ARV THERAPY IN INTEGRATED PREGNANCY CARE FOR PREGNANT WOMEN WITH HIV/AIDS AND ANEMIA

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ABSTRACT

Background: HIV / AIDS was still a syndrome to be very wary of in Southwest Papua. HIV/AIDS with Anemia has been associated with advanced disease in pregnant women (provide a citation). Management during pregnancy is one of the benchmarks for the welfare of mothers and babies. Medical treatment includes comprehensive obstetric care to support the pregnancy. The purpose of this study is to report on the management of obstetric care in a pregnant woman with HIV/AIDS and anemia.

Method: This research followed 36-year-old female patient who became pregnant for the 4th time, reportedly visited a community health center because she was dizzy, weak, and easily tired during pregnancy, had a risk of alcohol consumption, and was an active smoker.

Result: Hemoglobin (Hb) content is 10.5 gr/dl, which is below the healthy range (Mayo Clinic citation). Since the beginning of pregnancy has not been in contact with health workers.

Conclusion: ARVs that are quick, accurate, consistent, and long-lasting can help lessen the impact of HIV and anemia because it can inhibit the virus and reducing its activity.

Keywords: ARV, upbringing, integrated, pregnant women, HIV/AIDS.

Received: 11/09/2023
Accepted: 11/12/2023
DOI: https://doi.org/10.55908/sdgs.v11i12.1262

TERAPIA ARV EM CUIDADOS INTEGRADOS DE GRAVIDEZ PARA MULHERES GRÁVIDAS COM HIV/AIDS E ANEMIA

RESUMO

Histórico: HIV/AIDS ainda era uma síndrome a ser observada com muito cuidado no sudoeste de Papua. O HIV/AIDS com anemia tem sido associado à doença avançada em mulheres grávidas (fornecer uma citação). O manejo durante a gravidez é um dos parâmetros para o bem-estar de mães e bebês. O tratamento médico inclui cuidados obstétricos abrangentes para apoiar a...
gravidez. O objetivo deste estudo é relatar a gestão da assistência obstétrica em mulheres grávidas com HIV/Aids e anemia.

Método: Esta pesquisa seguiu a paciente do sexo feminino de 36 anos que engravidou pela 4ª vez, supostamente visitou um centro de saúde comunitário porque ela estava tonta, fraca e facilmente cansada durante a gravidez, tinha um risco de consumo de álcool, e era uma fumante ativa.

Resultado: O conteúdo de hemoglobina (Hb) é de 10,5 gr/dl, que está abaixo da faixa saudável (Mayo Clinic-citation). Desde o início da gravidez não teve contato com os profissionais de saúde.

Conclusão: ARVs que são rápidos, precisos, consistentes e duradouros podem ajudar a diminuir o impacto do HIV e da anemia porque podem inibir o vírus e reduzir sua atividade.

Palavras-chave: ARV, educação, integrado, gestantes, HIV/Aids.

1 INTRODUCTION

Human immunodeficiency virus (HIV) is an infection with a global prevalence of anemia in pregnant women living with HIV was 48.6% (95% CI: 41.6%-55.6%) (Guiying Cao, 2022) and there is currently no cure or vaccine. Antiretroviral therapy (ART) improves the HIV-infected humans as well as the general population. The people can benefit from ART by strengthening their resistance to infection, lowering their risk of accidental infections, decreasing their development to AIDS, and improving AIDS life. ART has also been proven in studies to lessen the risk of developing both AIDS and non-AIDS-related mortality (Rodger and Sabin, 2016). In terms of the general population, ART can prevent HIV transmission to others by reducing the viral prevalence in PLHIV. HIV testing and care are the key components of the strategy of “Treatment as Prevention” for preventing new infections (Vermund and Hayes, 2013). HIV diagnosis is the first step toward treating HIV, while only patients who have been admitted to and managed in treatment are acceptable to begin ART. However, coverage of ART is less than 50% in most countries (Mountain et al., 2014).

Women who live with HIV and become pregnant or who contract the virus during pregnancy are at risk for maternal and perinatal morbidity and mortality, especially if the virus is not well controlled. In addition, there is a risk of vertical transmission to the fetus during gestational and postpartum delivery through breastfeeding (Chilaka, 2021). It is generally higher in advanced HIV infection; among women, infants, and children; and in developing countries. Anemia can have substantial consequences in persons with HIV, including active and quality-of-life impairments to progressive illness and shortened life.
Worldwide iron deficiency anemia is the commonest of all in HIV patients on highly active antiretroviral therapy (HAART), in developed countries about 35% of patients on HAART develop anemia (Berhane, Haile and Tolessa, 2020).

The results of Pen Lunberg's study stated that there was no significant difference in HIV transmission in children (MTCT) between PHIV and BHIV, this was related to the care and management of retroviral in the first trimester (Lundberg, 2018). Proper management should be instituted to reduce the consequences of HIV on pregnancy, ideally starting with preconception counseling and planning a pregnancy when the viral load is minimum. During pregnancy, an appropriate combination of anti-retroviral drugs (cART) is mandatory with very close monitoring of viral load, and differentiated cell count group 4 (CD4). Special care should be taken to limit vertical transmission in those who arrive late and where the viral load is unknown or not controlled at the time of delivery (Kempton, 2019). Giving ART in both mono and double doses can improve the baby's well-being (Fang, 2019).

2 THEORITICAL FRAMEWORK

Pregnant women are very susceptible to disease if they do not take good care of themselves. The diseases commonly found are HIV/AIDS and Anemia. The relevance of these two diseases is determined by many factors, such as: predisposing (knowledge, attitude, values, tradition, parity and age); enabling (infrastructure, availability of human resources and access to health facilities); and strengthening (the attitudes and behavior of family).

3 OBSERVATION

3.1 COMMUNITY HEALTH CENTER

We reported a 36-year-old Papuan G4P3000 woman with HIV who contracted it during pregnancy and was not treated properly before. Recent diagnosis accompanied by anemia. She visited a community health center for antenatal care after previously feeling dizzy and weak. There is no information on getting examined and treated including ARV management. Having a level of education until elementary school, currently gravida 4th, the first to third children give birth at home without any assistance from health workers, so the economy is low, the mother of an active smoker and consumption of alcohol, she did not know the risk factors for HIV in her because she had never used drugs, did not
tattoo, did not have casual sex and had never had blood transfusions. The results showed 32 weeks gestation, BMI 19.62, blood pressure 10 0/60, pulse 72x/minute, breathing 18x /minute, temperature 36.3 °C from obstetric examination, inspection: enlarged abdomen, linea nigra (+), palpation: fundus uteri height 30 cm, DJJ 121x/min. min, HB 10.5 mg/dl, HIV Reactive, while husband non reactive HIV. The CD4 result at that time was 189 cells/μL, CD4:CD8 ratio 0.3. 1). Provide doctor advice in the form of ARV therapy in the form of tenofovir 300 mg, lamivudine 300mg, and efavirenz 600 as well as giving Ferrum tablets 120 mg and 0.50 mg folic acid. 2). A Integrated Upbringing During Pregnancy, a. collaboration with nutritionists to increase nutritional intake for pregnant women (2500-2800 Kcal/day, Protein 65 g/day, Omega 6 fats 15 gr, carbohydrates 400 gr, fiber 35 gr, water 2500-2800 ml/Day B. Edukai uit cigarette and liquor consumption, c. Keep yourself hygienic d. Taking ARVs regularly e. Rest 7-8 hours/day f. Pregnancy exercise 30 minutes 3-4 times/week g. Regular church service/week h. Check Health to the community health center on the specified date or at any time if the mother feels there is a disturbance/complaint. Mothers also get additional food for pregnant women in the form of biscuits 180 g/day which is a program of the Minister of Health. Conducted evaluation of care at 3 8 weeks gestational blood pressure 1 10/80 mmhg, pulse 80x/minute, breathing 18x/minute, temperature 36.6 ° C from obstetric examination: Leopold 1 Fundus uteri height 36 cm the top part of the fetus palpable buttocks, leopold 2 backs are on the right abdomen of the mother fetal heart rate 132 x / minute, extremities on the left. Leopold 3, head presentation. Leopold 4, not yet in the upper door of the pelvis, obtained CD4 results of 380 cells/μL, CD4:CD8 ratio of 0.5., advice doctor partus patients with caesarean section. Baby born normally, Apgar score 8/9, weight 2650 grams, Body length 41 cm, heart rate 142 X/min.

4 DISCUSSION

HIV (Human Immunodeficiency Virus) is an immune deficiency syndrome characterized by the presence of opportunistic infections and/or malignancies that are not caused by primary or secondary immune deficiencies or congenital infection but rather by human immunodeficiency virus (Setiawan, 2009). The way of transmission of HIV infection is through parenteral transmission, namely transmission from blood can occur if donor blood is not filtered for HIV testing, needle reuse and Injecting or using other
medical devices that can penetrate the skin, transmission through sexual intercourse is the most dominant of all modes of transmission, perinatal transmission of the virus can be transmitted from an HIV-infected mother to her child during pregnancy during delivery and breastfeeding (WHO, 2013). Before ARV therapy results are obtained CD4 191 cells/μL, CD4:CD8 ratio 0.31, after antiretroviral therapy CD4 results 383 cells/μL, CD4:CD8 ratio 0.5 in this case CD4: CD8 improvement occurs resulting in possible complications and worsening low infection.

Berhane's investigation revealed anemia to be present in 37.7% (80/212) prior to HAART treatment (ZDV category: 12.7%, TDF category: 25%). The greater incidence of anemia in the TDF group at starting (pre-HAART) was consistent with the nationwide HIV/AIDS therapy instructions, which supports starting a TDF-containing regimen as soon as possible patients with lower Hb concentration (Berhane, Haile and Tolessa, 2020). Following HAART initiation, the prevalence of anemia was found to be 33.5% (ZDV group: 20.30%, TDF group: 13.2% and P<0.05). This decrement in prevalence is in line with several studies (Fekene et al., 2018). ARV therapy should be given to all pregnant and breastfeeding PLHIV, regardless of WHO clinical stage and CD4 cell count, and continued for life. In this case, the patient after HIV screening and the positive results of the patient has taken ARV and will continue for life (Ministry of Health RI, 2019).

All HIV-infected women planning a pregnancy should initiate combination antiretroviral therapy (ARV), with the aim of achieving a maternal serum HIV RNA viral load below laboratory detection levels before pregnancy, as well as during pregnancy. Successfully identifying HIV infection during pregnancy through screening tests is essential to prevent HIV transmission in utero and during delivery. HIV transmission to infants can be less than 1% if given combination antiretroviral therapy (ARV) which is effective during the antepartum, intrapartum, and postpartum periods, this is related to HIV virological suppression (Rimawi, et al., 2016). HIV-infected mothers with a viral load of > 1000 copies/mL in developed countries, while in developing countries cesarean delivery recommendations emphasize the importance of preventing infection through standard vigilance, avoiding the breakdown of amniotic membranes, and invasive measures such as episiotomy to reduce the possibility of vertical transmission of HIV (Ministry of Health RI, 2019). In this case, viral load examination is not carried out due to limited costs. Prophylactic ARV therapy for infants born to HIV-infected mothers: given zidovudine for 6 weeks. Zidovudin dose 4mg/kgBB 2x daily begins as soon as
possible after birth. In this case, the baby weighs 3,140 grams, so the patient is given a dose of zidovudin 2x12mg. To avoid transmission of virus transmission through breast milk, infants are given formula milk that meets the requirements of AFASS (Acceptable Feasible Affordable Sustainable Safe) (Dina, 2017). Teeraananchai suggested that CD4 counts were higher in adolescents with HIV than in adolescents with perinatally acquired HIV. (Teeraananchai, 2019) Shontreal Cooper reported on a study of milk in a 22-year-old woman with poorly controlled perinatally acquired HIV/AIDS who had an HIV-negative newborn after 6 months birth with routine ARV therapy (Cooper, 2018).

5 CONCLUSION

Anemia will be present in pregnant women who have HIV/AIDS. According to the findings of the preceding discussion, providing ARVs that are quick, accurate, consistent, and long-lasting can help lessen the impact of HIV and anemia. This is why ARVs can inhibit the virus and heal it, reducing its activity.

ACKNOWLEDGEMENTS

Director of the Health Polytechnic of the Ministry of Health Sorong. The Malawei Health Center, nurse and patient.
REFERENCES


