

Case Study of Midwifery Care for Mrs. M G1P0A0 Pregnancy 34 to 38 Weeks, Labor and Newborns, Postpartum with CED, Neonates and Family Planning

A.Q. Rosiana^{1*}, A.N. Laili², Suryaningsih³, U. Khasanah⁴

^{1,2,3,4} Department of Health Polytechnic Surabaya Jl. Pucang Jajar Tengah No. 56, Kertajaya,
Kec. Gubeng, City of SBY, East Java 60282
Corresponding author: rosianaalivia@gmail.com

Abstract. Pregnancy is a physiological thing in a woman, this is related to the phases of pregnancy, childbirth, newborn, and postpartum. The processes of pregnancy, childbirth, newborns, and postpartum are physiological/natural events. However, it cannot be denied that the period of pregnancy, childbirth, the postpartum period of newborns and the use of contraception can be risky if not properly monitored. One of them comes from macronutrient deficiencies before or during pregnancy which is called chronic energy deficiency (CED). In providing services to patients, midwifery care is provided on an ongoing basis (Continuity of care) as well as presentation of midwifery care data using the SOAP documentation starting from pregnancy using the 10T examination, childbirth, and BBL using delivery assistance according to the 60-step APN standard. Postpartum uses standard postpartum maternal health (KF) services. Neonates use Neonatal Health Services (KN) standards, and contraceptive services use BKKBN standards. Handling this problem includes class activities for pregnant women. Through classes for pregnant women, it is hoped that there will be an increase in knowledge, changes in attitudes and behavior of mothers regarding pregnancy. In this activity, increased knowledge focuses on nutrition and counseling can be provided for pregnant women. Apart from that, efforts can be made to provide additional food (PMT), and encourage pregnant women to carry out regular antenatal care.

Keywords: Pregnancy, Continuity of care, CED.

1 INTRODUCTION

Pregnancy, childbirth, the postpartum period for newborns and the use of contraception can be risky if not monitored properly (Cooper, M., & Cameron, S, 2018). One of them comes from macronutrient deficiencies before or during pregnancy which is called Chronic Energy Deficiency (CED) (Muhrifan, A., et al, 2020). Pregnant women are said to have Chronic Energy Deficiency (CED) if their LiLA is <23.5 cm, where the condition of pregnant women is experiencing malnutrition (calories and protein) which lasts for a long time and is chronic due to an imbalance in nutritional intake, so that the nutrients the body needs are not sufficient (R. Alfarisi, Y et al, 2019). Therefore, it is very important for prospective pregnant women to maintain good nutritional status before entering pregnancy, for example not being thin and not anemic, to ensure that the nutritional reserves of pregnant women are sufficient for the needs of the fetus (E. Martiana, J et al, 2018).

Based on data sources from routine reports for 2022 collected from 34 provinces, it is known that there are 283,833 pregnant women with LiLA < 23.5 cm (CED risk) out of 3,249,503 pregnant women measured by LiLA, so it is known that the achievement of pregnant women with CED risk is 8.7% (cut off date 4 February 2022) while the target for 2021 is 14.5%. This achievement illustrates that the target for CED pregnant women this year has exceeded the target of the Ministry of Health's Strategic Plan for 2021. From these calculations it can be concluded that the percentage of pregnant women at risk of CED in 2021 is 8.7%, while the target for 2021 is 14.5%. The percentage of pregnant women with KEK in East Java province in 2021 is 9.2% (R. Kemenkes, 2022).

The impact of chronic lack of energy on childbirth: effects during labor such as difficult and long labor, premature labor, bleeding after labor, risk of birth by surgery (D Oktadianingsih et al, 2019). Pregnant women whose nutritional intake is inadequate or have poor nutritional status before and during pregnancy

will result in abnormalities in the fetus such as LBW due to inadequate nutritional needs for the fetus which causes its growth and development to be hampered (Marshal NE et al, 2022). According to research results from Haryanti et al (2019), pregnant women with CED will also experience problems related to their fetuses, such as miscarriage, birth defects, prematurity and stillbirth (SY Haryanti, DR and A. Kartini, 2019).

The program effort carried out, namely the activity of providing nutritional supplements, is an effort that can be carried out in order to meet the lack of nutritional needs from daily food consumption which results in the emergence of health and nutritional problems in nutritionally vulnerable groups (Dörsam AF et al, 2019). One of the supplement programs implemented by the government is the provision of supplementary food (PMT) to pregnant women (Yaya S et al, 2018). Apart from that, the important thing that pregnant women must pay attention to is that the food they consume consists of rice, side dishes, vegetables, fruit and milk (E. Retnaningtyas et al, 2022).

To support all forms of government programs, the author carries out continuous care (continuity of care) so that a woman gets continuous services starting from monitoring the mother during pregnancy, childbirth, postpartum, newborns and family planning (Susanti AI et al, 2022). Handling this problem includes class activities for pregnant women. Through classes for pregnant women, it is hoped that there will be an increase in knowledge, changes in attitudes and behavior of mothers regarding pregnancy. In this activity, increased knowledge focuses on nutrition and counseling can be provided for pregnant women. Apart from that, efforts can be made to provide additional food (PMT), and encourage pregnant women to carry out regular antenatal care.

2 METHOD

In providing care using Continuity of Care, the data obtained comes from primary data sources and secondary data. The primary data source is a data source obtained directly from the client (a primigravida mother gestation age 28-40 weeks with KEK status). Primary data sources include interviews and observations, which will be carried out on third trimester pregnant women with KEK. Interviews and observations were carried out directly through the assessment process. Secondary data sources are data sources obtained indirectly from informants in the field. The data source is a cohort book in the work area of the health center, a KIA book related to the condition of primigravida mothers in the third trimester and KEK.

The data collection technique used in providing midwifery care is by taking anamnesis on clients/patients directly or indirectly through other people which is carried out systematically at each visit and direct observation is carried out, namely by physical examination (inspection, palpation, auscultation, percussion and laboratory).

The analysis used in this care is to determine the diagnosis and problem. The diagnosis is made based on obstetric nomenclature obtained from the results of data interpretation and problems based on complaints that are considered to interfere with the mother's activities.

3 RESULT AND DISCUSSION

The results of the initial examination were obtained by Mrs. M G1P0A0 gestational age 34 weeks, with chronic energy deficiency (CED). Fetus, single, live, intrauterine. Mothers are advised to increase their diet which contains high calories and protein every day in addition to actively spending PMT from the nutrition program so that LILA increases and the condition of CED improves. This is in accordance with the opinion of Setyowati, and friends who stated that giving PMT that is high in calories and high in protein can significantly increase the weight of pregnant women with CED. Fulfillment of adequate nutrition during the pregnancy process will affect the condition of the fetus in its growth and development during pregnancy (A. Setowati et al, 2022). Pregnancy services were carried out 3 times. At the first visit the mother did not complain. On the second visit the mother complained of back pain. This is in accordance with Widatiningsih's opinion which states that back pain is one of the discomforts that occurs in the third trimester which occurs physiologically (S. Widiatningsih et al, 2017). Complaints can be resolved by providing HE by suggesting reducing tiring work and improving body posture. At the third

visit, the mother complained of frequent urination. During the third trimester of pregnancy, this is physiological or normal because the fetus is getting bigger, putting pressure on the bladder and this causes the mother to experience frequent urination (Complaints can be resolved by giving HE to reduce drinks containing caffeine and reduce drinking at night).

Labor begins at 37-38 weeks of gestation. In the first stage with PROM. During the first stage of labor, referrals are made to the hospital using the BAKSOKUDA principle and collaboration with SpOG doctors. The doctor's advice was to induce labor using misoprostol. Misoprostol is a prostaglandin E1 analogue (Haynes DR et al, 1992). By the World Health Organization (WHO), misoprostol is included in the list of essential medicines that can be used for several indications, including as a labor inducer. Misoprostol is available in tablet form and in practice is often given orally or vaginally as a labor inducer. The dose of oral misoprostol (MO) that is generally given is 20-25 µg every 2-4 hours (requires administration 2-6 times), but some studies use a dose of 50 µg every 4-6 hours (requires administration 2-5 times up to a maximum of 11 time) (Allen R, O'Brien BM, 2009). This is in accordance with Gusti's opinion which states that misoprostol has abdominal pain and uterotonic effects (E. Gusti, 2017). Labor induction is able to ripen the cervix and stimulate myometrial contractions because of its strong effect as a uterotonic. In stages II to IV there are no problems and labor proceeds normally. The second stage, delivery assistance is carried out according to the APN standard of 60 steps. The baby was born spontaneously, cried loudly and was active, male, weighing 2700 grams and body length 49 cm. IMD was successful after ± 30 minutes (Pierce S et al, 2018).

At the first postpartum visit, he complained of stomach ache and stitching pain. This is in accordance with the opinion of Hafifah, et al (2020) who stated that complaints of stomach ache/after pain are the result of uterine contractions which are sometimes very disturbing, usually lasting 2-3 days postpartum. The opinion of Susilawati & Ilda (2019) states that warm compresses can provide a feeling of warmth which aims to provide a feeling of comfort, overcome pain, reduce or prevent muscle spasms and provide a feeling of warmth in certain areas. Apart from warm compresses, cold compresses can be applied to help comfort postpartum mothers to reduce pain. At the second to last postpartum visit, there were no complaints (Aasheim V et al, 2017).

At the first to last neonatal visit, there were no complaints and the baby experienced an increase in weight of 400g. This weight gain in neonates is normal because the baby feeds on breast milk and breast milk contains substances that the baby needs during its growth period (Juharji H et al, 2022). This is in accordance with the opinion of Kumala & Purnomo (2019) that breast milk is the best food for babies because it is needed for the baby's health and supports optimal growth and development of the baby. Children who receive adequate nutritional intake will be able to support normal growth (De Sanctis V et al, 2021). By giving exclusive breast milk, it will be able to support the normal growth of the baby, both increasing weight and height, because breast milk contains substances that the baby needs during its growth period (Martin CR et al, 2016).

Midwifery care for family planning is carried out according to standards. The mother will choose the 3-month injectable birth control contraceptive because it will not interfere with her milk production during breastfeeding (Singhal S, 2014). For mothers who are breastfeeding, it is recommended to use contraception that contains the hormone progestin (Kapp, N., Curtis, K., & Nanda, K., 2010). One of them is a 3-month injectable contraceptive, if it only contains the hormone progestin then there is no impact on breast milk volume (Farlikhatun, L., & Sukaemi, N., 2023). For mothers who are breastfeeding, it is not recommended to use birth control that contains estrogen or estradiol cypionate because this can reduce the amount of breast milk produced, thereby inhibiting the smooth flow of breast milk during the lactation period (E. C. S. Bingan, 2019)

4 CONCLUSION

The aim of this review is that midwifery care is carried out from the third trimester of pregnancy at the first to third visits. The complaints experienced by the mother are resolved without complications. In the

first stage, complications occur and are resolved well. In stages II to IV there are no complications and it goes well. Postpartum complaints from the first visit to the third visit were resolved without any complications for the mother. At the neonatal visit, 3 visits were carried out according to standards, there was an increase in body weight and no complications were found in the baby. In family planning, the mother chose 3-month injectable birth control and agreed to it. Based on the data above, mothers are expected to continue to carry out the midwife's recommendations, officers will continue to provide services according to standards so that abnormalities can be detected early so that treatment can be carried out quickly and precisely.

5 REFERENCES

Allen R, O'Brien BM. (2009). Uses of misoprostol in obstetrics and gynecology. *Rev Obstet Gynecol.* Summer;2(3):159-68.

A. Setyowati, L. Ratnawati and R. M. Sholichah, "Pendampingan Pengelolaan Ibu Hamil dengan Kekurangan Energi Kronik dan Bayi Berisiko Stunting: Assistance in the Management of Pregnant Women with Chronic Energy Deficiency and Babies at Risk of Stunting," *Poltekita: Jurnal Pengabdian Masyarakat*, pp. 3(2), 157-165, 2022.

Aasheim V, Nilsen ABV, Reinar LM, Lukasse M. (2017). Perineal techniques during the second stage of labour for reducing perineal trauma. *Cochrane Database Syst Rev.* 2017 Jun 13;6(6):CD006672

Cooper, M., & Cameron, S. (2018). Successful implementation of immediate postpartum intrauterine contraception services in Edinburgh and framework for wider dissemination. *International Journal of Gynecology & Obstetrics*, 143, 56-61.

D. Oktadianingsih, I. Irianto, A. Chandradewi and I. Jaya, "Penambahan berat badan ibu hamil terhadap berat bayi lahir di kota mataram," *Jurnal Gizi Prima (Prime Nutrition Journal)*, pp. 2(2): 76-85, 2019.

Dörsam AF, Preißl H, Micali N, Lörcher SB, Zipfel S, Giel KE. (2019). The Impact of Maternal Eating Disorders on Dietary Intake and Eating Patterns during Pregnancy: A Systematic Review. *Nutrients.* Apr 13;11(4):840.

E. Retnaningtyas, Retnoningsih, E. Kartikawati, Nuning, Sukemi, D. Nilawati, Nurfajri and Denik, "Upaya Peningkatan Pengetahuan Ibu Hamil Melalui Edukasi Mengenai Kebutuhan Nutrisi Ibu Hamil," *Jurnal Pengabdian Kepada Masyarakat*, pp. 2 (2): 19-24, 2022.

E. C. S. Bingan, "Pemakaian KB Suntik 3 Bulan dengan Kecukupan ASI Eksklusif pada Ibu yang Mempunyai Anak Usia 7-23 Bulan," *JIDAN (Jurnal Ilmiah Bidan)*, pp. 6(2), 65-70, 2019.

E. Martiana, J. Dewantiningrum and M. Mexitalia, "Korelasi antara Penambahan Berat Badan Janin dengan Asupan Protein Pada Kehamilan Trimester III," *Medica Hospitalia*, pp. 5 (2): 80-84 , 2018.

Farlikhatun, L., & Sukaemi, N. (2023). The Effect of the Use of Progestin Contraception Pills and Combinations on Adequate Production of Exclusive Breast Milk in Breastfeeding Women. *Jurnal Keperawatan Komprehensif (Comprehensive Nursing Journal)*, 9(SpecialEdition).

Haynes DR, Whitehouse MW, Vernon-Roberts B. (1992). The prostaglandin E1 analogue, misoprostol, regulates inflammatory cytokines and immune functions in vitro like the natural prostaglandins E1, E2 and E3. *Immunology.* Jun;76(2):251-7.

Hafifa, S. M. F. Hanum and R. Rosyidah, "Midwifery Care for Postpartum

H. R. Kumala and W. Purnomo, "Hubungan ASI Eksklusif dengan Perkembangan Balita yang Memiliki Riwayat Berat Badan Lahir Rendah (BBLR) di Puskesmas Tanah Kali Kedinding Surabaya," *Media Gizi Kesmas. Universitas Airlangga*, pp. 8(2), 33-39, 2019.

I. P. Damayanti, "Asuhan Kebidanan pada ibu hamil dengan Ketidaknyamanan Sering BAK," *Ensiklopedia of Journal*, p. 1(4), 2019.

Juharji H, Albalawi K, Aldwaighri M, Almalki A, Alshiti H, Kattan W, Alqarni M, Alsulaimani S, AlShaikh T, Alsulaimani F. Impact of Breastfeeding on Low Birthweight Infants, Weight Disorders in Infants, and Child Development. *Cureus*. 2022 Dec 24;14(12):e32894.

Kapp, N., Curtis, K., & Nanda, K. (2010). Progestogen-only contraceptive use among breastfeeding women: a systematic review. *Contraception*, 82(1), 17-37.

Marshall NE, Abrams B, Barbour LA, Catalano P, Christian P, Friedman JE, Hay WW Jr, Hernandez TL, Krebs NF, Oken E, Purnell JQ, Roberts JM, Soltani H, Wallace J, Thornburg KL (2022). The importance of nutrition in pregnancy and lactation: lifelong consequences. *Am J Obstet Gynecol*. May;226(5):607-632

Martin CR, Ling PR, Blackburn GL. (2016). Review of Infant Feeding: Key Features of Breast Milk and Infant Formula. *Nutrients*. May 11;8(5):279

Muhrifan, A., Citrakesumasari, C., Djide, N., Sirajuddin, S., Jafar, N., & Naiem, F. (2020). Differences of oleic acid levels in breast milk of lactating mothers with chronic energy deficiency (CED) and normal status. *Journal of Scientific Research in Medical and Biological Sciences*, 1(2), 161-170.

Pierce S, Bakker R, Myers DA, Edwards RK. (2018). Clinical Insights for Cervical Ripening and Labor Induction Using Prostaglandins. *AJP Rep*. Oct;8(4):e307-e314.

R. Kemenkes, Laporan Akuntabilitas Kinerja Instansi Pemerintah Tahun 2021, Jakarta: Kementerian Kesehatan Republik Indonesia, 2022.

R. Alfarisi, Y. Nurmalasari and S. Nabilla, "Status Gizi Ibu Hamil Dapat Menyebabkan Kejadian Stunting Pada Balita," *Jurnal Kebidanan*, vol. 5, no. 3, pp. 271-278, 2019.

Susanti AI, Ali M, Hernawan AH, Rinawan FR, Purnama WG, Puspitasari IW, Stellata AG. (2022). Midwifery Continuity of Care in Indonesia: Initiation of Mobile Health Development Integrating Midwives' Competency and Service Needs. *Int J Environ Res Public Health*. Oct 26;19(21):13893.

Singhal S, Sarda N, Gupta S, Goel S. (2014). Impact of injectable progestogen contraception in early puerperium on lactation and infant health. *J Clin Diagn Res*. Mar;8(3):69-72.

S. Y. Haryanti, D. R. Pangestuti and A. Kartini., "Anemia dan kek pada ibu hamil sebagai faktor risiko kejadian bayi berat lahir rendah (BBLR)(studi di wilayah kerja puskesmas Juwana Kabupaten pati)," *Jurnal Kesehatan Masyarakat (Undip)*, pp. 7(1), 322-329, 2019.

S. Widatiningsih and C. H. T. Dewi, *Praktik Terbaik Asuhan Kehamilan*, Yogyakarta: Trans Medika, 2017.

Yaya S, Wang R, Tang S, Ghose B. Intake of supplementary food during pregnancy and lactation and its association with child nutrition in Timor Leste. *PeerJ*. 2018 Nov 15;6:e5935. doi: 10.7717/peerj.5935.