

## **EMPOWERMENT OF POSTPARTUM MOTHERS THROUGH BELLY REATHING EDUCATION AND LEMONGRASS AROMATHERAPY TO OVERCOME ANXIETY**

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**Abstrak :** This community service aims to improve the knowledge of postpartum mothers in Domas Pontang Village. Activities are carried out using the *community development* method through community empowerment, where postpartum women play a role as subjects and objects in health development. Evaluation was carried out using pre-test and post-test to measure the increase in knowledge of participants. The results showed an increase in knowledge, where the number of participants who understood the material well, sufficiently and poorly during the pre-test became good and sufficient in the post-test. In conclusion, education through community empowerment is effective in increasing the knowledge of postpartum women about belly breathing and lemongrass aromatherapy to overcome anxiety in Domas Pontang Village.

### **INTRODUCTION**

Pontang Subdistrict is included in Serang Regency, Banten Province, most of the women in Pontang Subdistrict are or have been TKW (Female Workers) or migrant workers, namely working abroad. With a history of having been a TKW, it makes it difficult to adapt after returning to the village. (Amirul Mukminin and Dehan Sya 2025)

This background, the difficulty in adapting, one of which makes limitations in knowledge and insight in self-empowerment efforts. Where self-empowerment contributes to well-being, such as clothing, food, shelter is a form of physical well-being. environmental participation and social life are included in social well-being and psychological well-being including feelings of anxiety, emotion, satisfaction and future expectations. Postpartum women are part of human resources in forming families, postpartum women's psychological well-being is achieved, it will form family well-being and form family resilience.(Family Resilience in Pontang District, Serang Regency, Banten Province n.d.)

During this postpartum period, the mother experiences a role transition, initially only with her husband and then the presence of a child, the presence of a baby, initially only having one child and then increasing the number of children, this is where the transition period from the role of being a parent occurs. How can mothers go through this transition period well, adapt, empower themselves so that mothers can adapt well. The public is more familiar with the baby blues, namely in this condition postpartum mothers experience mood swings, feel overly emotional, cry easily, fatigue, and confusion and chaotic thoughts. This is a mild postpartum stress syndrome

experienced by mothers in the range of 3-10 days. The factors of *postpartum blues* that occur in postpartum mothers are self-adjustment, *stress coping*, and social support. (Ningrum 2017)

Anxiety in postpartum mothers that is left unchecked will lead to post partum depression. In Indonesia, the incidence of *postpartum blues* is in the range of 50-70%. (Setyaningrum, Metra, and Sukmawati 2023) )The incidence of *postpartum blues* in Indonesia reaches 23%, while screening using the *Edinburgh Postnatal Depression Scale* (EPDS) found that 14-17% of *postpartum* women are at risk of experiencing *postpartum blues*. (Tridiyawati and Wulandari 2022a

The results of the study stated that music therapy is effective in preventing or overcoming postpartum blues including not only using Mozart classical music but also can use local wisdom music therapy such as karawitan, keroncong. In addition, the results of the study stated that lavender aromatherapy can reduce EPDS scores in mothers who experience postpartum blues so that is effective for overcoming the incidence of postpartum blues. (Amin et al. n.d.; Tridiyawati and Wulandari 2022b).

Therefore, as a form of non-pharmacological treatment to reduce anxiety, mothers can empower themselves with belly breathing, belly breathing is commonly used in overcoming pain during childbirth, this breathing technique can improve relaxation of abdominal muscles, genitalia muscles become relaxed, proper breathing techniques will increase the intake of oxygen into the mother's body, make the mother more comfortable (reduce pain) and ultimately increase endorphin hormones. (Rmik D- et al. 2021)

Lemongrass (*Cymbopogon citratus*) is a type of aromatic grass that belongs to the Poaceae family and contains various bioactive compounds with broad therapeutic properties. The essential oil of this plant has antibacterial, antifungal, antioxidant, anti-inflammatory, pain-relieving, and calming effects, and is also highly desirable due to its many uses in the food industry and traditional medicine. Lemongrass is used as a food and beverage flavoring as well as soap and cosmetic fragrance. The plant helps treat chest pain, high blood pressure, diabetes, headaches, muscle pain, knee pain and rheumatism, epilepsy, cough and weakness. Studies have shown that inhaling lemongrass essential oil can relieve body aches and respiratory system infections and reduce cold and flu symptoms. (Maybodi, Herandi, and Vaezpour 2025)

Therefore, self-empowerment efforts are needed so that postpartum women do not experience postpartum blues, namely by empowering themselves with increased knowledge, a simple effort that can be done.

## METHODS

This community service activity was carried out in Domas Village, Pontang District, Serang Regency, Banten Province, on June 6, 2025. The target of the activity is postpartum women who live in the area, with a total of 20 participants. With a method in the form of *Community Development. In this community service, subjects and objects in the community in a way that in every activity they are involved as part of their interests through their role ...*(Maulana, Social, and Sleman 2019)

Community service activities consist of several stages carried out :

### 1. Preparation Stage

Coordination with village midwives, posyandu cadres, lecturers, and students to formulate strategies for implementing activities.

2. Furthermore, an evaluation instrument was prepared in the form of a knowledge questionnaire consisting of 25 questions, including :
  - 5 questions about the danger signs of Belly Breathing
  - 15 questions about anxiety in postpartum women
  - 5 questions about Lemongrass Aromatherapy
 These 25 questions each score is 1 and if wrong get a score of 0, with the following provisions using the Gutman scale, namely by answering correctly 76% - 100% (Good), 56% - 75% (sufficient), < 56 (less) 16-20 (Good). (Julisia and Wulandari 2021)
3. Giving a pre-test, in the form of a questionnaire, distribution of leaflets, materials and demonstrations
4. A question and answer session was conducted to clarify participants' understanding and encourage active involvement during the education process. After counseling, participants were given a post-test.

## RESULTS AND DISCUSSION

The community service activity consisted of several stages:

1. Preparation Stage Coordination with village midwives, integrated health post (Posyandu) cadres, lecturers, and students to formulate an implementation strategy. Coordination was completed.
2. A pre-test was administered, consisting of a questionnaire, and leaflets were distributed on the topics of adaptation and psychological problems in postpartum mothers, prevention efforts through belly breathing techniques and lemongrass aromatherapy. This was followed by a demonstration of the belly breathing technique and the procedure for using lemongrass aromatherapy.
3. A question-and-answer session was conducted to clarify participants' understanding and encourage active participation during the educational process. Following the training, participants were given a post-test. The following are the results of the pre-test and post-test questionnaires.

The distribution of characteristics of postpartum women who participated in the activity can be seen in Table 1 below.

**Table 1. Characteristics of postpartum women in Domas Pontang Village in 2025**

	Category	f	%
Age	< 20 years	5	25
	20-35 years	12	60
	> 35 years	3	15
Education	University	2	10
	Senior High School	13	65
	Junior High School	5	25
Occupation	Trader	5	25
	Housewife	10	50
	Private Employee	5	25
Total		20	100

The majority of postpartum mothers are in the age category of 20-35 years, as many as 60%, while most of the education is high school as many as 65%, while for work most of the housewives are 50%.

**Table 2. Distribution of Knowledge Level of Postpartum Mothers Before and After Counseling in Domas Pontang Village**

Knowledge Level	Pre-test n (%)	Post-test n (%)
Good	5 (25%)	18 (90%)
Sufficient	10 (50%)	2 (10%)
Less	5 (25%)	0 (0,0%)
Total	20 (100,0%)	20 (100,0%)

Based on Table 2, there was an increase in knowledge during the pre-test and post-test, where during the pre-test there were respondents with good, sufficient and insufficient categories while during the post-test there was an increase only in the good and sufficient categories.



**Figure 1. 2. 3. Empowerment Documentation**

## Discussion



From the results of the above community service with the literature, the following discussion is obtained:

### 1. Characteristics of postpartum mothers (Table 1)

Most postpartum mothers are in the age category 20-35 years, as many as 60%, the second highest with the category < 20 years and > 35 years as many as 3 postpartum mothers. In this community service, postpartum women with the age category of 20-35 years, where the age of 20-35 years is an age in the category of healthy reproduction, where this age phase the reproductive organs owned by the mother are perfectly formed. (Purborini and Rumaropen 2023)

In community service activities, most of the postpartum mothers are in the age category of 20-35 years, namely as many as 60%, where this category is in reproductive age, the results of the study state that young age, namely <25 years, is more prone to depression during postpartum. (Hairol et al. 2021)

Most of the education is high school as much as 65%, and there are mothers with college as many as 2 people, and there are still respondents with junior high school education levels as many as 5 people. According to the category, high school education is a continuation of basic education, namely secondary education. Secondary education consists of general secondary education and vocational secondary education, the Secondary Education Unit is in the form of Senior High School (SMA), Madrasah Aliyah (MA). (PUSDATIN Kemendikdasmen 2025) While most of the education is high school as much as 65%, where high school is secondary education, that the higher a person's level of education will affect the level of knowledge and understanding of something. With most respondents having a high school education, and there are universities, these factors can be categorized as factors in the success of increasing knowledge. (Salsa Khoirunnisa 2022)

The occupation of most housewives is 50%, trading as many as 5 people, private employees 5 people. Housewives are women who spend a lot of time at home and spend their time taking care of their children according to the patterns given by the general public. (Junaidi 2017)

The results of the study mentioned that a higher incidence of postpartum depression is found in housewives or housewives than those who work. However, it does not deny that working mothers are prone to postpartum depression. Such as factors such as workload, and relationships with coworkers, in other words, these factors can help a mother ease her transition in returning to her work routine. (Hairol et al. 2021) Overall, this distribution of respondent characteristics provides an overview in empowering postpartum women.

### 2. Changes in Knowledge Level Before and After Counseling (Table 2)

The preparation phase was carried out through coordination with village midwives, integrated health post (Posyandu) cadres, lecturers, and students to formulate an implementation strategy. Next, a pre-test was administered, consisting of a questionnaire, comprising several questions about the stages and psychological issues in postpartum mothers, and prevention efforts through belly breathing and lemongrass aromatherapy. Next, leaflets were distributed, covering adaptation and psychological issues in postpartum mothers, prevention efforts through belly breathing and lemongrass aromatherapy, followed by a demonstration of the belly breathing technique and the procedure for using lemongrass aromatherapy.

Finally, a question-and-answer session was held to clarify participants' understanding and encourage active participation during the educational process. Following the counseling, participants were given a post-test. The results of the analysis in Table 2 show a significant increase in the level of knowledge after empowering postpartum women or counseling on *belly breathing* and *lemongrass aromatherapy*. Based on Table 2, there was an increase in knowledge during the *pre test* and *post test*, where during the *pre test* there were respondents in the good, sufficient and insufficient categories while during the *post test* there was an increase only in the good and sufficient categories. During the *pre-test*, 25% were found in the good category, and the majority of 50% were in the sufficient category.... there were even 25%

in the less category. After the *pre-test*, the majority of the good category was 90%, and 10% was sufficient.

The increase in *post test* results shows that efforts to empower mothers through increasing knowledge are effective. In the study there was an increase in knowledge after following the provision of material related to *postpartum* through the lecture method. (Alza, Nurhidayah, and Suherlin 2025)

Another study found that there was an 82% increase in knowledge of *Postpartum depression* after training sessions during the first twelve months postpartum including the provision of an online platform that can be used in self-screening, and early psychological intervention so that women at risk of *Postpartum depression* are referred. (Chrzan-Dętkoś, Murawska, and Walczak-Kozłowska 2022).

Based on interviews with postpartum women who participated in previous counseling activities, they did not know what self-empowerment efforts could be done in overcoming anxiety, with increased knowledge they were very enthusiastic. Increased knowledge in the form of counseling belly breathing and lemongrass aromatherapy, is a form of self-empowerment that is easy to do. With the empowerment of postpartum women carried out through increasing knowledge about efforts that can be made in overcoming anxiety and this community service as an effort to screen for anxiety.

The results of the study mentioned that Diaphragmatic breathing involves deep breathing and extending the lungs into the diaphragm rather than using only the abdomen or rib cage. The diaphragmatic breathing technique focuses on the breath and slows the breath rate by using processes such as counting breaths while expanding the abdomen and inhaling deeply through the nose, pausing, followed by contracting the abdomen and exhaling slowly and completely through the mouth. (Hopper et al. 2019)

The main component in lemongrass is citral which has antihypertensive effects in animal and human samples. This review suggests that lemongrass' antihypertensive effects, when taken orally, may occur through the following mechanisms: (1) vasodilation due to endothelial NO secretion and smooth muscle relaxation (via calcium channel blockage); (2) central nervous system suppressive activity, which causes cardiac depression via the parasympathetic system and reduces the level of anxiety; and (3) potentiation of diuresis, which can reduce blood pressure. In addition, the research findings of these findings suggest that the antihypertensive properties of lemongrass extracts are due to bioactive compounds such as saponins, tannins, flavonoids, alkaloids, and anthraquinones. (Silva and Bárbara 2022)

Based on the study results that mention the benefits of the two complementary breathing exercise therapies, namely belly breathing and lemongrass aromatherapy, they can be used as an effort to overcome anxiety, especially since both complementary therapies are easy to do so they can be used as a self-empowerment effort for postpartum mothers.

## CONCLUSION

Empowerment of postpartum women through belly breathing education and lemongrass aromatherapy to overcome anxiety is proven to increase participant knowledge. enough and less at pre-test to good and enough at post-test. Through this community service, increasing knowledge in the form of counseling belly breathing and lemongrass aromatherapy, is a form of self-empowerment that is easy to do. With the empowerment of postpartum women carried out through increasing knowledge about efforts that can be made in overcoming anxiety and this community service as a screening effort for anxiety.

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