In the field of maternal and child health, post-partum pain is an often neglected problem that many women experience after childbirth. Research revealed that 92% who delivered vaginally complain of significant pain in the perineum, on the day after normal spontaneous delivery (Anonymous, 2011).

Complementary Alternative Medicine (CAM) are slowly being introduced such as lavender aromatherapy to decrease pain which revealed to have same effects as that pharmacological agents.

With no study ever conducted if this could be applicable to postpartum patient, thus the researchers decided to undertake the study.
Outline

• Background
• Motivation
• Statement of the Problem
• Methodology
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Motivation

• In the field of health, improving the quality of nursing care demands more evidences about particular complementary interventions used in the field.

• One of the main goals of nursing is to enhance a patient’s quality of life and uplift client’s well being which include providing proper nursing care management for patients experiencing post partum pain.
Statement of purpose

- This study aims to determine the effectiveness of lavender aromatherapy on:
  (a) level of pain
  (b) blood pressure
  (c) relationship between pain and blood pressure among post-partum women.
Methodology

The study utilized a longitudinal quasi-experimental non-equivalent pretest-posttest design.

Subjects were chosen through purposive sampling (n=20) based on a pre-set criteria:
(a) 18-35 years old
(b) first 24-hour postpartum
(c) experiencing post-partum pain
(d) have not yet taken pain medication, and
(e) willing to participate.
Methodology

Researchers used numeric pain scale to assess pain level with blood pressure assessment as an adjunct to measure pain objectively.

Lavender aromatherapy was administered by putting 2 drops of pure (100%) lavender oil containing linalool and linalyl acetate to a 2x2 inches cotton cloth and was placed on the clothes of the subject above left collarbone.
Methodology

- Eligible control group (n=10) were first assessed by measuring the level of pain and their blood pressure since the setting was in a ward to make sure that no aroma of lavender would be left behind.

- After completing the control group, eligible experimental group were also assessed by measuring the level of pain and their blood pressure and was given the treatment.
Methodology

- A post-assessment was conducted by also asking the level of pain through numeric pain scale and measuring the blood pressure after 20 minutes of intervention.

- The control group did not receive any intervention but was also assessed after 20 minutes for pain level and blood pressure.
<table>
<thead>
<tr>
<th>Pain</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Computed Value</th>
<th>Decision</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>5.7</td>
<td>2.71</td>
<td>0.16</td>
<td>Fail to reject Null Hypothesis</td>
<td>Not significant</td>
</tr>
<tr>
<td>After</td>
<td>4.7</td>
<td>2.45</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$\alpha = 0.05$

Data revealed that pain decreases however, difference in the p-value (0.16) was greater than 0.05 (significant level) thus shows no significance.
Results

Mean Pre-Test Post Test Systolic Blood Pressure of Post Partum (Experimental Group)

<table>
<thead>
<tr>
<th>Systolic Blood Pressure</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>p-Value</th>
<th>Decision</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>112</td>
<td>16.19</td>
<td>0.0095</td>
<td>Reject Null Hypothesis</td>
<td>Significant</td>
</tr>
<tr>
<td>After</td>
<td>105</td>
<td>12.69</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\( \alpha = 0.05 \)

Systolic blood pressure yielded a decrease of 70mmHg showing significant difference since the p-value (0.0095) was lower than 0.05
## Results

Mean Pre-Test Post Test Diastolic Blood Pressure of Post Partum (Experimental Group)

<table>
<thead>
<tr>
<th>Diastolic Blood Pressure</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>p-value</th>
<th>Decision</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>69</td>
<td>7.38</td>
<td>1.0</td>
<td>Fail to reject Null Hypothesis</td>
<td>Not Significant</td>
</tr>
<tr>
<td>After</td>
<td>69</td>
<td>5.68</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

No significant difference was noted in the diastolic blood pressure (p-value of 1.0 > 0.05).
## Results

Correlation of Pain and Systolic Blood Pressure (Experimental Group)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Pearson r Value</th>
<th>Interpretation</th>
<th>Computed t-value</th>
<th>Tabular t-value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain and Systolic</td>
<td>0.80</td>
<td>High Correlation</td>
<td>3.771</td>
<td>2.31</td>
<td>Reject Null Hypothesis</td>
</tr>
</tbody>
</table>

Results also shows a high correlation of pain and systolic blood pressure since the computed t value (3.771) was greater than the tabular value of 2.31 (df= 8, @0.05 significant level).
Conclusion

- Lavender aromatherapy appears to be effective in decreasing level of pain among postpartum women and it appears that lavender aromatherapy decreases the systolic blood pressure but not the diastolic blood pressure.

- However larger sample is highly recommended and numeric pain assessment scale must be enhanced to accurately measure subjective pain to confirm its efficacy.
Recommendation

• The researchers would recommend that future researches be conducted in order to provide further knowledge about the properties of lavender aromatherapy and whether it could lower pain levels of post partum women.

• The researchers would like recommend to make a separate study on the effects of Lavender Aromatherapy to Pain and Blood Pressure between nulligravida and multigravida patients.
Recommendation

• The researchers would like to recommend future researchers to explore the clinical application in greater detail and move beyond the low dose of application of lavender aromatherapy.

• The researchers propose to other users of this study to come up with a pain scale that could directly measure post partum pain efficiently
Recommendation

• Additional literature to enlighten and support the lavender aromatherapy and its effect to pain and blood pressure are needed in order to fully understand how lavender works and how it can be used as a therapy for post partum pain.