The Effect of Music Therapy on Post-operative Pain and Patient Satisfaction in Adult Orthopedic Patients

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Objectives
- Briefly review potential pain issues in the post-operative patient
- Discuss the relationship of music therapy and its use as an adjunct to pain management
- Review the study results and the impact on patient care

Background
- Pain doesn’t discriminate!
- 50-75% of patients do not receive adequate relief from post-op pain
- Uncontrolled pain causes additional problems in the post-op period
- This is especially true in orthopedic surgery
- Pain perception is very individualized
- Patients need to feel that they have some control over their pain management
- Some patients worry about side effects and/or addiction
- Better pain control = increased satisfaction with overall hospital experience

Successful Pain Management:
- Requires a multifaceted approach
- Needs to include non-pharmacological techniques/adjunctive therapies

Literature Review
- Searched for studies to support the use of music therapy
- Variety of studies using different populations, but limited studies in the orthopedic patient
- AORN – systematic review of 42 RCT’s
Music Therapy:

- Is a non-traditional approach for relief of pain
- Has existed for a long time in some cultures
- Recently has received increased attention in hospitalized patients

PICO question:

P - Adult orthopedic patients in the post-operative period
I - Listening to Music on portable CD player
C - Pre & post pain scores
O - Decrease in pain & increase in patient satisfaction

Population -

Inclusion criteria:
Adult (18 or older), orthopedic patients, English speaking, able to understand/sign consent, hospital stay of > 24 hrs, ability to complete log sheets

Intervention –

How did we decide on the type music & player to be used?
- Based on recommendations from studies: Slow & flowing music with 60-80 bpm, recorded vs live, instrumental, repetitive
- Portable CD player - ease of use, cost, ability to clean between patients

Comparison -

Used NRS for pain scores (1-10)
Had patient record pre & post scores plus time listened (log sheet)
Also did satisfaction survey at d/c

Does not require a physician’s order
Used NRS for pain scores (1-10)
Recently has received increased attention in hospitalized patients

- Based on the theory of holistic nursing
- Is non-invasive, inexpensive & safe
- Can easily be incorporated into nursing care
- Has minimal legal/ethical issues

Also did satisfaction survey at discharge
Outcomes –

Results:

Total # of patients = 42
Total # of pain logs = 59
Total # of satisfaction surveys completed at discharge = 34

Results – con’t

Table 1. PAIN SCORES
(0-20 with 0 being the worst pain)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEFORE</td>
<td>59</td>
<td>5.43</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>AFTER</td>
<td>34</td>
<td>3.87</td>
<td></td>
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</tbody>
</table>

Results – con’t

Table 2. SATISFACTION SURVEY AT DISCHARGE

<table>
<thead>
<tr>
<th></th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>How satisfied were you with your overall pain control during this hospital stay?</td>
<td>56%</td>
<td>33%</td>
<td>11%</td>
</tr>
<tr>
<td>Did you find that listening to the music was helpful with your pain relief?</td>
<td>56%</td>
<td>40%</td>
<td>12%</td>
</tr>
<tr>
<td>Did you find the equipment easy to use?</td>
<td>57%</td>
<td>34%</td>
<td>12%</td>
</tr>
<tr>
<td>Would you recommend this music therapy to others?</td>
<td>Yes</td>
<td>100%</td>
<td></td>
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</tbody>
</table>

Thank you for participating in our study – we wish you well in your recovery.

IMPLICATIONS FOR PRACTICE:

• Music therapy supported as an adjunct to pain management
• Easy for patients to do; can be included in teaching about interventions for pain
• Limited cost, limited risk, physician’s order is not necessary
• Possibilities for other populations

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References


References, con’t


References, con’t


References, con’t


THANKS FOR YOUR ATTENTION!

QUESTIONS?