IMPLEMENTATION OF PREGNANCY EXERCISES AS AN EFFORT TO ACCELERATE STUNTING REDUCTION IN BUKITTINGGI CITY IN 2023

Diana Putri¹, Yellyta Ulsafitri², Yessi Pertiwi³

^{1,2,3}Mohammad Natsir University Bukittinggi, Indonesia

* Corresponding Author: Diana Putri, (Mohammad Natsir University Bukittinggi, Indonesia); Email dianaputri270509@gmail.com, Phone 082170383887.

Submission date: 30-01-2024; Date of received: 21-02-2024

Abstract

Background: Stunting is a health problem that is of concern to the government in Indonesia. The incidence rate in West Sumatra Province from SSGI data (2022) was 25.2% and in Bukittinggi City it was 16.8%. One indirect cause of stunting is low birth weight. One of the specific nutritional intervention efforts for stunting is Antenatal Care (ANC). The ANC standard in Indonesia is 14 T, one of which is pregnancy exercise. Pregnancy exercise has the benefit of normal birth weight. ACOG explains that the benefits of exercise in pregnancy can reduce the incidence of low birth weight. so that pregnancy exercise can be implemented as an effort to accelerate stunting reduction. The aim of this activity is to increase knowledge about pregnancy exercise and mothers to be able to implement pregnancy exercise independently as a form of concern for pregnant women in reducing the incidence of stunting. This activity involves pregnant women in the second and third trimesters in Bukittinggi City.

Methods: The method of implementing activities goes through 3 stages, namely preparation, implementation and evaluation stages.

Result: Pregnant women who attended this activity were 85% of the target participants, all pregnant women were very enthusiastic about participating in pregnant women's exercise. Activities are carried out in 3 stages starting from the introduction stage, implementation of activities and evaluation in the form of a discussion session.

Conclution: pregnant women get knowledge about the benefits of pregnancy exercise and to implement pregnancy exercise independently at home, each mother is given a pregnancy exercise guide in the form of a pregnancy exercise leaflet.

Keywords: *Implementation, Pregnancy Exercise, Stunting*

E-ISSN: 3031-2299

International Journal of Community Services

Vol. 1, Issue 2 (2024), February



Introduction

Stunting is a condition of being short or very short which is seen based on length or height according to age which is less than -2 standard deviation (SD) on the WHO growth curve according to World Health Organization (2020). This occurs due to an irreversible condition due to inadequate nutritional intake and/or recurrent/chronic infections that occur in the First 1000 Days of Life (HPK).¹

The incidence of stunting in Indonesia according to Riskesdas (2018) amounting to 30.8%.² The stunting incidence rate in West Sumatra from the 2022 Indonesian Nutrition Status Survey (SSGI) data was found to be 25.2% and in Bukittinggi City the stunting rate was 16.8%. National target in 2024 stunting rate reaches 14%.³

There are two factors that cause stunting, direct and indirect. The direct causes are nutritional intake and infectious diseases, while the indirect causes are food availability, nutritional status of pregnant women, birth length, exclusive breastfeeding, MP-ASI, birth weight.⁴ Efforts to prevent stunting that can be carried out to achieve national targets are divided into two, namely sensitive nutrition interventions and specific nutrition interventions. Sensitive nutrition interventions include access to proper sanitation, health insurance, Early Childhood Education (PAUD), family maternity, social assistance (PKH, BPNT, BLT, etc.), healthy homes, family food security, and food diversity for toddlers. Specific nutritional interventions include pregnancy checks (Antenatal Care), complete routine and basic immunizations, monitoring the growth of toddlers, blood supplement tablets for pregnant women and teenage girls, access to treatment for sick toddlers, giving worm medicine, and providing additional food for toddlers and pregnant women.³

One of the specific nutritional intervention efforts for stunting is pregnancy checks (Antenatal Care). In Indonesia, the ANC examination standard is 14 T which consists of measuring height and weight, blood pressure, upper arm circumference, uterine fundus height, presentation and fetal heart rate, tetanus toxoid screening, Fe tablets, laboratory examination, management and treatment. specifically, interviews, giving iodine capsule therapy, malaria therapy, pregnancy exercises, and breast care.⁵

Pregnancy exercise is movement exercise therapy and one of the activities in services during pregnancy or prenatal care which aims to prepare pregnant women physically and mentally when facing childbirth so that normal delivery can take place

E-ISSN: 3031-2299

International Journal of Community Services

Vol. 1, Issue 2 (2024), February

Index solution of the solution

quickly, safely and spontaneously.⁶ Pregnant women exercise in the second trimester and third trimester. The benefits of physical exercise for pregnant women are preventing stress, improving body posture, making pregnant more relaxed, preventing constipation, maintaining body condition, preventing low back pain, facilitating childbirth, and normal birth weight.⁷ Pregnancy exercise improves uteroplacental blood flow so that the flow of nutrients from mother to fetus is better so that pregnancy outcomes will be good.

One of the indirect causes of stunting is low birth weight (LBW). Research conducted by Marina Vargas Terrones, Nagpal and Barakat (2019) It was found that pregnant women who exercise during pregnancy can prevent babies from being born small for gestational age.⁸ This is in line with The American College of Obstetricians and Gynecologists (ACOG) that the benefits of exercise in pregnancy are reducing the incidence of low birth weight.⁹ Therefore, it is necessary to implement exercise for pregnant women as an effort to accelerate the reduction of stunting in Bukittinggi City.

Method

This activity was carried out in Bukittinggi City. Participants in this activity were pregnant women in the second trimester and third trimester who took part in the stunting prevention event at the Bukittinggi Mayor's Meeting Hall. The activities were carried out by the DIII Midwifery Study Program community service team, Faculty of Health Sciences, Mohammad Natsir University, Bukittinggi in collaboration with the Bukittinggi City Health Services. Implementation of this activity has several stages, namely:

1. Preparation Stages

- a. Preparations for implementing pregnancy exercise began by having a common perception with the committee from the Bukittinggi City Health Service in determining the location and participants.
- b. Preparation of pregnancy exercise material accompanied by leaflets.

2. Implementation Stages

- a. Prepare the tools needed to provide material and demonstrations.
- b. Provide greetings and introductions by conveying the purpose of this activity, as well as gathering information about mothers' knowledge regarding pregnancy exercise.

- c. Arrange a place so that it is safe and comfortable for pregnant women to do exercise.
- d. Carrying out a demonstration of pregnancy exercise movements which was attended by all participants.

The following is the flow of activities carried out

3. Evaluation stages

Ask again about the material that has been explained, and discuss if there are questions

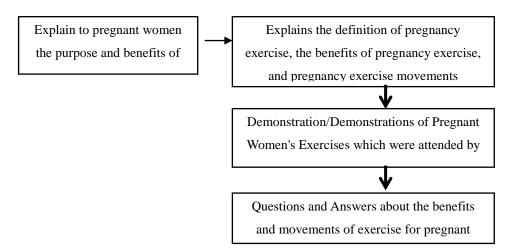


Figure 1. Flowchart of Pregnancy Exercise Implementation Activities in Efforts to Accelerate Stunting Reduction in Bukittinggi City

Results

This activity takes the form of implementing pregnancy exercises as an effort to accelerate stunting reduction in Bukittinggi City. This activity was held on Monday, August 28, 2023 at the Bukittinggi Mayor's Meeting Hall. This activity was carried out to 27 pregnant women.

Discussion

Pregnancy exercise is movement exercise therapy and one of the activities in services during pregnancy or prenatal care which aims to prepare pregnant women physically and mentally when facing childbirth so that normal delivery can take place quickly, safely and spontaneously. ⁶ Implementation of activities is carried out in several stages:



1. Introductory Stages

At this stage the community service team introduces themselves and conveys the purpose of this activity. Next, the presenter asked the pregnant women who had attended what they knew about pregnancy exercise. This was done to determine the mother's knowledge regarding pregnancy exercise. Knowledge is the result of knowing after someone senses a particular object. Knowledge is the result of knowing after someone senses a particular object. ¹⁰



Figure 2. Introduction stages for pregnant women to find out the mother's knowledge about pregnancy exercise

2. Stages of Pregnancy Exercise Activities

After knowing the description of the mother's knowledge about pregnancy exercise, we continued with the presentation of material about the definition of pregnancy exercise, the benefits of pregnancy exercise, the gestational age at which pregnancy exercise can be performed, and explaining pregnancy exercise movements and the benefits of each movement. Before demonstrating pregnancy exercises, the community service team said that pregnancy exercises can only be participated in by pregnant women in the second and third trimesters.



Figure 3. Submission of Image Material



Figure 4. Demonstration of Pregnancy Exercise Movements

Vol. 1, Issue 2 (2024), February



Figure 6. Discussion Session

Pregnant women exercise in the second trimester and third trimester. The benefits of physical exercise for pregnant women are preventing stress, improving body posture, making pregnant more relaxed, preventing constipation, maintaining body condition, preventing low back pain, facilitating childbirth, and normal birth weight.⁷ Pregnancy exercise improves uteroplacental blood flow so that the flow of nutrients from mother to fetus is better so that pregnancy outcomes will be good.

One of the indirect causes of stunting is low birth weight (LBW). Research conducted by Marina Vargas Terrones, Nagpal and Barakat (2019) It was found that pregnant women who exercise during pregnancy can prevent babies from being born small for gestational age.⁸ This is in line with The American College of Obstetricians and Gynecologists (ACOG) that the benefits of exercise in pregnancy are reducing the incidence of low birth weight.⁹

Conclusion

The conclusion of this activity is that from this activity pregnant women gain knowledge about the benefits of pregnancy exercise, and how pregnancy exercise movements can be done independently at home. This was done as an effort to reduce the number of stunting incidents in Bukittinggi City. It is recommended that all pregnant women in the second trimester and third trimester can do pregnancy exercises which have many benefits both for the physical and mental health of the mother, as well as for the fetus.

References

- Kemenkes. Mengenal Apa Itu Stunting [Internet]. 2022 [cited 2023 Sep 20].
 Available from: https://yankes.kemkes.go.id/view_artikel/1388/mengenal-apa-itu-stunting
- 2. Riskesdas. Hasil Riset Kesehatan Dasar Tahun 2018. Kementrian Kesehat RI. 2018;53(9):1689–99.
- 3. Kemenkes. Buku Saku Hasil Survei Status Gizi Indonesia (SSGI) 2022. Jakarta; 2022.
- 4. Bappenas. Kerangka Kebijakan Gerakan Nasional Percepatan Perbaikan Gizi dalam Rangka Seribu Hari Pertama Kehidupan (Gerakan 1000 HPK). 2013;71.
- 5. Massa K. Buku Ajar Keperawatan Maternitas. Jambi: PT. Sonpedia Publishing Indonesia; 2023.
- 6. Kemenkes. Persalinan Normal Jadi Mudah dan Lancar, Senam Hamil Yuk.. [Internet]. 2022 [cited 2023 Sep 29]. Available from: https://yankes.kemkes.go.id/view_artikel/243/persalinan-normal-jadi-mudah-dan-lancar-senam-hamil-yuk
- 7. Kementerian Kesehatan RI. BUKU KIA REVISI 2020 LENGKAP.pdf. Kementrian Kesehatan Republik Indonesia. 2020. p. 53.
- 8. Vargas-Terrones M, Nagpal TS, Barakat R. Impact of exercise during pregnancy on gestational weight gain and birth weight: an overview. Brazilian J Phys Ther [Internet]. 2019;23(2):164–9. Available from: https://doi.org/10.1016/j.bjpt.2018.11.012
- 9. ACOG. Physical Activity and Exercise During Pregnancy and the Postpartum Period [Internet]. 2020 [cited 2023 Sep 29]. Available from: https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2020/04/physical-activity-and-exercise-during-pregnancy-and-the-postpartum-period
- 10. Notoatmodjo S. Ilmu Perilaku Kesehatan. Jakarta: Rineka Cipta; 2014.