GOING GREEN IN LABOR AND DELIVERY: Assessing Knowledge and Identifying Barriers and Facilitators to Recycling in Obstetric Operating Rooms and on the Labor and Delivery unit

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Introduction
- The amount of waste produced and the number of wasted resources impact hospital systems’ financial stability
- Non-contaminated waste is a significant cost expense to healthcare facilities when misclassified as hazardous waste for disposal.
- Disposal of hazardous waste is calculated by weight.
- Non-contaminated waste is disposed of in landfills.
- Multiple studies demonstrate the lack of knowledge for segregating waste.

Literature Review
- PICO: Would creating a recycling program protocol and educational guidelines promote acceptance and increase understanding to optimize waste streams through recycling in the obstetric operating rooms and labor and delivery unit compared to the current standard disposal routine for waste management?
- Search for evidence included Google Scholar, PubMed, MEDLINE, and CINAHL. A total 36 articles from 1994-2020 were discovered.
- Theoretical model: Learning theory by Piaget. The way people think affects their behavior through assimilation and accommodation.
- Design: Quality Improvement Project (QI)

Table: Data Analysis

<table>
<thead>
<tr>
<th>Question Number</th>
<th>N</th>
<th>Question</th>
<th>Frequency</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 1-4</td>
<td>62</td>
<td>Agreed</td>
<td>Majority 25-34 years (29.51%)</td>
<td>The respondents were predominantly female RNs</td>
</tr>
<tr>
<td>Question 5-6</td>
<td>62</td>
<td>Do you Recycle at home?</td>
<td>No difference in the proportion of people who recycle at home or in the OR.</td>
<td></td>
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<tr>
<td>Question 7-8</td>
<td>62</td>
<td>I am concerned about the amount of waste generated in the labor and delivery unit and in the operating room.</td>
<td>Strongly agree (29.03%)</td>
<td></td>
</tr>
<tr>
<td>Question 9-10</td>
<td>62</td>
<td>I see regular waste disposed of in contaminated waste containers frequently.</td>
<td>Strongly agree (11.29%)</td>
<td></td>
</tr>
<tr>
<td>Question 11-12</td>
<td>62</td>
<td>We have to dispose of waste properly and/or recycle.</td>
<td>Strongly agree (12.90%)</td>
<td></td>
</tr>
<tr>
<td>Question 13-15</td>
<td>62</td>
<td>I see a lot of waste in my department.</td>
<td>Strongly agree (13.35%)</td>
<td></td>
</tr>
</tbody>
</table>

Potential Sources: 36 articles were retrieved, excluding articles older than 2016. The list was then narrowed to 15 relevant articles to this project.

Data Collection
- This QI project aims to determine the barriers and facilitators to reducing waste in the labor and delivery unit.
- Anonymous online survey. Three parts: demographic, core questions, and open-ended responses.

Implementation Into Practice
- Reducing, Reusing, and Recycling supplies leads to cost containment.
- Research and quality improvement projects will continually reshape how we use resources and conserve supplies to increase sustainability and reduce cost.

Conclusion
- Plans in place to reduce resources and dissemination of education. Research shows that education and training can decrease waste by 6.5% each month. Education on cost and resource reduction will be most beneficial for change and cost savings.

Key References

Majority Female (98.39%)
Majority RNs (75.41%)
Majority > 20 years (29.03%)

Focus Group discussed disposable items, streamlined supplies with drapes and sponges, and wasted drugs.