Evaluation of a Surgical Site Discharge Teaching Tool using Pictures and a Mirror

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10/5/15
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Project Need

- Patients have increased level of acuity and are being discharged earlier.
- Shorter length of stay limits the nurses ability to provide comprehensive discharge instructions and validate understanding of surgical incision care.
Background information-SSI

- JCAHO has published national safety goals on surgical site infection (SSI).
- The goals identify standards for comprehensive patient teaching plus implementation of a system to measure SSI rates for 30-90 days post surgical procedure. ([www.jcrinc.com](http://www.jcrinc.com)).
Background-Comprehension

- Pictures linked to spoken and written text demonstrated increased attention, comprehension, recall, and intention/adherence of health education materials (Houts, et al., 2004).

- Adherence to discharge instructions is essential for recovery and prevention of complications.

- Patients are more likely to comply with discharge instructions when they understand them (Zavala, et al. 2011).
Purpose/Aims

1) Compare standard patient discharge instructions to a revised teaching program (text and pictures) and a hand-held mirror for inspection of the abdominal, surgical incision in the laparotomy patient.

2) Evaluate the ease of self-assessment to detect a SSI.
Sample-Setting

- This 2-group comparative design was conducted on a surgical unit in a full service hospital renowned for its service to women.
- 60 patients undergoing an exploratory laparotomy using an open incision approach was recruited for the project.
- Patients signed an agreement form to participate.
Instruments

- Patient education teaching tool
- 2 sided laminated card the size of a book mark
- Side 1 - 3 colored pictures
- Normal incision healing
- Incision healing with redness and a SSI
- Side 2 - Instructions of when to call a health care provider if problems and to inspect the incision daily
Questionnaire

1. Do you feel at ease and confident in looking at your incision every day?
   1 – Not confident at all  3 – I am somewhat confident
   2 – Slightly confident  4 – I am very confident

2. Did you receive the necessary information from the nursing staff to identify a surgical site infection of your incision?
   1 – Not enough information  3 - Enough information, but still unsure
   2 – Some information  4 – Enough information to identify an infection

3. Please describe what an infected incision would look like in your own words?

4. Did you feel that the explanation of how to inspect your incision was clear enough?
   1 – Not clear  3- Somewhat clear
   2 – Slightly clear  4 - Very clear

5. How confident are you that you would know when to notify the physician if you feel an infection has developed?
   1 – Not confident at all  3 – I am somewhat confident
   2 – Slightly confident  4 – I am very confident

6. Do you feel that the written instructions related to incision care were easy to read and follow?
   1 – Difficult to follow  3 – Somewhat easy to follow
   2 – Slightly difficult to follow  4 – Very easy to follow

7. After the discharge instructions provided by your nurse in the hospital, how confident are you telling the difference between your incision healing normally or becoming infected?
   1 – Not confident at all  3- I am somewhat confident
   2- Slightly confident  4 - I am very confident

Post Intervention Questions

8. After viewing the pictures provided on the pamphlet, how confident are you in your ability to identify a surgical site infection?
   1 – Not confident at all  3- I am somewhat confident
   2- Slightly confident  4 - I am very confident

9. Did you feel the mirror that was provided on discharge was helpful to view the incision?
   Yes why?  No, if not then why?
Results
## Demographics

<table>
<thead>
<tr>
<th>Group</th>
<th>Standard Instructions</th>
<th>Instructions with Pictures</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years) Mean ± SD</td>
<td>56.6 ± 12.6</td>
<td>53.1 ± 17.4</td>
<td>0.39</td>
</tr>
<tr>
<td>Length of stay Mean ± SD</td>
<td>4.6 ± 2.5</td>
<td>4.1 ± 1.74</td>
<td>0.36</td>
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</tbody>
</table>
Question #3
Please describe what an infected incision would look like in your own words.

- Patients can identify common symptoms of red/inflamed, drainage/seepage, and pus.
Results

<table>
<thead>
<tr>
<th></th>
<th>Standard Instructions</th>
<th>Instructions with Pictures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeling at Ease and confident looking at incision daily</td>
<td>P=0.01</td>
<td>P=0.01</td>
</tr>
<tr>
<td>Received necessary information to identify SSI</td>
<td>P=0.001</td>
<td>P=0.001</td>
</tr>
<tr>
<td>Explanation of how to inspect incision was clear</td>
<td>P=0.017</td>
<td>P=0.017</td>
</tr>
<tr>
<td>Confidence of when to call MD for SSI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Written instructions were easy to read and follow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confidence level in identifying normal healing vs being infected</td>
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</tbody>
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Standard Instructions

Instructions with Pictures
Question #8
After viewing the pictures provided on the pamphlet, how confident are you in your ability to identify a SSI?

- 93% of patients (n=28) were very confident after viewing the pictures on the pamphlet to identify a SSI.
Patient Comments Concerning Use of Hand Held Mirror addressed in Question #9

- “Easier to see down below”
- “I saw red and went to my local doctor to check and it was a reaction to the staples”
- “I could get a better look”
- “Helped to look after I lifted up my belly”
- “When you are swollen, it helped me look”
- “Helped to see the closure”
- “It would be hard to see it anyway without it”
Summary of Results

- The revised picture discharge teaching tool, plus the mirror improved patient ease and confidence for early detection of an SSI.

- This project supports the current literature on discharge instructions with illustrations.
Limitations

- Convenience sample of 60
- Phone questionnaire was not pilot tested.
- There was no question on the survey that addressed if the patient thought she had an infection and whether or not she called the health provider.
- The patients identified with the nurse that implemented the discharge teaching and completed all the phone questionnaires, possible bias.
- Limited population-surgical-oncology, gynecology.
- 3 of the patients in the intervention group were still hospitalized so unable to assess total use of picture tool
Questions
References:


