor health and poor outcomes (Johnson, 2015)
• Suboptimal decision making results in poorly managed chronic conditions, overuse of emergency services, preventable admissions
• Effective patient education can yield patient med adherence (Kean et al., 2016)
• Education not effective if materials do not match reading level (Johnson, 2015)

METHODOLOGY

Design
  – Retrospective program evaluation/chart review

Project Site and Population
  – Urban, academic, ambulatory oncology adult infusion center
  – NCI designated CCC
  – Adult oncology patients over the age of 18 receiving first outpatient cancer treatment

Sample
  – Retrospective chart review of 34 first time infusion patients
  – 19 Infusion nurses

Measures
  – Demographics
  – HL score, preferred learning style
  – Symptom Management
    – self-reported medication adherence
    – pain score
    – self-reported nausea and vomiting incidence
  – Nursing documentation

Analysis
  – Data Analysis
    – Demographics: SPSS v 27, descriptive statistics
    – Wilcoxon signed rank test
      • Compare the related samples to test hypothesis on symptom management
    – Independent t test
      • Compare symptom management at the second visit between groups of patients who had HL scores <= 60 to patients with HL scores 61-66
    – No statistical significance

RESULTS

Demographic Characteristics
  • Minimal diversity noted in the sample
  • Majority of the patients were white, non-Hispanic, insured, and were from central and northern New Jersey
  • Mean age of the sample was 63 years old. Ages ranging between 40 and 85.

Findings
  • Individualized Education and Symptom Management
    – Wilcoxon signed-rank test
      • No statistical relationships
    – Independent t test
      • Compare symptom management at the second visit between groups of patients who had HL scores <=60 to patients with HL scores 61-66
      • No statistical significance

• Medication Adherence
  – No missed doses recorded
  – 100% medication adherence

• Educational Activity
  – Chart audit of 34 Initial Patient Visits
    • < 1% of charts with missing symptom management documentation
  – Nurse Survey
    • Administered 10 question Survey Monkey
    • N=19 respondents

REFERENCES

AVAILABLE ON SEPARATE SHEET

CONTACT INFORMATION
Carla Schaefer MSN, RN, OCN, CENP schaeft@cinj.rutgers.edu

IMPLICATIONS

• Medication adherence result was similar to those of the literature reviewed where HL and learning styles were used to tailor the education
• Lack of diversity and higher-level HL scores could relate to the sample size and the choice of the HL assessment tool
• Type 2 error likely related to the small sample size in regard to symptom management

DISCUSSION

• The individualized patient education plan developed could be used in multiple other settings within this cancer center as well as others throughout the health system
• Exploring a different time point for HL screening to occur would be more appropriate
• Should be implemented as a practice standard within the ambulatory oncology setting
• Study furnishes information that policymakers can consider when assessing and designing programs used to control chronic conditions.
• Findings could be useful in reducing the overall cost of healthcare and healthcare spending
• Findings from the staff survey support the need for education of our healthcare providers regarding HL and preferred learning style

SAMPLE PREFERRED LEARNING STYLES

Note: No subjects selected kinesthetic as their preferred learning style. 10 patients provided preferred learning style.

Figure 1: The preferred learning styles

REALM

Sample REALM Health Literacy Scores

<table>
<thead>
<tr>
<th>Grade Category</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd grade or less</td>
<td>0 (0)</td>
</tr>
<tr>
<td>4th through 6th grade</td>
<td>1 (0.01)</td>
</tr>
<tr>
<td>7th or 8th grade</td>
<td>6 (17.6)</td>
</tr>
<tr>
<td>9th grade or more</td>
<td>27 (79.4)</td>
</tr>
</tbody>
</table>

Note: N=34. All participants completed HL assessments. There were no missing data.
References


