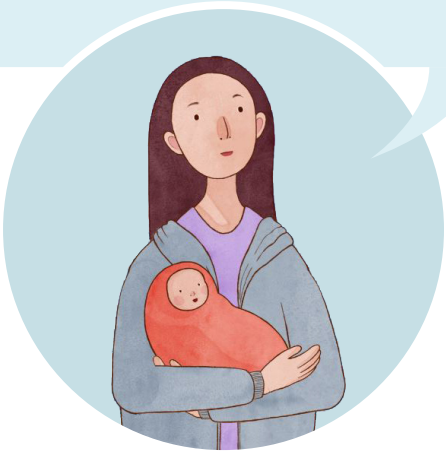
Challenges in the time following childbirth – staying in HIV care, adhering to HIV medication, mental health.



The first months with a new baby are challenging for new parents, who will likely be sleep deprived, exhausted, and recovering from the birthing process. This is particularly true for single parents with other children to care for. All these factors can lead to challenges with adherence to ARVs and with staying engaged in care. This may be exaggerated in situations were social support is lacking.

What does research tell us?

The OHTN Rapid Response Services did a review of available research focusing on postpartum (the period following childbirth) mothers living with HIV in high-income settings, with special attention given to three issues: **retention in HIV care, adherence to HIV medications, and mental health**. Factors related to these issues are explored and strategies to address these challenges are identified.

The full review is available on the OHTN website: Rapid Response Service. Postpartum women living with HIV: Challenges related to treatment adherence, retention in care, and mental health. Toronto, ON: Ontario HIV Treatment Network; November 2018.

Key Findings

Parents living with HIV with new babies may find it challenging to remain engaged in HIV care and achieve optimal adherence to ARVs[1, 2, 15-18].

- Regular HIV care should be started between conception and birth[3].

Staying retained in HIV care allows treatment adherence to be monitored[4, 5] and increases the chances of achieving viral suppression[5].

- Having a suppressed viral load prevents HIV transmission to the baby during pregnancy and delivery, helps the mother stay healthy, and prevents transmission of HIV to other partners[6].

Late entry in care, or lack of regular care prior to delivery, is associated with lack of regular care once the baby is born[7-10].

- Women engaged in HIV care before they become pregnant are more likely to be retained in care and virally suppressed in the first and second year after delivery[7].
- Some factors that can influence staying in regular HIV care among new parents living with HIV include competing life priorities[11] and interpersonal support[12].

Psychiatric symptoms, particularly depression, can impact well-being, quality of life, and other important clinical outcomes among pregnant and postpartum women living with HIV[24].

- One review of over fifty studies found that there is a high prevalence of depression, general distress, and other psychiatric symptoms among pregnant and postpartum women living with HIV[24].

Possible Interventions

In 2014, a systematic review on interventions to improve adherence to antiretroviral therapy among people living with HIV noted a major evidence gap[19]. A few interventions that may improve adherence among postpartum women living with HIV were identified: Directly Observed Therapy[20, 21] and text message reminders[22, 23].

The Perinatal Case Management intervention, designed specifically for pre- and postpartum women living with HIV, improved retention in HIV care and antiretroviral adherence outcomes among a U.S. population[2].

Interventions to address perinatal depression among women living with HIV were difficult to find. Two systematic reviews outlining interventions for perinatal depression among women in general were identified[25, 26]. However, it is important to note that there may be additional physical and psychological health-related risks among women living with HIV who are experiencing perinatal depression[27].

The need for more research and development targeting interventions for pregnant women living with HIV is highlighted in a 2014 meta-analysis[24]. One study identified in this meta-analysis describes how an evidence-based cognitive behavioural therapy intervention to prevent perinatal depression was adapted for two different Latina immigrant communities in the U.S.[28]. A five-step iterative process was used to culturally adapt the intervention.

References

1. World Health Organization. WHO recommendations on postnatal care of the mother and newborn. Available from http://apps.who.int/iris/bitstream/handle/10665/97603/9789241506649_eng.pdf;jsessionid=EDE032E16AF446A3EBBCFC5A841BED0E?sequence=1 Accessed October 17, 2018. 2013.

2. Anderson EA, Momplaisir FM, Corson C, Brady KA. Assessing the impact of perinatal HIV case management on outcomes along the HIV care continuum for pregnant and postpartum women living with HIV, Philadelphia 2005-2013. AIDS & Behavior. 2017;21(9):2670-81.

3. Money D, Tulloch K, Boucoiran I, Caddy S, Yudin MH, Allen V, et al. Guidelines for the care of pregnant women living with HIV and interventions to reduce perinatal transmission: Executive summary. Journal of Obstetrics and Gynaecology Canada. 2014;36(8):721-34.

4. Gardner EM, McLees MP, Steiner JF, Del Rio C, Burman WJ. The spectrum of engagement in HIV care and its relevance to test-and-treat strategies for prevention of HIV infection. Clinical Infectious Diseases. 2011;52(6):793-800.

5. Skarbinski J, Rosenberg E, Paz-Bailey G, Hall HI, Rose CE, Viall AH, et al. Human immunodeficiency virus transmission at each step of the care continuum in the United States. JAMA internal medicine. 2015;175(4):588-96.

6. CATIE. Your guide to HIV treatment. Available from https://www.catie.ca/sites/default/files/Your%20Guide%20to%20HIV%20Treatment_EN_web_march2017.pdf Accessed November 1, 2018. 2017.

7. Adams JW, Brady KA, Michael YL, Yehia BR, Momplaisir FM. Postpartum engagement in HIV care: An important predictor of long-term retention in care and viral suppression. Clinical Infectious Diseases. 2015;61(12):1880-7.

8. Rana AI, Gillani FS, Flanigan TP, Nash BT, Beckwith CG. Follow-up care among HIV-infected pregnant women in Mississippi. Journal of Women's Health. 2010;19(10):1863-7.

9. Siddiqui R, Bell T, Sangi-Haghpeykar H, Minard C, Levison J. Predictive factors for loss to postpartum follow-up among low income HIV-infected women in Texas. AIDS Patient Care & STDs. 2014;28(5):248-53.

10. Swain CA, Smith LC, Nash D, Pulver WP, Lazariu V, Anderson BJ, et al. Postpartum loss to HIV care and HIV viral suppression among previously diagnosed HIV-infected women with a live birth in New York state. PLoS ONE. 2016;11(8):e0160775.

11. Boehme AK, Davies SL, Moneyham L, Shrestha S, Schumacher J, Kempf MC. A qualitative study on factors impacting HIV care adherence among postpartum HIV-infected women in the rural southeastern USA. AIDS Care. 2014;26(5):574-81.

12. Buchberg MK, Fletcher FE, Vidrine DJ, Levison J, Peters MY, Hardwicke R, et al. A mixed-methods approach to understanding barriers to postpartum retention in care among low-income, HIV-infected women. AIDS Patient Care & STDs. 2015;29(3):126-32.

13. British Columbia Centre for Excellence in HIV/AIDS. Therapeutic guidelines: Antiretroviral (ARV) treatment of adult HIV infection. Available from http://cfenet.ubc.ca/sites/default/files/uploads/Guidelines/Therapeutic-Guidelines-for-Antiretroviral-ARV-Treatment-of-Adult-HIV-Infection-[07-JUN-2018].pdf Accessed November 2, 2018. 2018.
14. World Health Organization. Mother-to-child transmission of HIV. Available from https://www.who.int/hiv/topics/mtct/about/en/ Accessed October 22, 2018. 2016.

15. Bardeguez AD, Lindsey JC, Shannon M, Tuomala RE, Cohn SE, Smith E, et al. Adherence to antiretrovirals among US women during and after pregnancy. Journal of Acquired Immune Deficiency Syndromes. 2008;48(4):408.

16. Kaida A, Forrest J, Money D, Burdge D, Forbes J, Fernandes K, et al. Antiretroviral adherence during pregnancy and postpartum among HIV-positive women enrolled in the drug treatment program in British Columbia, Canada. Canadian Journal of Infectious Diseases and Medical Microbiology. 2009;20(Suppl B):1B-112B (Abstract O046).

17. Gertsch A, Michel O, Locatelli I, Bugnon O, Rickenbach M, Cavassini M, et al. Adherence to antiretroviral treatment decreases during postpartum compared to pregnancy: A longitudinal electronic monitoring study. AIDS Patient Care & STDs. 2013;27(4):208-10.

18. Nachega JB, Uthman OA, Anderson J, Peltzer K, Wampold S, Cotton MF, et al. Adherence to antiretroviral therapy during and after pregnancy in low-income, middle-income, and high-income countries: A systematic review and meta-analysis. AIDS. 2012;26(16):2039-52.

19. Chaiyachati KH, Ogbuoji O, Price M, Suthar AB, Negussie EK, Barnighausen T. Interventions to improve adherence to antiretroviral therapy: A rapid systematic review. AIDS. 2014;28(Suppl 2):S187-S204.

20. Ciambrone D, Loewenthal HG, Bazerman LB, Zorilla C, Urbina B, Mitty JA. Adherence among women with HIV infection in Puerto Rico: The potential use of modified directly observed therapy (MDOT) among pregnant and postpartum women. Women & health. 2007;44(4):61-77.

21. Hart JE, Jeon CY, Ivers LC, Behforouz HL, Caldas A, Drobac PC, et al. Effect of directly observed therapy for highly active antiretroviral therapy on virologic, immunologic, and adherence outcomes: A meta-analysis and systematic review. Journal of Acquired Immune Deficiency Syndromes. 2010;54(2):167.

22. Campbell AR, Kinvig K, Côté HC, Lester RT, Qiu AQ, Maan EJ, et al. Health care provider utilization and cost of an mHealth intervention in vulnerable people living with HIV in Vancouver, Canada: Prospective study. Journal of Medical Internet Research. 2018;6(7):e152.

23. King E, Kinvig K, Steif J, Qiu AQ, Maan EJ, Albert AY, et al. Mobile text messaging to improve medication adherence and viral load in a vulnerable Canadian population living with human immunodeficiency virus: A repeated measures study. Journal of Medical Internet Research. 2017;19(6):e90.

24. Kapetanovic S, Dass-Brailsford P, Nora D, Talisman N. Mental health of HIV-seropositive women during pregnancy and postpartum period: A comprehensive literature review. AIDS & Behavior. 2014;18(6):1152-73.

25. Stephens S, Ford E, Paudyal P, Smith H. Effectiveness of psychological interventions for postnatal depression in primary care: A meta-analysis. The Annals of Family Medicine. 2016;14(5):463-72.
26. Dennis CL, Hodnett ED. Psychosocial and psychological interventions for treating postpartum depression. Cochrane Database of Systematic Reviews,. 2007;4(CD006116).

27. Psaros C, Geller PA, Aaron E. The importance of identifying and treating depression in HIV infected, pregnant women: A review. Journal of Psychosomatic Obstetrics & Gynecology. 2009;30(4):275-81.

28. Le H-N, Zmuda J, Perry DF, Muñoz RF. Transforming an evidence-based intervention to prevent perinatal depression for low-income Latina immigrants. American Journal of Orthopsychiatry. 2010;80(1):34-45.