"5 SHADES OF BROWN": A COLLABORATIVE RESEARCH PROJECT ON IN-PATIENT COLONOSCOPY PREPARATIONS

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BACKGROUND

The ability to visualize abnormalities on the bowel wall may be limited by the quality of bowel preparation. Approximately 13-25% of bowel preparations are inadequate. Inadequate preparations result in reduction of colorectal neoplasm detection, prolonged procedure times and increased cost by aborted exams and early re-examinations. As a unit we were seeing an even larger percentage of poor preparations in our in-patient population.

PATIENT EDUCATIONAL MATERIALS

Dear Patient,

You have orders to take a colonoscopy preparation by your physician. It is very important to drink the solution as directed. If the prep is not adequate your doctor may not have the ability to see your colon well.

Examples of difficulty include:

1. You can’t drink it due to nausea or vomiting, or becoming bloated “without any results”
2. The prep doesn’t appear to be working after 4 hours of consumption
3. The results are not becoming clear as pictured below:

If you have difficulty with the prep, let your nurse know

Why is it important to get cleaned inside?

Your doctor MUST be able to see in order to do the test right. If it is dirty on the inside, your doctor may not be able to see important things, like polyps or cancer, and may even have to do the test again. That would mean you would have to start over, and nobody wants that. So help us to help you make this “come and done.”

Imagine this:

When your colon is clean doing the colonoscopy is like driving on a country road on a sunny day. It is easy to see and drive.

When your colon is dirty, doing the colonoscopy is like driving on a winter road in a snow storm. It is hard to see and hard to drive

How do I know when my bowel prep is complete:

The stool coming out should look like the stuff you are drinking – clear, without many particles. You know you are done when the stool coming out is yellow, light, liquid and clear – like urine

RESULTS

Table 1

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n</th>
<th>Total (as %)</th>
<th>Control (as %)</th>
<th>Education (as %)</th>
<th>Y2, p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>71</td>
<td>41.6%</td>
<td>43 (43.1%)</td>
<td>28 (28.5%)</td>
<td>0.03 (&gt; 0.05)</td>
</tr>
<tr>
<td>Female</td>
<td>99</td>
<td>58.4%</td>
<td>54 (56.9%)</td>
<td>45 (41.6%)</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>71.8</td>
<td>71</td>
<td></td>
<td>65.2</td>
<td></td>
<td>2.81***</td>
</tr>
</tbody>
</table>

Table 2

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Control (as %)</th>
<th>Education (as %)</th>
<th>Test statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bowel prep</td>
<td>7 (2.74)</td>
<td>6.59 (2.59)</td>
<td>1.49***</td>
</tr>
</tbody>
</table>

Note: Means (Standard deviation) and t test reported *** indicates p value < 0.01

CONCLUSIONS

An analysis was performed to determine the effect between enhanced educational and the quality of bowel preparation. Findings indicate there was a statistically significant difference between these two variables. In the sample characteristics, gender was not significantly different; however the control group was significantly older (control group 71.8; Education group 65.2) (see table 1). The study shows that the participants receiving enhanced education had a higher quality of bowel preparation as determined by the Boston Bowel Preparation score (see table 2). The implications of this finding may increase the detection of colorectal neoplasms, reduce procedure times, reduce cost by reducing the number of aborted examinations and re-examinations and improves patient satisfaction.

METHODS

Data were collected on inpatients scheduled for colonoscopy from 6 step down units and 3 med-surg units at BHILOU. Initially the research team collected data on 97 patients receiving standard pre-colonoscopy patient education. Researchers then educated unit nursing staff on the enhanced patient education. Data are now being collected on patients who received the enhanced patient education material. Scoring of the adequacy of bowel preparation is being done by MDs performing colonoscopy at the time of procedure using the Boston Bowel Prep Scale (BBPS).

BIBLIOGRAPHY

3. New Bowel Preparations for Colonoscopy a report by Lawrence B Cohen, Associate Clinical Professor, Mount Sinai School of Medicine, New York. © Touch Briefing 2008 pg 32