ADHERENCE TO POST EXPOSURE PROPHYLAXIS FOR HIV AMONG VICTIMS OF SEXUAL VIOLENCE IN MONROVIA, LIBERIA

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Background: Liberia

• 14 year civil war ended in August 2003.
• Widespread rape documented.
  – Swiss et al. (1998): 49% of women surveyed experienced at least one act of physical or SV during war from 1989-1994.
  – Johnson et al. (2008): 42% of female and 33% of male combatants experienced SV.
• SV has continued during the post-conflict period.
Background: Benson Hospital

- Benson Hospital (BH) is a Médecins Sans Frontières supported maternal child health center located in Paynesville, Monrovia.
- Included a clinic providing comprehensive response to victims of sexual violence.
- From May 2005 through December 2007, 2054 victims of recent incidents of sexual violence were treated at BH.
Background: HIV

• Post-exposure prophylaxis for HIV (PEP) is recommended for victims of sexual assault within the first 72 hours.

• HIV prevalence in Liberia: Estimated 1.5-5.7%
Background: Literature Review

• Ellis et al. (2005): 65% of children on PEP in a hospital in Malawi reported back after one month. Adherence rates not stated.
• Kim et al. (2009): Increased adherence from 20% to 58% in a rural hospital in South Africa following implementation of an intervention.
• Linden et al. (2005): 21% adherence among women reporting to a large urban emergency department in the United States.
• Loufry et al. (2008): Adherence ranged from 24-33% in 18 sexual assault treatment centers in Ontario, Canada.
Design

• A cohort analysis of retrospectively collected data of victims of SV who received PEP.
• PEP was provided to all patients who were deemed high risk based on a standardized assessment.
• Treatment: bi-therapy with lamivudine/3TC and zidovudine/AZT.
Design

• All patients who received PEP were given specialized counseling.

• Family members were included in counseling for child survivors.

• Patients were required to provide detailed addresses and phone numbers, when possible.
Design

- Follow-up visits were scheduled for days 7, 21 and 28.
- At each visit, adherence and adverse affects were monitored.
- Sufficient PEP treatment was provided to last until the next scheduled visit.
- For those who did not return to the clinic, home visits were attempted.
Design

• Adherence was defined as completing the 28-day treatment.
• Treatment was discontinued if a patient reported missing more than one dose.
• SPSS version 17.0 was used to run frequencies and chi-squared analysis to identify factors associated with adherence.
Patients

- From May 2005 through December 2007, 2054 victims of recent incidents of sexual violence were treated at BH.
- 1039 (50.6%) reported within 72 hours.
- PEP provided to 765 (72.8%) patients.
Results

• 598 (79.1%) adhered to treatment.
• The only significant factor associated with adherence was the number of follow-up visits ($p<0.05$).
• Those with 4 or more visits recorded were most likely to have adhered to treatment.
Conclusions

• In a resource poor setting, it is possible to achieve high levels of adherence to PEP among victims of sexual violence

• Requires that protocols and procedures designed to ensure that patients attend follow-up visits are implemented.

• Requires appropriate dedication of staff and transportation to do home visits.
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