A study to assess the effectiveness of proper body posture maintenance on back pain among antenatal mothers in NMCH, Nellore

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Abstract

Background: There are many major problems during pregnancy among one is, back pain. Backache during pregnancy as baby grows hollows in lower back becomes more pronounced and this can cause backache. Also become are of hormone changes the ligament become softer and stitch this can put extra strain an joint of lower back and pelvic which can also cause backache may women experiences backache during the 2nd and 3rd trimester lower back pain during pregnancy.

Aim: The aim of the study was to assess the effectiveness of proper body posture maintenance on back pain among antenatal mothers.

Objectives: 1. To assess the level of back pain among antenatal mothers. 2. To assess the effectiveness of structured teaching programme on proper body posture maintenance among antenatal mothers. 3. To find the association between back pain with demographic variables among antenatal mothers.

Methodology: 30 antenatal mothers from adults in Dakkilivaripalem, Nellore were selected by using non probability convenient sampling technique.

Results: The study concluded that STP on proper body posture maintenance was found to be effective in reducing back pain among antenatal mothers. Hence the research hypothesis (H1) is accepted and the null hypothesis (H0) is rejected.

Keywords: Knowledge, causes, complications, hookworm infections, adults

Introduction

Make an Investment in Your Posture You Won’t Regret and That Will Return Real Results” - Ernest Aufuso

There are many major problems during pregnancy among one is, back pain. Backache during pregnancy as baby grows hollows in lower back becomes more pronounced and this can cause backache. Also become are of hormone changes the ligament become softer and stitch this can put extra strain an joint of lower back and pelvic which can also cause backache may women experiences backache during the 2nd and 3rd trimester lower back pain during pregnancy. [1]

Some hormone can cause ligament that support the spine loosen leading to instability and pain muscle separation work typically gain between 25 and 35 pounds. The spine that has to support that sought can cause lower back pain. Posture changes shifter center of gravity. This may result in muscle separation. As uterus expands two parallel sheets of muscle with run from rib cage to the public bore may separate center stream. This separation may worsen lower back pain. Stress, emotion can cause muscle tension in back which may be felt as back pain can back spam. It finds that experiences an increase back pain during stressful periods of your pregnancy [2].

P Katonis (2016) reported studies regarding the epidemiology of pregnancy related low back pain. It rates from 25% to 90% with most studies estimating that 50% of pregnant women will suffer from low back pain. One third of them will suffer from severe pain, which will reduce their quality of life [3].

The majority of women are affected in their first pregnancy. 80% of women suffering from low back pain claim that it affects their daily routine and 10% of them report that they are unable to work. Pregnancy related low back pain usually begins between 20th and 28th weeks of gestations however it may have on earlier onset [4].

Maintaining an optimal level of function throughout pregnancy and having the least amount of discomfort are the main goals of treatment of back pain during pregnancy. Maintaining
good back posture, hygiene, spine mobilization, stabilization, exercises, specific body mechanics for routine activities, such as house work, job sleeping, physical therapy designed to strengthen muscles to support the spine and help prevent the back pain [3].

Need For the Study
In India, (2016) the prevalence of Low back pain among the pregnant women was 51%. It is mostly occurred in more than 26 years old pregnant women. The housewives were mostly complaints of Low back pain. In case of 1st pregnancy or primigravida, low back pain was experienced most, it was 45.1% and in the 2nd trimester of pregnancy percentage of feeling low back pain was most, and it was 47.06%. [6].

Back pain during pregnancy, the cause are manifold their weight increases on one hand and specific physiology of spine on the other during pregnancy a women’s body weight increase by 15 to 25% their significance a greater burden on tendems, ligament and joints [7].

In worldwide, Netherland shows that 38% of women still have symptoms of 3 months postpartum and 13.8% at 12 months. Low back pain during pregnancy is considered to be most important risk factors for postpartum low back pain and existing literature as a supports low back pain and leading reasons for sick leave 20% of women experience pelvic girdle pain [8].

In Andhra Pradesh, the prevalence of low back pain during pregnancy was found to be 57.3% which is similar to most other countries, pain onset was most frequently reported in the 3rd trimester of pregnancy (40.7%) and was often reported as to be is low back area (71.2%). Almost half of the patient reported their pain as being moderate (44.1%). [9]

Problem Statement
A study to assess the effectiveness of proper body posture maintenance on back pain among antenatal mothers in NMCH, Nellore.

Objectives
1. To assess the level of back pain among antenatal mothers.
2. To assess the effectiveness of structured teaching programme on proper body posture among antenatal mothers.
3. To find the association between back pain with demographic variables among antenatal mothers.

Research Hypothesis
H1: There is a significance decrease in back pain among antenatal mothers in post-test than the pre-test.
H2: There is an association between back Pain with selected demographic variables among antenatal mothers.

Delimitations
The study is delimited to;
• Primi and multi gravida mothers.
• Antenatal mothers in third trimester.
• Antenatal mothers attending NMCH, Nellore.

Methodology
Research Approach
Research Approach: Quantitative Research Approach
Research Design: Pre-experimental, One group pre- test, post-test design.

Setting: The study was conducted in antenatal ward at Narayana Medical College Hospital

Population
Target population: All antenatal mothers.
Accessible population: Antenatal mothers admitted in NMCH and who fulfilled in the inclusion criteria.

Sampling Technique: Non probability convenience sampling technique.

Sampling Technique: Non-probability convenience sample technique was adopted.

Sampling Size
The sample size was 30 antenatal mothers admitted in NMCH.

Sample Criteria
Inclusion criteria
• Antenatal mothers admitted in NMCH.
• Antenatal mothers who were having low back pain.
• Antenatal mothers who were willing to participate

Exclusion Criteria
• Antenatal mothers who do not have back pain
• Antenatal mothers with high risk condition.

Description of the Tool
The tool consists of two parts:
• Part-I: It deals with demographic variables age, gravida, parity, trimester, education, occupation, family income and type of family.
• Part-II: A visual analogue scale assess the level of back pain.

Table 1: Score interpretation

<table>
<thead>
<tr>
<th>S. No</th>
<th>Criteria</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Mild pain</td>
<td>&gt;2</td>
</tr>
<tr>
<td>2.</td>
<td>Moderate pain</td>
<td>4-6</td>
</tr>
<tr>
<td>3.</td>
<td>Severe pain</td>
<td>8-10</td>
</tr>
</tbody>
</table>

Data Analysis & Discussion

Table 2: Frequency and percentage distribution of level of back pain among antenatal mothers in pre-test and post-test. (N=30)

<table>
<thead>
<tr>
<th>S. No</th>
<th>Level of pain</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>F</td>
<td>P</td>
</tr>
<tr>
<td>1.</td>
<td>Mild Pain</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>2.</td>
<td>Moderate pain</td>
<td>15</td>
<td>50</td>
</tr>
<tr>
<td>3.</td>
<td>Severe pain</td>
<td>12</td>
<td>40</td>
</tr>
</tbody>
</table>
The study concluded that STP on proper body posture maintenance was found to be effective in reducing back pain among antenatal mothers. Hence the research hypothesis \((H_1)\) is accepted and the null hypothesis \((H_0)\) is rejected.

### Table 3: Frequency and percentage distribution of level of back pain among antenatal mothers in pre-test and post-test. (N=30)

<table>
<thead>
<tr>
<th>S. No</th>
<th>Level of pain</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Paired ‘t’ test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>P</td>
<td>F</td>
<td>P</td>
</tr>
<tr>
<td>1.</td>
<td>Mild Pain</td>
<td>3</td>
<td>10</td>
<td>21</td>
</tr>
<tr>
<td>2.</td>
<td>Moderate pain</td>
<td>15</td>
<td>50</td>
<td>9</td>
</tr>
<tr>
<td>3.</td>
<td>Severe pain</td>
<td>12</td>
<td>40</td>
<td>-</td>
</tr>
</tbody>
</table>

### Table 4: Mean and standard deviation of back pain in pre-test and post-test. (N=30)

<table>
<thead>
<tr>
<th>Category</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Level of knowledge</td>
<td>6.4</td>
<td>2.4</td>
<td>2.4979</td>
</tr>
<tr>
<td></td>
<td>1.7435</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 5: Association between level of back pain and demographic variables. (N=30)

<table>
<thead>
<tr>
<th>S. No</th>
<th>Demographic variables</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Paired ‘t’ test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>F</td>
<td>P</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>Gravida a) Primi gravida</td>
<td>7</td>
<td>38.88</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>b) Multigravida</td>
<td>11</td>
<td>61.11</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Trimester a) 1st trimester</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>b) 2nd trimester</td>
<td>1</td>
<td>5.55</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>c) 3rd trimester</td>
<td>17</td>
<td>94.44</td>
<td>9</td>
</tr>
</tbody>
</table>

### Reference

2. Latha P, Dr. Indira S. Effectiveness of IEC package on minor ailments of pregnancy and its management among pregnant mothers at Narayana Medical College Hospital, Nellore, International Journal of Applied Research.