



Article

Sustainable Midwifery Care (Continuity Of Care) In The Preconception Period in The Working Area Of The Pagambiran Health Center Padang City

Yulizawati¹ Prety Zinta Aprila² M. Pemberdi Intasir³

¹Departement of Midwifery, Faculty of Medicine, Universitas Andalas, Indonesia, Padang

²Departement of Midwifery, Faculty of Medicine, Universitas Andalas, Indonesia, Padang

³Departement of Biology Education, Raja Ali Haji Maritime University, Indonesia, Tanjung Pinang

SUBMISSION TRACK

Received: February 14, 2024

Final Revision: March 16, 2024

Available Online: June 30, 2024

KEYWORDS

Midwifery, Continuity of Care, Maternal Mortality Rate.

CORRESPONDENCE

Phone: 082170708616

E-mail: pretyzintaaprila@gmail.com

A B S T R A C T

Background: Based on *World Health Organization (WHO)* data in 2021 that Maternal Mortality Rate (MMR) in the world caused by complications pregnancy and childbirth reached 295,000 (810 per day) people. Meanwhile, The maternal mortality rate in Indonesia recorded in the Indonesian health profile in 2021 is 7,389 mothers in West Sumatra Province. The maternal mortality rate also increased from 125 people in 2020 to 193 people in 2021. This phenomenon is not in accordance with Indonesia's Sustainable Development Goals (SDGs), which states that the maternal mortality rate target is a maximum of 70 deaths per 100,000 live births by 2030. So, the implementation of midwifery *Continuity of Care (CoC)* is very important as promotional and preventive step to prevent mother complication during pregnancy.

Purpose: Providing CoC midwifery care to women during the preconception period.

Methods: Implementation of midwifery care in a continuity of care manner with assessment according to midwifery science aims to help women solve the problems they face, with various steps consisting of basic data assessment, data interpretation, potential diagnosis, immediate action, drawing up a comprehensive care plan, implementation, and evaluation, as well as recording through SOAP documentation. S (Subjective) O (Objective) A (Assessment) P(Planning).

Results: The condition of the 4 clients was obtained with 2 clients, namely Mrs.V 29 years old with a history of 1 eracs and 1 abortion and Mrs. child and wants to get it back. Apart from that, 2 other clients, namely Mrs.C, 28 years old and Mrs.A, 29 years old, have not been successful in getting pregnant till date. Increasing client knowledge in the form of

material discussed with interactive discussions using posters, leaflets and educational videos.

Conclusion: Regulation of Health Ministry of Indonesia (PMK 21 of 2021) has regulated the implementation of CoC which aims to reduce morbidity and mortality rates for mothers and newborns.

Keywords: midwifery, continuity of care, maternal mortality rate.

I. INTRODUCTION

The World Health Organization (WHO) states that around 15% of all pregnant women experience complications with the world Maternal Mortality Rate (MMR) due to pregnancy and childbirth complications reaching 295,000 (810 per day) people. (WHO,2021). The maternal mortality rate in Indonesia recorded in the Indonesian health profile in 2021 is 7,389 mothers in West Sumatra Province. The maternal mortality rate also increased from 125 people in 2020 to 193 people in 2021 (BPS Sumbar,2022).

This phenomenon is not in accordance with Indonesia's Sustainable Development Goals (SDGs), which states that the maternal mortality rate target is a maximum of 70 deaths per 100,000 live births by 2030 (Bappenas, 2015). Therefore, the implementation of Continuity of Care (COC) midwifery care is a promotive and preventive step to prevent complications during pregnancy. This is because the mother's health status before pregnancy is a determining factor in the mother's condition during pregnancy.

Continuity of Care (COC) is a model of midwifery care provided to patients in continuity starting from pregnancy, delivery, postpartum, newborn care and family planning services that link women's health. Continuity service relationships are therapeutic relationships between women and health workers, especially midwives, in allocating services and providing comprehensive knowledge (Mastina *et al*, 2023).

Apart from that, Continuity of Care (CoC) services are regulated in Regulation of Health Ministry of Indonesia (PMK) number 21 of 2021 concerning the implementation of health services during pre-pregnancy, pregnancy, childbirth and the post-natal period, contraceptive services and sexual health services (PMK 21 of 2021).

Continuity of Care (COC) midwifery care covers three aspects, namely management, information and relationships. Continuous management involves communication in providing information between women and midwives who arrange to provide midwifery services (Agus *et al*, 2020).

It is important to provide care during the preconception period to women before pregnancy with the aim of reducing maternal morbidity and mortality, increasing the health readiness of teenagers as prospective brides, and/or couples of childbearing age during the pre-pregnancy period, as well as ensuring the health of the mother. If care during the preconception period can be implemented well, it will be able to provide a healthy and quality generation, guaranteeing the achievement of quality of life and fulfillment of reproductive rights, as well as maintaining and improving the quality of maternal and newborn health services (PMK 21 of 2021).

Pre-pregnancy health services are defined as any activity and/or series of activities aimed at women (from adolescence to before pregnancy) in order to prepare women for a healthy pregnancy (PMK 21 of 2021). Pre-conception services are carried out before pregnancy with a period ranging from three months to one year before conception. ideally, preconception services include when the ovum and sperm are mature (around 100 days before conception) in order to optimize the woman's health before pregnancy to improve the health of the mother and newborn, also reduce the risk of complications for the mother and baby (Koomesh *et al*, 2018).

Centers for Disease Control and Prevention (CDC) recommends ways to improve the quality of health by visiting health services regularly (scheduled), providing education related to preconception and pregnancy health, vaccinations, nutritional status and folic acid, assessing alcohol consumption, history disease, and providing counseling related to modifying individual habits (Koomesh *et al*, 2018)..

Preconception services are also regulated in the Republic of Indonesia Ministry of Health Regulation (PMK) number 21 of 2021 in the form of providing communication, information and education, counseling services, health screening services, providing immunizations, providing nutritional supplementation, medical services, and/or other health services (PMK 21 of 2021).

The preconception of CoC should focus on providing communication, information and education, counseling services and health screening. Providing information, education, and communication (IEC) and counseling is carried out by means of interactive discussions using communication, information and education facilities and media in the form of leaflets, posters and educational videos.

Apart from that, the preconception CoC also carries out health screening which is carried out by taking anamnesis, physical examination and supporting examinations. Anamnesis is carried out to obtain information about complaints, illnesses suffered, history of illness, risk factors, including early detection of mental health problems. After that, a physical examination is carried out in the form of checking vital signs, checking nutritional status, checking signs and symptoms of anemia, complete physical examination according to medical indications, and supporting examinations, which are health services carried out based on medical indications and/or health program needs (PMK 21 of 2021)

Based on the description above, the author is interested in providing Continuity of Care care for women during the preconception period, which is carried out by applying midwifery care in the form of communication, information and education (IEC), counseling, and screening in a community environment. The approach taken by Women Centered Care is to focus on women and consider women as unique so that the solution to all women's problems will not be the same. Woman-centered care is implemented through assessments to identify needs and formulate interpretations of midwifery data including midwifery diagnosis, identifying problems and necessary needs, making clinical decisions by preparing effective and efficient midwifery care plans, implementing and completing care based on Evidence Based Practice (EBP), and carry out evaluation actions as a reference for further action.

II. METHODS

During the COC preconception period, there were 4 clients who received midwifery care in the form of communication, information and education, as well as counseling and health screening. Implementation of midwifery care in a continuity of care manner with assessment according to midwifery science aims to help women solve the problems they face, with various steps consisting of basic data assessment, data interpretation, potential diagnosis, immediate action, drawing up a comprehensive care plan, implementation, and evaluation, as well as recording through SOAP documentation (Agus *et al*, 2020).

III. RESULT

The condition of the 4 clients was obtained with 2 clients, namely Mrs. V 29 years old with a history of 1 eracs and 1 abortion and Mrs. child and wants to get it back. Apart from that, 2 other clients, namely Mrs. C, 28 years old and Mrs. A, 29 years old, have not been successful in getting pregnant till date.

IV. DISCUSSION

Midwifery care is carried out according to the client's condition, in the form of necessary medical services and IEC regarding nutrition, reproductive health, how to determine the fertile period, preparation for becoming parents, tips for starting a family, and pregnancy planning so that each couple is physically and mentally prepared. and family financial management (PMK 21 of 2021).

Pregnancy Planning

Pregnancy planning is setting the ideal age and the right time to get pregnant as well as regulating the spacing of pregnancies and the number of children. Pregnancy planning aims to ensure the mother's health status is good and avoid disease so that the baby is born healthy by preventing 4 too many pregnancies, namely: (BKKBN,2019).

a. Too young pregnancies (<20 years)

Pregnancy that is too young causes several problems, such as difficulties in giving birth because the reproductive organs are not yet fully developed, pregnancy poisoning (preeclampsia), miscarriage, bleeding, risk of a narrow pelvis making it difficult to give birth prematurely, low birth weight (LBW) babies, defects. congenital, social mental problems (mother not ready to accept pregnancy).

b. Too old pregnancies (>35 tahun)

Pregnancy (>35 years) can increase the risk of hypertension in pregnancy, diabetes, preeclampsia, birth defects, LBW, prematurity, and miscarriage. Terlalu dekat jarak kehamilan (<2 tahun)

Distance between pregnancies needs to be considered so that the mother has time for the uterus to recover so that her physical and mental condition is ready for the next pregnancy. Apart from that, mothers who space out their pregnancies can provide exclusive breastfeeding and good parenting patterns for their babies.

c. too frequent pregnancies (>3 anak)

Pregnancy needs to be planned by paying attention to when to get pregnant, the distance and number of children, and the accuracy of contraceptive use.

High Risk of Pregnancy

a. Anemia

Anemia is a condition where the hemoglobin (Hb) in the blood is less than normal (12mg/dl). Pregnant women with anemia will become lethargic, tired, weak, tired, limp (5L) and often complain of dizziness and lightheadedness (Ministry of Health of the Republic of Indonesia, Ministry of Religion of the Republic of Indonesia, 2018).

b. Malnutrition

Assessment of a person's nutritional status is carried out through calculating the Body Mass Index (BMI) with the formula $BMI = BB(kg) : TB(m)^2$ (Indonesian Ministry of Health, Indonesian Ministry of Religion, 2018).

Classification of BMI values

Very thin	Severe degree of underweight	<17,0
Thin	Mild degree of underweight	17-<18,5
Normal	Normal	18,5-25,0
Fat	Mild degree of excess weight	>25,0-27,0
Obesitas	Severe degree of overweight	>27,0

Women of childbearing age and pregnant women can determine the risk of chronic energy deficiency (CED) by measuring the Upper Arm Circumference (LiLA) which is marked <23.5 cm..

c. Hypertension in Pregnancy (HIP)

Hypertension in pregnancy is blood pressure $>140/90$ mmHg after 20 weeks of pregnancy in women who previously had normal blood pressure or in women with a previous history of hypertension. (Indonesian Ministry of Health, Indonesian Ministry of Religion, 2018).

Mental Health of the Bride and Groom

Psychological readiness is a very important thing that couples must prepare before marriage. Mental health is a condition where an individual can develop physically, mentally, spiritually and socially so that the individual is aware of his own abilities, can cope with stress, can work productively and is able to contribute to his community (Hidayati, *et al*, 2020).

Preparing to Become a Parent

Good parents must maintain harmony between husband and wife by recognizing the characteristics of each partner so that a healthy, happy and prosperous family can be created (Hidayati, *et al*, 2020).

Nutrition in Pregnancy

Balanced nutrition is consuming a variety of foods in balanced amounts and proportions that meet the needs of the mother and the growth and development of the fetus. Fulfillment of macro nutrients in the form of carbohydrates, protein and fat, as well as micro nutrients including vitamin A, vitamin D, iodine, folate, zinc (Savitrie F., 2020).

Reproductive Organ Hygiene

The reproductive system or genital system is a system of sex organs in an organism that work together for the purpose of sexual reproduction (Kostania *et al*, 2020).

A. How to care for female reproductive organs

- a. Clean the genital organs from front to back using clean water and dry.
- b. It is best not to use vaginal douching fluid because it can kill good bacteria in the vagina and trigger the growth of pathogenic fungus
- c. Choose quality sanitary napkins that are soft and have high absorbency. Do not wear sanitary napkins for a long time. During menstruation, change sanitary napkins as often as possible.
- d. If you have frequent, smelly, colored or itchy vaginal discharge, as well as complaints about other reproductive organs, immediately consult a health worker.

B. How to care for male reproductive organs

Maintain the cleanliness of the genital organs

- a. Circumcision is recommended to maintain the cleanliness of the foreskin (the outer skin that covers the head of the penis).
- b. If there are complaints about the genital organs and the area around the genitals, immediately consult a health worker

Pregnancy Planning

Pregnancy is the meeting of egg and sperm cells inside or outside the uterus and ends with the release of the baby and placenta through the birth canal (BKKBN, 2019).

a. Changes in cervical mucus

Changes occur before the fertile period, namely by increasing the amount of fluid and changing the texture to a clear color and a more fluid texture.

b. Increased sexual desire

During the fertile period, female hormones will increase, thus affecting sexual desire in women.

c. Body temperature increases and breasts become softer

The increase in the hormone progesterone during the fertile period will trigger an increase in body temperature ($+0.5$ C).

d. LH Test

This method uses an ovulation test pack as an instrument that can detect whether or not there is an increase in Lutenizing Hormone or LH Hormone.

- e. Sim to Thermal Method
Combines basal body temperature method with cervical mucosa.
- f. Calendar Method
Effective if menstruation is normal, namely 21-28 days. Monitoring the number of days in each menstrual cycle is carried out six times in a row. Then calculate the fertile period by looking at the data that has been recorded.

Function of Family

A quality family is realized if the family has resilience. Family can only be created if each family can carry out family functions (Winiastuti *et al* , 2020).

- a. Function of Religion
Parents play a role in teaching their children to recite the Qur'an and read the holy book to form belief and faith.
- b. Social and Cultural Functions
The family instills relationships and provides cultural heritage.
- c. Functions of Love and Affection
The role of the family is very centralized in shaping the personality of their offspring.
- d. Protection Function
Family as a place to complain, admit mistakes, and a place to vent.
- e. Reproductive Function
The family is a means for humans to channel sexual desires to other humans (of different genders) legally and religiously
- f. Socialization and Education Function
The family has the function of forming a good personality who is ready to enter into community life.
- g. Economic Functions
The family is tasked with fulfilling the living needs of family members within it.
- h. Environmental function
The family is a reflection of the behavior and character of its members in the community and in the surrounding environment.

Family Economic Management

Family economic management is an action to plan, implement, monitor, evaluate and control the acquisition and use of economic resources to meet family needs. Economic management also aims to ensure stability and quality family economic growth (Badrunsyah *et al*, 2019).

V. CONCLUSION

Regulation of the Minister of Health of the Republic of Indonesia number 21 of 2021 has regulated the provision of comprehensive and sustainable health care for women, known as Continuity of Care (CoC), which aims to reduce morbidity and mortality rates for mothers and newborns, one of which is through midwifery care during the preconception period. Pre-pregnancy health services are any activity and/or series of activities aimed at women from adolescence until before pregnancy in order to prepare women to become healthy pregnant which is carried out in accordance with article 5 by providing communication, information and education, counseling, health screening, immunization, providing supplementation. nutrition, medical services, other health services.

REFERENCES

- World Health Organization. 2021. *World health statistics 2021: monitoring health for the SDGs, sustainable development goals*. Geneva: World Health Organization, 2021. Available from <https://reliefweb.int/report/world/world-health-statistics-2021-monitoring-health-sdgs>
- BPS Sumatera Barat. 2022. Profil Kesehatan Provinsi Sumatera Barat 2021. Bada Pusat Statistik Provinsi Sumatera Barat. Available from <https://sumbar.bps.go.id/publication/2023/06/27/a2ff441e960b0fb64fdc86e1/profil-kesehatan-provinsi-sumatera-barat-2022.html>
- Kementerian Perencanaan Pembangunan Nasional/Badan Perencanaan Pembangunan Nasional. 2015. Peta Jalan SDGs Indonesia Menuju 2030. Edisi ke-1. Kementerian PPN/Bappenas. Jakarta. Available from https://sdgs.bappenas.go.id/website/wp-content/uploads/2021/02/Roadmap_Bahasa-Indonesia_File-Upload.pdf
- Mastina, *et al.* 2023. Hubungan Penggunaan Buku KIA dengan Penerapan Continuity of Care (COC) Pada Pelayanan Kebidanan di Wilayah Kerja Puskesmas Tanjung Tebat Kabupaten Lahat. *Jurnal Ilmiah Obsgin*. 15(4):153-158. Available from <https://stikes-nhm.e-journal.id/JOB/article/view/1507/1382>
- Kementerian Kesehatan. 2021. Peraturan Menteri Kesehatan Nomor 21 Tahun 2021 Tentang Penyelenggaraan Pelayanan Kesehatan Masa Sebelum Hamil, Masa Hamil, Persalinan, dan Masa Sesudah Melahirkan, Pelayanan Kontrasepsi, dan Pelayanan Kesehatan Seksual. Kemenkes. Jakarta. Available from <https://paralegal.id/peraturan/peraturan-menteri-kesehatan-nomor-21-tahun-2021/>
- Agus, *et al.* 2020. Analysis of Continuity of Care (COC) Implementation In Study Program D III Midwifery UNS. *PLACENTUM Jurnal Ilmiah Kesehatan dan Aplikasinya*. 8(2):67-76. Available from <https://jurnal.uns.ac.id/placentum/article/view/43420>
- Koomesh, *et al.* 2018. Effectiveness of midwifery counseling based on solution-focused approaches on fear of childbirth. *Semnan University of Medical Sciences and Health Services*. 20(22):375-383. Available from https://www.researchgate.net/publication/324164651_Effectiveness_of_midwifery_counseling_based_on_solution-focused_approaches_on_fear_of_childbirth
- Badan Koordinasi Keluarga Berencana Nasional. 2019. Pentingnya Mengatur Jarak Kehamilan Bagi Pasangan Usia Subur. Available from <https://kampungkb.bkkbn.go.id/kampung/12116/intervensi/195582/sosialisasi-pentingnya-mengatur-jarak-kehamilan>
- Kementerian Kesehatan dan Kementerian Agama. 2018. Buku Saku Bagi Penyuluh Pernikahan Kesehatan reproduksi Calon Pengantin. Edisi ke-2. Kementerian Kesehatan RI. Jakarta.
- Hidayati, *et al.* 2020. Analisis Kesiapan Psikologis Pasangan dalam Menghadapi Pernikahan. *Jurnal Aplikasi IPTEK Indonesia (JAIPTEKIN)*. 4(2):136-146. Available from <http://bk.ppj.unp.ac.id/index.php/aiptekin/article/view/372>
- Savitrie, E. 2022. Gizi Seimbang Ibu Hamil.
URL: https://yankes.kemkes.go.id/view_artikel/405/gizi-seimbang-ibu-hamil
- Kostania, *et al.* 2020. Pengembangan Booklet Pranikah sebagai Media Informasi dalam Pelayanan Kesehatan untuk Calon Pengantin. *Jurnal Kebidanan Indonesia*. 11(2):1- 10. Available from <https://jurnal.stikesmus.ac.id/index.php/JKebIn/article/view/367>
- Winiastuti Y, *et al.* 2020. Delapan Fungsi Keluarga. Edisi ke-1. Badan Kependudukan dan Keluarga Berencana Nasional: Jakarta Timur. Available from https://dppkb.bandung.go.id/uploads/informasi_publik/8-Fungsi-Keluarga.pdf

Badrunsyah, *et al.* 2019. Penyuluhan Tentang Manajemen Keuangan Keluarga Di RW 06 Kelurahan Cipayang. *Jurnal Pelayanan dan Pengabdian Masyarakat*. 3(1):1-9. Available from <https://ejournal.urindo.ac.id/index.php/PAMAS/article/view/372>

Yulizawati et al, 2023, *Formula of Learning Outcome Soft Skills Under Graduate Midwifery*. Journal of Midwifery Vol 8 No 1. Available from <http://jom.fk.unand.ac.id/index.php/jom/article/view/551>

BIOGRAPHY

Yulizawati Yulizawati, SST., M.Keb was born in Kampar 20 July 1981 and currently a Lecturer in the Midwifery Department, Faculty of Medicine, Universitas Andalas since 1 May 2014. She completed Diploma III degree in Midwifery at the Polytechnic of Padang, taking Midwifery Program in Bukittinggi, and graduated in 2002. She used to worked at RSIA Eria Bunda Pekanbaru in 2003-2004, and Akbid Indragiri Rengat 2004-2014. She graduated from Diploma IV in Midwifery Program in 2004 at the Faculty of Medicine, Padjadjaran University. Currently, she is the Head of the Midwifery Department, Faculty of Medicine, Andalas University. As well as being EiC of the Journal of Midwifery (JoM).

Prety Zinta Aprila Prety Zinta Aprila, born in Padang, 30 April 2002. She completed her education at SD Negeri 37 Anduring, SMP Negeri 31 Padang, and SMA Negeri 9 Padang. currently studying for the Bachelor of Midwifery Study Program at the Faculty of Medicine, Andalas University since 2020. Active in the West Sumatra Language Ambassador Association, volunteer teacher at Bukik Ase Padang literacy school and also the Islamic midwife forum in the midwifery student community, Faculty of Medicine, Andalas University.

M. Pemberdi Intasir, M.Pd, born in Pekanbaru, 13 Nopember 1991, He is Lecturer at Department of Biology Education, Raja Ali Haji Maritime University.