EFFORTS TO INCREASE PREGNANT WOMEN’S KNOWLEDGE ABOUT THE USE OF AROMATHERAPY TO REDUCE LABOR PAIN

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ABSTRACT

Childbirth is the process of expelling a fetus that occurs in a full-term pregnancy, spontaneous birth with a posterior presentation without complications for the mother and fetus. During childbirth, the mother feels pain which can interfere with comfort during contractions. Labor pain appears in the first stage of the active phase. Methods for reducing pain due to childbirth can be done using pharmacological and non-pharmacological methods. Non-pharmacological treatment of labor pain can be treated with aromatherapy because it is believed to be a complementary therapy to reduce the intensity of pain, namely with essential oils derived from the fragrant smell of plants to reduce health problems, the smell has a calming effect on the brain during labor. Objective: to increase pregnant women’s knowledge about the use of aromatherapy to reduce labor pain. Method: counseling, discussion, question and answer, as well as pretest and posttest carried out in Geguntur Village, Jempong Baru Village, Sekarbela District, Mataram City on August 8 2023. Results: there was an increase in the knowledge of pregnant women who had good knowledge by 30.8%, namely from 61.5% to 92.3%. Conclusion: there is an increase in pregnant women's knowledge about the use of aromatherapy to reduce labor pain after receiving health education.

Keywords: Knowledge, aromatherapy, labor pain

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1. INTRODUCTION

The process of labor is a process of opening and closing the cervix accompanied by the descent of the fetus and placenta into the birth canal until it comes out completely which occurs in full-term pregnancy (37-40 weeks) or the fetus has approached viability with head presentation, small fontanel presentation position, spontaneous birth through vaginal with the mother’s own power without hurting the mother and baby except episiotomy, lasting less than 24 hours without problems for the mother and baby (Wagiyo & Putrono, 2016). The process of labor begins with stage 1, stage 1 is also called the opening of the cervix which lasts from zero opening to complete opening (10 cm). At the beginning of his kala I the opening is not so strong that the mother can still walk around. The process of opening the cervix as a result of his is divided into two phases, namely the latent phase (8 hours) from opening 0 cm to opening 3 cm, and the active phase is divided into 3 phases, namely the acceleration phase, where within 2 hours the opening is 3-4 cm, the dilatation phase takes place very quickly, from 4 cm to 9 cm, and the deceleration phase, where the opening of 9 cm becomes 10 cm (Mutmainnah et al., 2017).

Labor pain is a subjective experience of physical sensations associated with uterine contractions, cervical dilatation and thinning, and fetal descent during labor. Physiological responses to pain include increased blood pressure, pulse, respiration, sweating, pupil diameter, and muscle tension (Sari et al., 2018). Pain during childbirth is unique and different in each individual, pain also has certain characteristics that are the same or common. Maternal age, parity, perception and anxiety have a relationship with labor pain in the active phase of labor. Some studies show that primitive societies experience longer labor and pain, while in modern societies 7-14% of labor is painless and most 90% of labor experiences pain (Prawirohardjo, 2014). According to Bonica in his book textbook of pain in (Oktavia, 2017) that only 15% of births take place without pain or mild pain, 35% of labor with moderate pain, 30% of labor with severe pain and 20% of extraordinary pain. Also according to the results of research (Kusnita et al., 2017) showed that most of the laboring women, both primiparous and multiparous, were in the category of severe pain at 55% (11 people) and those experiencing very severe pain were 30% (6 people) and 15% (3 people).

Labor pain is one of the most severe pains experienced, and can vary greatly in terms of intensity and location. In some cultures, women prefer to avoid normal labor by cesarean section (Yazdkhasti & Pirak, 2016). This is in line with the results of research by Withburn, et al, (2017) based on research in Australia 77% of Australian birthing women used pharmacological interventions to relieve pain during labor, including regional analgesics (33%) and systemic opioids (20%). Some women fear labor pain so much that they opt for a caesarean section to avoid normal labor, and that fear alone can cause laboring women to experience more intense pain and report a more negative experience. Compared to non-pharmacologic methods for pain management, pharmacologic methods are also associated with poorer outcomes for infants (Whitburn et al., 2017).

Appropriate pain management is one of the goals to be achieved for a satisfactory delivery because psychological responses to pain and psychological responses such as hyperventilation, and increased blood pressure can affect maternal and fetal well-being in labor (Tanvisut et al., 2018). Many methods have been used for pain management during labor, both pharmacological and non-pharmacological, but pharmacological methods are more expensive and can cause side effects. Whereas non-pharmacological methods are cheaper and effective without adverse side effects and can increase satisfaction during the labor process, because the mother can control her feelings and strength (Danuatmaja & Meilasari, 2014).

Commonly used pharmacological techniques such as (systemic drugs, inhalation anesthesia, general anesthesia, regional anesthesia) and non-pharmacological (psychoprophylaxis, hypnوتism, acupuncture, Aromatherapy healing touch therapy, relaxation exercises, massage therapy, music therapy, etc) (Yazdkhasti & Pirak, 2016). Complementary and alternative medicine (CAM) for labor analgesic has been more popular in the last decade, for example hypnosis, massage, heat compression, exercise breathing and aromatherapy.
Aromatherapy is a complementary therapy that uses liquid ingredients made from plants and is volatile, also known as essential oils or other aromatic compounds that can affect a person's psyche, emotions, cognitive function and health. When Aromatherapy is inhaled, the aroma molecules will be captured by the sensory nerves on the olfactory membrane, then electrically impulses are forwarded to the gustatory center and the limbic system (emotional center). This activates the hypothalamus. The limbic system is directly related to other parts of the brain that regulate heart rate, stress levels, blood pressure, breathing, memory, and secrete the hormone endorphin which has a function to reduce pain during labor (Putri & Amalia, 2019). Based on the above, the service team intends to conduct health counseling to increase the knowledge of pregnant women about "Efforts to Increase Pregnant Women’s Knowledge About the Use of Aromatherapy to Reduce Labor Pain".

2. Method

The method of implementing this service consists of several stages. The first stage is planning the activities to be carried out. The planning process includes identifying needs, identifying existing potentials and weaknesses, determining solutions and activities to be carried out, and organizing activities. The first stage of activities began with a field survey to Jempong Baru Village, Sekarbela District, Mataram City, West Nusa Tenggara. Furthermore, the service team held discussions to determine problem solutions.

The second stage is the implementation of service activities in the form of solutions that have been approved by the Head of Jempong Baru Village. The implementation of the activity was carried out for 1 day, namely Efforts to Increase Pregnant Women’s Knowledge About the Use of Aromatherapy to Reduce Labor Pain which was carried out on August 8, 2023.

Health counseling activities consist of three stages. The first stage is the pretest stage, where the service team distributes questionnaires to assess respondents' knowledge before being given health education. The second stage is the process of providing health counseling on aromatherapy to reduce labor pain. The material was given for 15 minutes and continued with questions and answers for 10 minutes. Pregnant women who answered questions correctly were given prizes by the service team. The method used was lecture with audiovisual media in the form of powerpoint, LCD, laptop, and leaflet. Powerpoint and leaflets contain material with pictures so that participants can easily understand the material presented. The third stage is the posttest stage, where the service team distributes questionnaires again to assess respondents' knowledge after being given health counseling.

The target of this community service activity is pregnant women in trimester 3. This community service activity is attended by level 2 students. The role of students in this activity is to weigh and measure the blood pressure of pregnant women, this is done for students to be more skilled.

3. Result And Discussion

a. Results

The implementation of health counseling was carried out for one day on August 8, 2023, which was attended by 26 pregnant women participants with the resource person being a lecturer in the Midwifery Study Program of the Undergraduate Program of STIKES Yarsi Mataram.

This health counseling activity begins with pretest activities. The pretest results can be seen in the following table:

<table>
<thead>
<tr>
<th>Kategori</th>
<th>Frekuensi</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Baik</td>
<td>16</td>
<td>61,5</td>
</tr>
<tr>
<td>2. Cukup</td>
<td>7</td>
<td>26,9</td>
</tr>
<tr>
<td>3. Kurang</td>
<td>3</td>
<td>11,6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>26</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Based on table 1, most pregnant women had good knowledge (61.5%) and a small proportion had poor knowledge (11.6%). The second stage was the process of providing health counseling on the use of aromatherapy to reduce labor pain. The material was given for 15 minutes and continued with questions and answers for 10 minutes. The
participants were very enthusiastic about the activity, as seen from the number of participants who asked and answered when asked questions. Of the 26 participants, 80% raised their hands when asked to ask questions and of the 3 questions asked by the service team, 95% of the answers were correct.

The third stage is the posttest stage, where the service team distributed questionnaires again to assess respondents' knowledge after being given health counseling. The posttest results can be seen in the following table:

<table>
<thead>
<tr>
<th>Kategori</th>
<th>Frekuensi</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Baik</td>
<td>24</td>
</tr>
<tr>
<td>2. Cukup</td>
<td>2</td>
</tr>
<tr>
<td>3. Kurang</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
</tr>
</tbody>
</table>

Based on table 2, most pregnant women have good knowledge (92.3%) and a small proportion have sufficient knowledge (7.7%).

b. Discussion

Based on tables 1 and 2, there was an increase in the knowledge of pregnant women about the use of aromatherapy to reduce labor pain. The increase can be seen from the data on the number of pregnant women who have good knowledge, from 61.5% increased to 92.3% after receiving health counseling, where the increase was 30.8%. Meanwhile, the number of pregnant women with moderate and poor knowledge decreased. The percentage decrease in the knowledge of pregnant women in the moderate category was 19.2% and there were no pregnant women who had poor knowledge.

These results are supported by a research article by Kacperczyk-Bartnik et al (2019) which states that the implementation of pregnancy education classes can reduce the perception of pregnant women towards pain in labor. This can be seen from the pain perception of pregnant women who attended pregnancy education classes decreased (score 6.5 ± 2.2 to 6.1 ± 1.9), while pregnant women who did not attend classes had a score of 6.6 ± 2.3 to 6.7 ± 2.1, which means that they actually experienced an increase in pain perception scores (Kacperczyk-Bartnik et al., 2019).

In addition, Rahayu et al also support the measurement results in this community service, namely that training on labor pain reduction techniques for pregnant women can increase pregnant women’s knowledge about therapy with complementary methods to relieve pain in labor (Rahayu & Febriati, 2020).

Knowledge can be influenced by several factors, one of which is the information factor. The results of research conducted by Bulahari, et al (2015) show that there is a relationship between information factors and knowledge with a p value of 0.024 (<0.05). The more information obtained, the better the knowledge obtained. This information can be obtained with health education. Health education is carried out to instill knowledge (Notoatmodjo, 2012).

Health counseling is an effort to convey messages to communities, groups, or individuals about health in the hope that knowledge about health in the community will be better. Thus, it is hoped that this will change behavior that supports their health (Notoatmodjo, 2012).

The success of health counseling is supported by several factors including the methods and media used. This study combines the methods of lecture (counseling) and discussion (guidance) individually. The individual technique will establish a strong interpersonal relationship between the educator and different
individuals in learning new behaviors or interests. Health education using individual methods can be provided to targets with low to high educational backgrounds. The success of the individual method is influenced by the ability of the counselor (researcher) by mastering the material and being able to convey the material in a language that suits the target and being able to take an approach that provides intensive space for respondents. It is also supported by the media used (Linggardini, 2016).

Media is a tool in providing health education so that messages or information reach the recipient of the message. Media or visual aids contribute greatly to changes in community behavior, especially in the aspect of information. The five senses that channel a lot of knowledge to the brain are the eyes (approximately 75%-87%), while 13%-25% of human knowledge is channeled through other senses so that it will provide good enough stimulation (Perceka & Sutrisno, 2020).

2. Conclusion
Based on the research that has been done, there is an increase in knowledge between before being given health counseling and after being given health counseling which is 30.8%, so it is concluded that there is an increase in knowledge about the use of aromatherapy to reduce labor pain in Jempong Village, Sekarbela District, Mataram City.

5. Reference


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