EFFICACY OF SELECTED INTERVENTIONS ON BACKPAIN AMONG PRIMIGRAVIDA MOTHERS AT SELECTED HOSPITALS IN KERALA.

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Introduction

The pain associated with childbirth can be related to the experience of childbirth. It is the aspect of childbirth most feared by the expectant woman. Pain equates to suffering, hence pain should be eliminated to eliminate suffering. An almost limitless number of pharmacological treatments are employed to relieve pain, which has detrimental effects on the health of both the mother and the fetus. Massage is an incredibly effective means of labor progress that offers several physical and mental benefits. Relaxation is accomplished by the aromatherapy massage offered by your partner or a member of the birth team. Both skin care and therapeutic benefits are realized with the use of the oils. Skilled massage during labour was reported to be effective and pain reducing by women who had experienced it. There has been interest in the topic of pain and its alleviation for women during labor since the birth of mankind. pharmaceuticals are utilized to ease the pain during childbirth. In order to avoid resorting to pharmacological pain management early in labor, complementary, non-pharmacologic techniques of pain reduction should be incorporated into nursing care. In the later stages of labour, massages are one of the greatest non-pharmacological treatments available. It offers the potential benefits such as lowering pain, alleviating muscle spasms, and relaxing both the muscles and the brain. Whether or not she has back discomfort, a back massage always makes her feel better.

One of the essential oils utilized in labor is jasmine oil. Jasmine is one of the greatest essential oils for labor since it reduces pain and spasms and increases contraction strength. Reports indicate that stimulating the lower back with jasmine, clary sage, rose, and lavender improves the sensation of labor for some women. These endorphins promote natural pain-killing and mood-lifting. Massage is advised for women in the first stage of labor due to its proven association with pain and anxiety reduction and shorter labors. It also lowers the risk of postpartum depression.

Methodology

This study used a quasi-experimental approach in which the test group acted as a control group. In Kerala, evaluative research was used for the study. a modification of Wiedenbach's– the clinical nursing theory Primi moms were sampled in the study, giving a sample size of one hundred. control and experimental group were both served by a convenient sampling procedure. Convenient sampling was employed to gather samples in which 50 for the experimental groups and 50 for the control group. Samples were collected from control and experimental groups on different days. A specific number of samples was picked daily for the experimental group. The investigator presented preliminary mothers to the audience.

In order to judge the effect of an experimental group and a control group, a visual analogue scale was used to measure the effect of low back pain and measurements taken of the mother's fetomaternal parameters. For 10 minutes in every one hour using 10 ml of Jasmine oil as treatment, the Jasmine oil massage was performed on both sides for three times in the experimental group. Once Jasmine oil was applied to the back, the post-test was carried out in 15 minutes. The first group of primiparous women were provided regular medical treatment beforehand, and then after one hour, the post-test was done. Finally, a post-test satisfaction rating for Jasmine oil-based back massage was calculated for the experimental group using a rating scale. Descriptive and inferential statistics were used to summarize the collected data.

Results and discussion

The results of the study revealed that the bulk of the study's primiparous women (70%) fell between the ages of 18 and 25 years, and 30% were between the ages of 26 and 30. On the control group, 70% of the moms were between the ages of 18 and 25, while only 40% were in the age bracket of 26 to 30. Overall, about three-quarters of the moms in the experimental group were satisfied with their children's education.

About half (50%) had completed high school, about a third (30%) were illiterate, about a tenth (10%) were high school graduates, and the remaining tenth (10%) only completed primary school. Only 40% of the moms in the control group had primary education, 16% had secondary education, 14% were illiterate, and 30% had graduate or professional degrees. For mothers in the experimental group, the largest percentage (57%) were rural-dwelling and the smallest percentage (43%) were urban-dwelling. In the control group, nearly half (47 percent) of the mothers were rural, and nearly half (47 percent) were urban. Most of the primiparous women (57%) were from nuclear families, whereas few (43%) were from mixed families. Most primiparous moms (53%) came from nuclear families, while the other half (47%) came from mixed families.

About income, 73% of the moms in the experimental group had monthly incomes of Rs 5000 or higher, 20% had an income between Rs 3000- Rs 5000, and 7% had incomes below 3000. 46% of mothers in the control group had an income between Rs.3000- Rs.5000; while 34% of mothers had an income of over Rs.5000. Meanwhile, only 20% of moms in the experimental group were from the Hindu religion. There were 67% and 87% of subjects in the experimental and control groups, respectively, who were from the Hindu faith. On the other hand, Christian and Buddhist primi moms (23 percent and 10 percent) were far less common in the experimental group (10 percent and 3 percent) than in the control group (10 percent).

As illustrated by the results of the pre-test and post-test measurements of low back pain among the experimental group, the great majority of first mothers (47 percent) reported suffering from a severe level of low back pain and the remaining 43 percent reported suffering from a moderate level of low back pain. For the most part, the mothers in the post-test group experienced only low-back discomfort of the moderate level (81% of primiparous women) or the severe level (30% of primiparous mothers). there was a difference in the levels of fetomaternal parameters before and after the tests in the experimental group

The results show that 99% of the fetal heart rate range were in normal ranges before and after the test. When it comes to uterine contraction duration, in the pretest, all of the samples (98 percent) Uterine contraction duration were within normal range. In the post-test, however, most (74 percent) of the primiparae had Uterine contraction length within normal range.

During the pre-test, the control group showed that over 80% of first moms had moderate-level low back pain, with another 20% having mild-level pain, but after the test, more than 70% of first mothers had severe-level pain, with another 30% having mild-level pain. The difference between the pre-test and post-test levels of fetal heart rate in the control group reveals that the values (100%) in both the pre-test and post-test were within normal limits. About 97% of primiparous moms had uterine contraction durations that were within normal limits both in the pretest and posttest.

Based on the data analysis, it was found that the post-test mean score of level of low back pain 8 (standard deviation \pm 0.547) was lower than the pretest mean score 10 (standard deviation \pm 1), resulting in a paired 't' value of 11.12 (table value = 3.33) at the p<0.05 significance level. The findings are in agreement with Jeyalakshmi S., (2008), who found that Jasmine oil massage helps ease low back discomfort for parturients at Andhra Mahila Sabha in Chennai during the first stage of labor. Study findings reveal that, the post-test mean score for the level of low back pain is 6.12 with a standard deviation of 0.491 and paired 't' value of 17.433.

As a result, the hypothesis H1 was accepted: After receiving the test results, the post-test mean uterine contraction duration score was 65.6 seconds (with a standard deviation of 8.7 seconds), compared to the pretest value of 59.03 seconds (with a standard deviation of 5.5 seconds). A significant difference was found between the pre-test and post-test scores for uterine contraction frequency, as revealed by a post-test mean score of 2.719 (SD+0.496) and a paired 't' value of 8.909 (table value = 1.699), at the p<0.05 significance level. As other fetomaternal parameters such as the fetal heart rate, systolic blood pressure, and diastolic blood pressure, were measured before to and after the tests, the mean of those mean values was used in both tests.

The findings are consistent with the findings of Jeyalakshmi S., (2008) who had conducted a study on effectiveness of Jasmine oil massage therapy upon the low back pain of parturient mother in the first stage of labor. The study findings are showed that, in experimental group the mean and standared deviation of uterine contraction frequency interval before therapy was high 4.21(SD+0.642) compared to after therapy 3.46 (SD+

0.501). Uterine contraction duration was low in before therapy 57.67(SD+6.045) compared to after therapy 71.83(SD+7.234). This showed that massage therapy increased the uterine contraction duration and decreased the frequency interval of contraction. The mean of other fetomaternal parameters such as fetal heart rate, mother's pulse rate, and blood pressure were same before and after therapy.

Hence the research hypothesis H2: There is a significant difference between the pretest and post test level of fetomaternal parameters in experimental group was accepted.

When looking at the data, it was found that the post-test mean score of level of low back pain was 8(+/-0.547) SD lower than the pretest mean score, which produced a paired 't' value of 11.12 (table value: 3.33 at significance level of p<0.05). The findings are in line with previous research by Jeyalakshmi S. (2008), who found that Jasmine oil therapy is effective on mothers with low back pain during birth. Researchers discovered that post-test scores were higher, with a 't' paired difference of 6.08, showing that post-test scores in the control group were higher than pretest scores.

As compared to the control group, the post-test mean values for fetal membranes such as uterine contraction duration (53.55) were lower as well as systolic and diastolic blood pressure (116.3 and 74). The pretest mean fetal heart rate was 136.9 (SD+3.66) and the post test was an increase of 3.43 (SD+0.75). The findings are in line with the results of Jeyalakshmi S., (2008), who found that the low back pain of expectant mothers during the initial stage of labor was helped by massage with olive oil. At baseline, control group moms' mean pulse rate was 66.98 (SD+6.28), uterine contraction duration was 56.17 (SD+7.82), and systolic pressure was 116.23 (SD+8.33), with diastolic pressure being 76.93 (SD+3.44). After treatment, the fetomaternal parameters decreased to normal levels.

The results of the study showed that the experimental group's mean post-test level of low back pain was significantly lower than the control group's mean post-test level of low back pain. Results showed a significant difference in the levels of low back pain between the treatment and control groups, at a level of significance of p<0.05. According to Khoda Karami, Safarzadeh (2006), who conducted a study to examine the effect of massage therapy on the degree of labor pain, the study findings are consistent. The results of the study show that at the beginning of active phase, the pain severity in the experiment group was significantly different from that in the control group (p=0.009). In the middle of transitional phase, pain severity in the experiment group was still significantly different from that in the control group (p=0.014). In the final stages of first stage, however, the experiment group and control group reported similar levels of pain (p=0.01). Another difference between the experimental and control groups was the length of the first stage of labor. The study's results are expected to introduce massage as a nonpharmacological pain-reduction strategy during childbirth to minimize the agony of labor.

As a result, the study hypothesis goes The results of the post-test for low back pain were approved, and show that there is a substantial difference between the groups: the control group experienced significantly lower post-test levels of low back pain than the experimental group. The post-test mean score of uterine contraction duration in the experimental group was 63.0 seconds (SD+8.7) compared to the post-test mean score of uterine contraction duration in the control group, which was 57.5 seconds (SD+7.8). An independent 't' value of 7.422 (p-value less than 0.05 and significant difference between experimental and control groups in uterine contraction time) was found with a table value of 1.645. Mean uterine contraction frequency in the experimental group after the post-test was 2.719 SD+0.496, while the control group mean was 2.039 SD+0.094. At a significance level of 0.05, an independent 't' value of 4.963 for the control group demonstrates a significant difference in uterine contraction frequency compared to the experimental group. Fetal heart rate, systolic blood pressure, and diastolic blood pressure were comparable between the two groups in the study.

theory for the study is that The post-test levels of fetomaternal parameters between the experimental group and the control group were found to be significantly different.

Most 20(66.6%) of the primi moms had an adequate level of satisfaction; however a little less than 10(33.3%) of the primi mothers had a satisfactory level of contentment. Results in a study conducted by Mei-Yueh Change (2002) in relation to the effectiveness of massage on pain and anxiety during labor are in agreement with those in this study. Thirty-two of the thirty-six participants (87% From the experimental group) indicated that the massage was useful, providing relief from discomfort and promoting a positive mental attitude while in labor.

the discovery in the study implies that The study revealed no significant relationship between low back pain levels and a wide range of demographic factors, including age, education, domicile, family makeup, income, and religion (p>0.05). Jeyalakshmi S. (2008) had previously found that the effectiveness of Jasmine oil massage therapy in the early stage of labor is similar to previous studies. While examining the demographics, it was discovered that age, educational status, and location of residence, type of family, family monthly income, and low back pain all had no significant relationship. As a result, the research hypothesis H5 was dismissed; there would be a strong relationship between the experimental group's level of low back pain and the demographics they selected.

CONCLUSION

The physical pain experienced during labor is practically universal for women who give birth. Designing intervention procedures for labor pain can be difficult for nurses, who have to take several factors into consideration. To test the effectiveness of jasmine oil massage on low back pain, this study utilized the sample of 100 participants from five hospitals in Kerala, where the populations were representative of hospitals in Kerala. Based on statistics, it can be shown that low back discomfort and uterine contraction frequency are reduced in the experimental group, and duration of uterine contractions is increased in the control group. Because the investigator thought it was important to give additional attention to low back pain assessment, the investigator felt that standardized assessment tools were required to utilize olive oil back massage as a nonpharmacologic treatment to help with the reduction of low back pain during first stage of labor.

References :

1. Brucker M, Zwelling E. Maternal newborn nursing: Theory and practice. Philadelphia: W.B. Saunder; 2004.

2. Buckle J. The role of aromatherapy in nursing care. Nursing Clinics of North America. 2001; 36(1): 57-72.

3. Chang M, Wang S, Chen C. Effects of massage on pain and anxiety on labor: A randomized controlled trial in Taiwan. Journal of Advances in Nursing, 2002;38: 68-73.nd

4. Rose Mary. Pains in Childbearing And Its Control.2 Edition. Wisely-Blackwell Publication.

5. Karami NK, Safarzadeh A, Fathizadeh N. Effects of massage therapy on severity of pain and labor of primiparous women. Iranian journal of nursing and midwifery research 2009, 12(1): 6-9. Available from URL: http://www.ijnmr.mui.ac.ir/index.php/ ijnmr/article/view/2

6. Chandra T. effectiveness of olive oil back massage on primigravida women. Nightingale nursing times. Vol.6 .jan2011

7. Julia, G.B. (1995). Nursing Theories. (4th ed). California: A pearson Education Company. 179-191

8. Jacob, M. (2005). A Comprehensive Text Book of Midwifery. (1st ed). New Delhi: Jaypee brothers. pp.596-606

9. Lowis, S.L. et.al. (2004). **Medical Surgical Nursing.** (7th ed). London: Mosby company. Pp.924-35

10.Ladewig, J. (1990). Essentials of maternal Newborn Nursing. (3rd ed).

California: Addision – Wesley Company. Pp. 423-26

11. Leifer, G. (2005). Maternity Nursing. (9th ed). Philadelphia: Elseveir pp. 114-115

12.Lynna, L.Y. (2007). **Maternity Nursing Care.** (1st ed). Haryana: Sanat Printers. Pp. 481-83, 540

13.Murray, S.S. (1998). **Foundations of Maternal- Newborn nursing.** (2nd ed). Pennsylvania: WB Saunders Company. Pp. 367-74

14. Mahajan, B.K. (2005). **Methods in Biostatistics.** (6th ed). NewDelhi: Jaypee Brothers Medical Publishers. Pp. 131-39,169-77