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Loss to follow-up after pregnancy among women living with HIV in England, Wales and Northern Ireland: the role of African ethnicity

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Background

- Approximately 1500 pregnancies/year in women living with HIV
- Little known about loss to follow up (LTFU) after pregnancy
- In UK 10% adults attending HIV care do not attend the following year\(^1\)
- Associated with black African ethnicity\(^1,2\), female gender\(^1\) and younger age\(^1\)

\(^1\) Rice BD et al. *Sexually Transmitted Diseases* 2011, 38(8):685-690
High rates of LTFU postnatally reported in resource-poor settings\(^1,2\)

Late antenatal booking\(^1\), socioeconomic factors\(^1\), institutional barriers\(^2\)

UK study: 65% LTFU at 3 months postnatally\(^3\)

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\(^1\) Panditrao M et al. *AIDS Care* 2011, 23(5):593-600


\(^3\) Saulsbury N et al. *British HIV Association Spring Conference, Cardiff*, 2004
Objectives

1. Quantify the extent of LTFU 1 year after pregnancy in women living with HIV in England, Wales and Northern Ireland

2. To explore the association between LTFU by one year and (i) maternal ethnicity and (ii) African region of birth
**Methods**

**Loss to follow up:** not attending an HIV clinic in England, Wales or Northern Ireland during the calendar year following the end of pregnancy
Methods

• Combined data
• Scotland excluded
• Hierarchical matching strategy
• 88% matching in women reported as pregnant in 1998 – 2009: 8695 pregnancies
• Logistic regression models
Matching algorithm

Matched gender + date of birth

PLUS postcode or postcode sector

OR postcode district + country of birth

OR postcode district + site of treatment or delivery

OR postcode district + date of diagnosis
Results

• Overall 12% women (1055/8695) did not access care in the year after pregnancy
• Of those who did not access care eight were known to have died
• Almost 40% (414/1055) women who did not access care returned for care by the end of 2010
• If unmatched (1139) coded as LTFU then 22% (2195/9834) did not access care
Univariable analyses: LTFU (1 year)

- Younger maternal age, increasing time since diagnosis, higher CD4 count, detectable viral load and reporting region in England (not London) were associated with LTFU – all $p<0.001$
- Pregnancy outcome, mode of delivery, maternal injecting drug use and year not associated with LTFU
LTFU (1 year) and maternal ethnicity

- White
- Black African
- Caribbean
- Other

Percentage

p<0.001
LTFU (1 year) and maternal ethnicity

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>AOR (95% CI) ( ^a )</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>1</td>
</tr>
<tr>
<td>Black African</td>
<td>1.96 (1.44, 2.67) *</td>
</tr>
<tr>
<td>Caribbean</td>
<td>1.47 (0.88, 2.44)</td>
</tr>
<tr>
<td>Other</td>
<td>1.00 (0.61, 1.63)</td>
</tr>
</tbody>
</table>

\( ^a \) Adjusted for age, time since diagnosis, last CD4, last viral load, reporting area and year of pregnancy; * \( p < 0.001 \)
### LTFU (1 year) and African region of birth

<table>
<thead>
<tr>
<th>Region</th>
<th>AOR (95% CI)</th>
</tr>
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<tbody>
<tr>
<td>East Africa</td>
<td>1</td>
</tr>
<tr>
<td>Southern Africa</td>
<td>1.97 (1.46, 2.65)*</td>
</tr>
<tr>
<td>West Africa</td>
<td>1.51 (1.21, 1.89)*</td>
</tr>
<tr>
<td>Middle Africa</td>
<td>1.03 (0.73, 1.46)</td>
</tr>
</tbody>
</table>

\[ a \] Women born in sub-Saharan Africa; \[ b \] Adjusted for age, time since diagnosis, last CD4, last viral load, reporting area and year of pregnancy; * \( p < 0.001 \)
Limitations

- Matching: errors in coding, changes in date of birth and change of residence
- Residual confounding
- Information about deaths and emigration
- Intermittent follow-up
- No data from Scotland
Conclusions

• One in 8 HIV-positive women do not return for HIV care in the year after pregnancy
• Black African women, especially from SA and WA at greatest risk
• Role of emigration
• Withdrawal from care

*Mother holding baby, Keith Haring (1986)*
Acknowledgements

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Thank you

*Mama Africa*, Jacob Crawfurd (2005) at www.crawfurd.dk/photos