Using Comfort Menu to Impact Pain Experience
Chona Melvin, DNP, RN, FNP-C, Ahlam Jadalla, PhD, RN, Joy Goebel, PhD, RN, FPCN

Background
- Acute postsurgical pain following spine surgery is common.
- Inadequate pain management leads to chronic pain, increased hospital stay and disability.
- Non-pharmacological interventions (NPIs) can be utilized for management of post-surgical pain.

Purpose Statement
To improve pain indicators and length of stay among postsurgical spine patients through a Comfort Menu of Non-pharmacological Interventions (NPIs).

Method
Design: Quality Improvement (QI) project.
Setting & Participants: 28-bed surgical unit in a large California magnet hospital with patients ≥ 16 years, who undergo spine surgery. Baseline data were collected Oct-Dec 2017; and post implementation data between July 16-Sept 16, 2018.

Outcomes:
- Numerical Rating Scale (NRS) pain level
- Morphine Equivalent Daily Dose net (MEDDₙ)
- Length of Stay (LOS)
- Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) pain satisfaction score

Baseline vs. Postimplementation % of Change

<table>
<thead>
<tr>
<th>NRS</th>
<th>MEDDₙ</th>
<th>LOS</th>
<th>HCAHPS pain satisfaction scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/10</td>
<td>78.10 mg</td>
<td>6.56 days</td>
<td>71.1%</td>
</tr>
<tr>
<td>6/10</td>
<td>48.53 mg</td>
<td>3.67 days</td>
<td>100%</td>
</tr>
</tbody>
</table>

Results
- 103 patients were included; 32 (baseline, no NPI used); 71 (post implementation with NPI used)
- Majority had previous spine surgery (baseline 68.75%, post-implementation 67.6%).
- NRS pain levels decreased by a percent change of 14.3% (Baseline NRS 7/10 vs. post-implementation NRS 6/10)
- MEDDₙ decreased by a percent change of 37.9% (Baseline 78.10 mg/day vs. post-implementation 48.53 mg/day)
- LOS decreased by a percent change of 44.1% (Baseline 6.56 days vs. post-implementation 3.67 days)
- HCAHPS pain scores increased by a percent change of 40.6% (Baseline 71.1% vs. post-implementation 100%)

Discussion
- All pain indicators (NRS, MEDDₙ, HCAHPS pain satisfaction score) and LOS improved
- NPI's accessibility may affect its utilization
- Nursing staff recommendation includes consistent patient education of NPIs availability throughout the shift

Recommendation
- Consider comfort menu of NPIs as adjuvant treatment in surgical spine pain
- Improve NPI’s accessibility to patients
- Further research is needed with diverse populations and large sample

Limitation
- Outcome assessment of each NPI was not feasible due to limited sample usage
- Retrieval of information (e.g. pain scores, NPI used) was dependent upon nursing documentation
- Multiple initiatives to affect MEDDₙ, LOS, and HCAHPS pain satisfaction score were co-occurring

Note:
- NRS=Numerical rating scale, MEDDₙ=Net Morphine equivalent daily dose, LOS=length of stay, HCAHPS= Hospital Consumer Assessment of Healthcare Providers and Systems

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Adapted from “Improving Your Pain Comfort Items and Services Menu”, Cedars-Sinai 2018.