

Impact of Ante- and Postnatal Depression Screening in Women with HIV: A Scoping Review

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Purpose

- This scoping review aimed to identify existing knowledge regarding the impact of ante- and postnatal depression screening in women with Human Immunodeficiency Virus (HIV) and to adduce the necessity for effective screening.

Defined goals:

- Explore available peer-reviewed literature for the impact of ante- and postnatal depression screening.
- Evaluate importance of screening.
- Evaluate effectiveness of screening tools.

Background

- Maternal depression has been identified as a strong predictor of poor prenatal care with studies showing a higher rate of depressive symptoms in HIV positive pregnant women than in HIV negative pregnant women.
- Globally, in 2020, there were an estimated 19.3 million women living with HIV in 2020. It was shown that in 2021, women living with HIV in the United States was 258,000 and 6-7000 of those women give birth annually.
- Among pregnant women living with HIV, mental health-related factors such as depression could potentially undermine effective antiretroviral therapy (ART) adherence, increased mortality, poor HIV viral suppression consequently impacting vertical transmission of HIV.

Figure 1

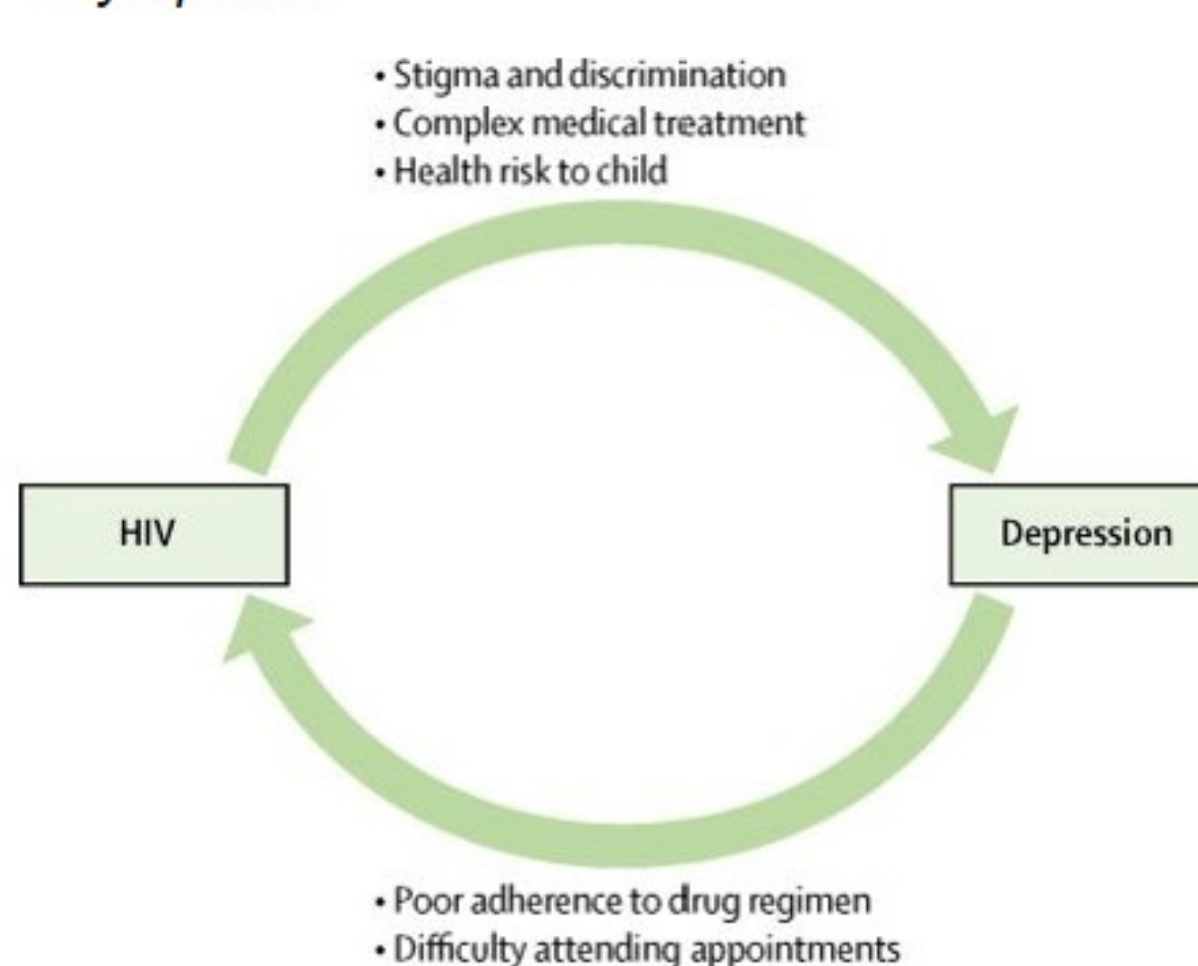
Adults and children estimated to be living with HIV - 2020



Note: From Core Epidemiology Slides [PowerPoint presentation], 2021. UNAIDS.org (https://www.unaids.org/en/resources/documents/2021-core-epidemiology-slides)

Figure 2

Vicious cycle between HIV and depressive symptoms



Note: From Depression, Pregnancy, and HIV: The Case to Strengthen Mental Health Services for Pregnant and Post-Partum Women in Sub-Saharan Africa (Figure) by Stinger et al., 2014, Lancet Psychiatry

Methods

Search & Selection

- Literature search of CINAHL Complete, Directory of Open Access Journals, MEDLINE, EBSCOHost, and PubMed databases.
- Keywords “HIV” AND “pregnancy” AND “depression”.
- Results screened by title and abstract, then collectively reviewed by abstract, methods, and discussion to confirm inclusion.
- Search yielded 53 articles for potential inclusion.
- 12 articles fully met inclusion criteria for this scoping review.
- Preferred Reported Items for Systematic Review and Meta-analyses reporting guidelines for scoping reviews (PRISMA-ScR) was implemented.

Eligibility Criteria

- Peer-reviewed scientific research.
- Approved by the IRB if applicable.
- Published between 01/01/2000 to 10/13/2021.
- Participants must be female humans with HIV-positive serostatus.
- Outcomes must include screening for depression during ante- or postnatal timeframe.
- Language was not limited.

Synthesis of Results

- Outcomes assessed
 - Maternal adherence to ART
 - CD4+ cell counts
 - Infant outcomes
 - Maternal outcomes.

Results

Characteristics of Sources of Evidence

- Level of evidence of the included articles is as follow: two Level I (synthesis of cohort/case-control studies), nine Level II (single cohort/case-controlled studies), one Level III (meta synthesis of qualitative/descriptive studies).

Synthesis of Results

Outcomes Synthesis Table												
	1	2	3	4	5	6	7	8	9	10	11	12
SD	√	√	√	√	√	√	√	√	√	√	√	√
ART	↓a	↓a	↓a	NE	NE	↓b	↓a	NE	NE	—	↓a	↓a
CD4	↓a	NE	↓a	NE	NE	NE	NE	NE	√	↓a	↓a	NE
IO	NE	↓a	—	↓a	↓a	↓b	NE	↓a	NE	NE	NE	↓b
MO	NE	↓a	↓a	↓a	NE	↓b	NE	NE	NR	↓a	↓b	↓b

LEGEND

↑ = increased; ↓ = decreased; — = No Change; NE = Not Examined; NR = Not Reported; √ = present; a = Statistically significant findings; b = Statistical significance not reported

SD = screening for depression in mother; ART = adherence to antiretroviral therapy; CD4 = effect on CD4 counts; IO = effect on infant outcomes; MO = effect on maternal outcomes

- Brittain et al. (2014); 2. Hegarty et al. (2019); 3. Kapetanovic et al. (2009); 4. Kapetanovic et al. (2014); 5. Mbatha et al. (2020); 6. Psaros et al. (2009); 7. Psaros et al. (2020); 8. Rodriguez et al. (2018); 9. Rubin et al. (2011); 10. Sarna et al. (2019); 11. Sheth et al. (2015); 12. Zhu et al. (2019)

Implications for Practice

- Findings underscore the need to integrate routine screening for perinatal depression in women with HIV.
- A positive finding of depression from screening does have an impact on ART adherence, CD4+ count, and the wellbeing of ante- and postnatal women with HIV and their infant.
- The positive screening was indicative of decreased ART adherence, decreased CD4+ count, decreased maternal wellbeing, as well as decreased infant wellbeing.
- Further research on this topic is needed to understand the implication of specific screening tools and the effect of timely recognition and treatment for this population.
- Furthermore, depression screenings could positively impact not only maternal and infant health, but also healthcare costs and provision of care through increased understanding of timely treatment for this population.

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