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CASE REPORT PREECLAMSIA IN PREGNANT WOMEN IN WORK AREA KISMANTORO HEALTH CENTER WONOGIRI WITH DASH METHOD

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ABSTRACT

Preeclampsia is one of the causes of the high maternal mortality rate seen on a national and regional scale and is usually characterized by symptoms such as hypertension, edema, proteinuria. In 2021 there were 23 cases of preeclampsia and 11 cases with preeclampsia referred. The results of interviews with 2 mothers who experienced preeclampsia were a history of hypertension before pregnancy and the mother's age was > 35 years with multipara. DASH (Dietary Approaches to Stop Hypertension) is an effective diet method for people with hypertension. The DASH diet approach can be used as a non-pharmacological therapy and as a substitute for drugs. The results of the study showed that participants had complaints of dizziness and heartburn for 3 days, pregnant women at the age of > 35 years and had a history of high blood pressure before pregnancy. Objective data showed high blood pressure 150/100, edema in the right and left legs, positive urine protein. The diagnosis in this case was preeclampsia with initial treatment in collaboration with doctors for further examination and treatment and recommending participants to adopt a DASH diet every day at home. Notes of development in the first week, participants were no longer dizzy and heartburn and edema were reduced. The results of the second week, participants did not experience edema and decreased blood pressure. Treatment of preeclampsia with the DASH diet method can lower blood pressure when properly applied every day.

Keywords: *Preeclampsia, DASH, Pregnancy*

1. INTRODUCTION

Preeclampsia is a contributor to the high maternal mortality rate is preeclampsia. Preeclampsia or eclampsia is a complication that is often experienced by pregnant women. Viewed on a national and regional scale, preeclampsia or eclampsia is a major cause of maternal death, namely bleeding, preeclampsia, and infection [Elsanti, 2020].

Preeclampsia is a collection of symptoms that occur in pregnant women, childbirth, and the puerperium consisting of hypertension, edema, and proteinuria that appear at 20 weeks gestation until the end of the first week after delivery. Preeclampsia is a serious problem and has a fairly high level of complexity. The magnitude of this problem is not only because preeclampsia affects the mother during pregnancy and childbirth, but also causes postpartum problems, such as the risk of cardiometabolic disease and other complications [Muzalfah et al., 2018].

According to the World Health Organization (2019), the maternal mortality rate in the world is 303,000 people. The Maternal Mortality Rate in Association of Southeast Asian Nations is 235 per 100,000 live births (ASEAN Secretariat, 2020). According to the Indonesian Demographic and Health Survey Data, the Maternal Mortality Rate in Indonesia increased from 228 per 100,000 live births in 2002-2007 to 359 per 100,000 live births in 2007-2012. MMR decreased in 2012-2015 to 305 per 100,000 live births and the number of maternal deaths in Indonesia in 2019 was 4,221 cases [Kemenkes RI, 2021].

According to the Ministry of Health in Indonesia, the maternal mortality rate is 1712 per 100,000 live births. Meanwhile, the IMR in 2017 was 10294 per 1,000 live births [Kemenkes RI, 2021].

MMR achievement in 2020 is 98.6/100,000 life birth; IMR: 7.79/1000 life birth and infant mortility rate 8.99/1000 life birth) although this figure is much better than the national target

(MMR: 226/100,000 life birth; IMR: 24/1,000 life birth) however, the MMR achievement is lower than the MMR achievement in 2019 (AKI 76.93/100,000 KH; IMR: 8.24/1000 KH and AKABA 9.65/1000 KH [Dinas Kesehatan Provinsi Jawa Tengah, 2021].

The MMR in 2020 is 111.45 per 100,000 live births, this has increased again compared to 2019 which was 73.87 per 100,000 births. The most common causes of maternal death in Wonogiri Regency in 2020 were bleeding 5 people, severe pre-eclampsia (PEB) 3, broncho pneumonia 1 person, hyperthyroidism 1 person, heart disease 1 person, amniotic fluid embolism 1 person [Dinas Kesehatan Wonogiri, 2021].

The results of the study [Wijaya, 2021] with the title Management of Preeclampsia in Pregnant Women at PMB Siti Azizah Wijaya, S.ST., Bd showed that participants 1 and 2 had complaints of swollen feet accompanied by headaches. On examination of vital signs, participants 1 and 2 showed high blood pressure results. After being given implementation in the form of observing blood pressure, recommending bed rest, implementing a diet with the DASH diet and soaking the feet using warm water mixed with salt, it was found that participant 1 was resolved at week 3 and participant 2 was resolved at week 4. This occurs because participant 2 is more cooperative than participant 1.

Based on the results of a preliminary study at the Kismantoro Wonogiri Health Center, the number of cases of preeclampsia has increased from 2020 to 2021. In 2020 the number of pregnant women with preeclampsia was 11 cases and preeclampsia were referred as many as 7 cases. Meanwhile, in 2021 there were 23 cases of preeclampsia and 11 cases with preeclampsia who were referred. The results of interviews with 2 mothers who experienced preeclampsia were a history of hypertension before pregnancy and the mother's age was over thirty five years with multipara.

Based on (Hapsari, 2016) One way to control hypertension, especially in pregnancy, is to adjust the diet using the DASH method. Since the publication of the results of the DASH diet research in 1997, the DASH diet has been widely recommended to prevent and treat hypertension. The Dietary Approaches to Stop Hypertension (DASH) diet study states that a diet high in vegetables, fruit, and low-fat dairy products that are low in saturated fat and total fat and high in potassium, calcium, and magnesium can lower systolic blood pressure by 6-11 mmHg. and diastolic blood pressure of 3-6 mmHg [Rahadiyanti et al., 2015] .

The DASH diet approach is not only used as a non-pharmacological therapy but can be used as a substitute for drugs [Fitriyana & Wirawati, 2022]. To anticipate the occurrence of unwanted things in pregnant women with symptoms that lead to preeclampsia, it is recommended to carry out routine and regular antenatal checks. This is useful for early detection if the mother's body finds signs and symptoms of preeclampsia, so that the mother can immediately get treatment. In addition, patients can also do bed rest early and apply a good diet so that their condition does not worsen and is expected to be more stable than the previous condition.

Therefore, in helping efforts to accelerate the decline in MMR and IMR, one of the authors is implementing continuous care or Continuity of Care. Continuity of Care in midwifery is a series of continuous and comprehensive service activities starting from pregnancy, childbirth, postpartum, newborn care and family planning services that link women's particular health needs and individual circumstances (Homer et al., 2014).

2. PATIENT IDENTITY

The patient named Mrs. S, 36 years old. His last education was junior high school, he worked to take care of the household, address Gesing Kismantoro.

The main complaints are dizziness and heartburn for 3 days. Pregnant with 2nd child and never miscarried. History of disease, namely having had hypertension in the first pregnancy.

3. CLINICAL FINDINGS

Good general condition, Compos mentis consciousness, Blood pressure: 150/100mmHg, Respiration: 20 x/min, Pulse: 80 x/min, Temperature: 36.5oC, TFU: 28 cm, head presentation, convergent, contractions: none, FHR : 142 x/minute, right and left lower extremely edema.

4. TIMELINE

Time	Subjective	Objective	Assessment	Planning
07.07.22 10.00	Dizziness and heartburn for 3 days	Blood pressure: 150/100 mmHg, Respiration: 20 x/minute, Pulse: 80 x/minute, Temperature: 36.5oC, TFU: 28 cm, head presentation, convergent, contraction: none, FHR: 142 x/minute, lower extremity edema.	Mrs. S G2P1A0 36 years old 34 weeks pregnant single fetus live intra uteri, longitudinal position, cephalic presentation, puca, convergent with preeclampsia	1. Explain to the mother about the current state of her pregnancy 2. Explain to the mother about preeclampsia 3. Observation of KU, vital signs, especially blood pressure, and ask the mother to tilt to the left while sleeping. 4. Advise the mother to bed rest and soak the feet in warm water 5. Give moral support to mother 6. Give KIE to the mother regarding the management of preeclampsia with the DASH method 7. Collaborate with doctors for further examination 8. Advise mother to visit again in 1 week
14.07.22 09.00	Mom is no longer dizzy and no pain in the pit of the heart	Blood pressure: 150/95 mmHg, Respiration: 20 x/minute, Pulse: 80 x/minute, Temperature: 36.5oC, TFU: 28 cm, head presentation, convergent, contraction: none, FHR: 142 x/minute, lower extremities slightly edematous	Mrs. S G2P1A0 36 years of age 35 weeks pregnant, single live intrauterine fetus, longitudinal position, cephalic presentation, puca, convergent with preeclampsia	1. Explaining the results of the examination to the mother that the mother's condition has improved such as the mother is no longer dizzy and has heartburn, reduced blood pressure, reduced edema 2. Encourage mothers to continue implementing the DASH diet at home, namely a diet rich in fruits, vegetables, whole grains, nuts, fish, and low-fat milk. These foods are high in important nutrients, such as potassium, magnesium, calcium, fiber, and protein. 3. Advise the mother to rest enough during the day 1-2 hours and 7-8 hours at night 4. Advise the mother to continue to take vitamins from the doctor 5. Advise control mother for 1 more week to monitor general condition and vital sign
21.07.22 08.00	Mom has no complaints, just wants to check her pregnancy	Blood pressure: 146/90 mmHg, Respiration: 20 x/minute, Pulse: 80 x/minute, Temperature: 36.5oC, TFU: 29 cm, head presentation, convergent, contraction: none, FHR: 150x/minute, extremities no edema	Mrs. S G2P1A0 36 years of age 36 weeks pregnant, single live intrauterine fetus, longitudinal position, cephalic presentation, puca, convergent with preeclampsia	1. Explain the results of the examination to the mother that her condition has improved, blood pressure has decreased, there is no edema, positive urine protein 2. Encourage mothers to continue implementing the DASH diet at home, namely a diet rich in fruits, vegetables, whole grains, nuts, fish, and low-fat milk. 3. Advise the mother to rest enough during the day 1-2 hours and 7-8 hours at night 4. Giving counseling to mothers with danger signs in pregnancy such as severe dizziness, blurred vision, heartburn, bleeding, seizures 5. Giving counseling to the mother for signs of labor such as urinating in the lower abdomen, removing blood mucus, removing fluid/amniotic fluid from the birth canal 6. Provide counseling to mothers regarding preparation for childbirth 7. Advise the mother to continue to take vitamins from the doctor 8. Instruct the mother for control in 1 week to monitor general condition, vital sign and signs of labor.

5. DIAGNOSTIC CHECK

Investigations carried out were urine protein examination with positive results. The diagnosis of this case was preeclampsia. This diagnosis is supported by research results which state that (Peres et al., 2018) Preeclampsia is a hypertensive condition found at gestational age over twenty weeks with or without urine protein and accompanied by other organ disorders.

The prognosis in this case is preterm delivery. This is in line with the theory Norwitz ER, Repke JT in Hidayati et al., 2018 One of the prognosis for preeclampsia in pregnancy is the risk of complications to the mother and fetus, such as

impaired fetal growth, preterm birth, placental abruption, and Intra Uterin Fetal Death.

6. INTERVENTION THERAPY

The intervention carried out during the visit was to encourage mothers to apply the DASH method, namely a diet high in important nutrients, such as potassium, magnesium, calcium, fiber, and protein. (Nurhayati, 2021). Based on research (Porouw & Yulianingsih, 2019) The content of sodium and potassium in Ambon bananas is proven to be able to reduce high blood pressure in pregnant women when consumed regularly and with the right dose.

The next implementation is to encourage mothers to do bed rest (Novitasari et al., 2018), In addition, it is recommended that mothers soak their feet in warm water (Sabattani et. al., 2016).

Management in cases of preeclampsia also provides referrals or recommendations to the hospital for further examination and treatment with the patient's consent.

7. FOLLOW UP AND RESULT

Monitoring is carried out every 1 week, by conducting home visits, at the first visit there is a development of the mother's condition, namely complaints of dizziness and heartburn have disappeared, reduced leg edema, there is a decrease in diastolic blood pressure of 8 mm Hg. The second visit showed progress with a decrease in systolic blood pressure of 4 mm Hg and diastolic 5 mm Hg, no edema, urine protein was still positive.

8. CONCLUSION

Treatment of preeclampsia with the DASH method can lower blood pressure if applied every day properly. Collaboration with doctors is also very necessary for further examination and therapy.

9. INFORMED CONSENT

Informed consent has been done on July 7, 2022 and the patient is willing to be a respondent.

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