THE PREVALENCE OF HIV IN PATIENTS WITH MISCARRIAGES AT PELONOMI HOSPITAL

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1. The 2011 National Antenatal Sentinel HIV & Syphilis Prevalence Survey in South Africa
BACKGROUND

Free State district antenatal HIV prevalence-2010

1. The National Antenatal Sentinel HIV & Syphilis Prevalence Survey in South Africa
BACKGROUND

1. 44 686 women admitted for incomplete miscarriage in 1994 in South African hospitals[1]

2. Studies showed that women are more likely to attempt falling pregnant after a pregnancy loss[2]

BACKGROUND

• Association between HIV and miscarriages is controversial[4,5]

• HIV can be transmitted across placenta early in pregnancy[6,7]


THE OBJECTIVES OF THE STUDY

• Primary objective:
To establish the prevalence of HIV in patients with miscarriages at Pelonomi hospital

• Secondary objective
Compare with existing national antenatal HIV prevalence
METHODOLOGY

• Study design - Retrospective descriptive

• Study period- 1 March 2009-28 February 2011

• Sample - All women with miscarriages <24wks
  - Target 500 women

• Pilot study - 20 patients

• 504 Women were included in the study

• The SAS-system - data analysis
DATA COLLECTION

Gynae. admission book

Diagnoses used: miscarriage or pv bleeding

Files retrieved from records

All files with diagnosis of miscarriage < 24wks gestation

HIV blood results: Files / MEDITECH / NHLS-DISA
OUTCOME MEASURES

- HIV status
  - Pos/Neg/Unkn
- Demographic information
- Types of miscarriages
- Methods of treatment
RESULTS

504 Women included

HIV Prevalence

- 39.7% (n=200) Known HIV
- 60.3% (n=304) Unknown

- 70.1% (n=213) HIV NEG
- 29.9% (n=91) HIV POS
RESULTS

AGE

- 75% n=378
- 14.7% n=74
- 10.3% n=52

<20yrs
20-34yrs
>34yrs
RESULTS

Gravidity

- 1: 29.9%
- 2: 34.7%
- 3: 21.2%
- 4: 9.7%
- >4: 4.4%

Parity

- 0: 38.4%
- 1: 34.3%
- 2: 17.9%
- 3: 6.6%
- 4: 2.2%
- >4: 0.6%
RESULTS

Spontaneous miscarriages - 470 (93.3%)

- Incomplete: 33.4% (n=157)
- All other types: 66.6% (n=313)

(Threatened, inevitable, Complete, missed)

Induced miscarriages - 34 (6.7%)

- Medical: 94.1% (n=32)
- Criminal: 5.9% (n=2)
RESULTS

Septic miscarriages

96.4% n=485

3.6% n=18
RESULTS

Treatment

- 81.6% n=411
- 18.1% n=91
- 0.4% n=2

Uterine evacuation
Hysterectomy
Conservative
RESULTS

Marital status
- Single: 86.7% (n=437)
- Married: 13.3% (n=67)

Occupation
- Employed: 70.2% (n=354)
- Unemployed: 22.2% (n=112)
- Student: 7.5% (n=38)
Table 8: Demographic characteristics of study population tested for HIV. A: HIV+ (n=91); B: HIV- (n=213). MEANS.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Lower 25% quartile</th>
<th>Median</th>
<th>Upper 75% quartile</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age-A (yrs)-B</td>
<td>24</td>
<td>28</td>
<td>32</td>
<td>&lt;0.0001</td>
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<tr>
<td></td>
<td>21</td>
<td>24</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>Gravidity-A-B</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>=0.0003</td>
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<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>Parity-A-B</td>
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<td>2</td>
<td>&lt;0.0001</td>
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<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
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<td>Gestation-A-B</td>
<td>8</td>
<td>10</td>
<td>16</td>
<td>=0.4993</td>
</tr>
<tr>
<td>(wks)</td>
<td>8</td>
<td>12</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Characteristic</td>
<td>HIV(+) n(%)</td>
<td>HIV(-) n(%)</td>
<td>Total value</td>
<td>P value</td>
</tr>
<tr>
<td>-----------------------------</td>
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<tr>
<td><strong>Employment:</strong></td>
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</tr>
<tr>
<td>Employed</td>
<td>16(17.6)</td>
<td>46(21.6)</td>
<td>62</td>
<td>0.0217</td>
</tr>
<tr>
<td>Unemployed</td>
<td>73(80.2)</td>
<td>144(67.6)</td>
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<td></td>
</tr>
<tr>
<td>Student</td>
<td>2(2.2)</td>
<td>23(10.8)</td>
<td>25</td>
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<tr>
<td><strong>Previous miscarriage:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>16(17.5)</td>
<td>46(21.6)</td>
<td>62</td>
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<tr>
<td>No</td>
<td>75(82.4)</td>
<td>167(78.4)</td>
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<tr>
<td><strong>Previous ectopic pregnancy:</strong></td>
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<td></td>
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<tr>
<td>Yes</td>
<td>0(0)</td>
<td>0(0)</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>91(100)</td>
<td>213(100)</td>
<td>304</td>
<td></td>
</tr>
<tr>
<td><strong>Marital status:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>80(87.9)</td>
<td>181(84.9)</td>
<td>261</td>
<td>0.5012</td>
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<tr>
<td>Married</td>
<td>11(12.1)</td>
<td>32(15.0)</td>
<td>43</td>
<td></td>
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</table>
DISCUSSION

• Seropositivity prevalence in our study (29.9% CI 25.1-35.3%) is similar to antenatal seropositivity prevalence nationally and provincially.

• A striking 39.7% of patients with miscarriages left health care system without knowledge of HIV status.

• Majority of patients were unemployed (70.2%) and unmarried (86.7%).

• Limitations of the study is its retrospective nature and the window period that some tested negative could fall under.
CONCLUSION

• HIV seropositivity in patients with miscarriages is similar to overall maternal seropositivity rate in South Africa

• Our study does not show an increase of HIV prevalence in patients with miscarriages

• Our study highlights lack of health care professionals to offer HIV-VCT
ACKNOWLEDGEMENTS

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Thank You
Dankie