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 0f 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.

Methods
Search & Selection
- Keywords “HIV” AND “pregnancy” AND “depression”.
- Results screened by title and abstract, then collectively reviewed by abstract, methods, and discussion to confirm inclusion.

Eligibility Criteria
- Peer-reviewed scientific research.
- Published between 01/01/2020 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 follows: 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

<table>
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<tr>
<th>Outcomes Synthesis Table</th>
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<tr>
<td>SD</td>
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<td>ART</td>
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<td>CD4</td>
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<td>HbA1c</td>
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- Increase: ✓, Decrease: ▼, No Change: NE, Not Enrolled: NR, Not Included: ∅, p-value: ∗ Statistical significant findings, ⊕ Statistical insignificant not reported

- Screening for Depression in earlier, ART: adherence to antiretroviral Therapy, CD4: effect on CD4 counts, HbA1c: effect to infant outcomes, NS: effect on maternal outcomes.

References

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, 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.

Figure 1
- Figure 2

Figure 1: Adults and children estimated to be living with HIV - 2021
Figure 2: Women cycle between HIV and depressive symptoms

Total: 37.1 million (5.5-45.1 million)