National HIV Pregnancy Planning Guidelines

Developed to assist people living with HIV in Canada with their conception planning and fertility needs.

Ms. Shari Margolese (Community Champion)
Dr. Mona Loutfy (Physician Champion)

Background

- Decreasing mortality and morbidity overall related to HIV
- Increasing prevalence of women who are HIV-positive (51% globally, 23% in Canada)
- A majority of HIV+ women and men living with HIV that are of reproductive age (> 80%)
- Methods to reduce the chance of vertical HIV transmission (from mother to child) to < 1%
- High desire (69%) and intention (57%) to have children among HIV- positive women in Canada*

⇒ Women living with HIV are going to be planning pregnancies.

*Loutfy et al. PloS ONE 2009
However limited access to preconception counseling assisted reproductive therapies and fertility treatments*

Discrepancy between needs & services available

*Yudin, Shapiro, Loutfy. Reprod Health. 2009
Canadian HIV Fertility Program Diagram

**VISION:**
To champion a collaborative program that guides and assists people living with HIV in Canada with their fertility desires and pregnancy planning in a holistic, ethical, supportive and medically sound manner.
Objectives

- Development of National HIV Pregnancy Planning Guidelines (NHPPG)
  - To comprehensively evaluate the relevant literature
  - To derive evidence-based guidelines for safer pregnancy planning and conception for HIV-positive individuals
  - Based on a community-based model & justice-based and evidence-based approaches
Background

Four main issues need to be considered:
1) Vertical Transmission
   • Viral transmission from the mother to the child
2) Healthy pre-conception
3) Horizontal Transmission
   • Viral transmission between partners or interacting individuals
4) Fertility issues
   • If the individual or couple has infertility
Methods

- Based on the principles
  - **Appraisal of Guidelines Research & Evaluation (AGREE) Instrument**
    - a generic tool developed for assessing the quality of clinical guidelines

- Search strategy to produce Literature Review
  1. PubMed and MEDLINE databases
  2. Conference databases were searched (i.e. CROI, IAC, IAS, ICAAC, CAHR, OHTN)
  3. Hand search of retrieved articles for additional citations
  4. Review with experts in the field for missed citations
Methods

● Development of recommendations

■ Over 70 Key stakeholders in varied relevant fields were identified and brought together from across the country to form the NHPPG Development Team (Fertility, HIV, OB/Gyn, Midwives, Community, FP, SW, Psychiatry, Policy, Legal, Gov’t, Researchers, Paeds, Others)

■ Five national teleconferences

■ Two in-person meetings
  • During each in-person meeting the team was divided into four working groups to discuss, debate and reach consensus on the specific portions of the guidelines.
Methods

- **Grading of evidence**

  Using the Evaluation of Evidence criteria described in the Canadian Task Force on Preventive Health Care

<table>
<thead>
<tr>
<th>QUALITY OF EVIDENCE ASSESSMENT</th>
<th>CLASSIFICATION OF RECOMMENDATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>The quality of evidence reported in this document has been described using the Evaluation of Evidence criteria outlined in the Report of the Canadian Task Force on the Periodic Health Exam.</td>
<td>Recommendations included in this document have been adapted from the ranking method described in the Classification of Recommendations found in the Report of the Canadian Task Force on the Periodic Health Exam.</td>
</tr>
<tr>
<td>I: Evidence obtained from at least one properly randomized controlled trial.</td>
<td>A. There is good evidence to support the recommendation that the condition be specifically considered in a periodic health examination.</td>
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<tr>
<td>II-1: Evidence from well-designed controlled trials without randomization.</td>
<td>B. There is fair evidence to support the recommendation that the condition be specifically considered in a periodic health examination.</td>
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<tr>
<td>II-2: Evidence from well-designed cohort (prospective or retrospective) or case-control studies, preferably from more than one centre or research group.</td>
<td>C. There is poor evidence regarding the inclusion or exclusion of the condition in a periodic health examination, but recommendations may be made on other grounds.</td>
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<tr>
<td>II-3: Evidence obtained from comparisons between times or places with or without the intervention. Dramatic results in uncontrolled experiments (such as the results of treatment with penicillin in the 1940s) could also be included in this category.</td>
<td>D. There is fair evidence to support the recommendation that the condition not be considered in a periodic health examination.</td>
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<td>III: Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees.</td>
<td>E. There is good evidence to support the recommendation that the condition be excluded from consideration in a periodic health examination.</td>
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Results: Linking key stakeholders for guidelines development

Linking Stakeholders

■ Society of Obstetricians and Gynecologists of Canada (SOGC)/Canadian Fertility and Andrology Society (CFAS)

■ Association of Medical Microbiology and Infectious Disease Canada (AMMI Canada)
Results

Guideline Headings:

- Ensuring healthy mother, baby and family
- Legal and ethical issues
- Psychosocial and mental health issues
- Antiretroviral and other drugs in pre-conception
- Options for reducing horizontal transmission
- Scenarios
- Fertility issues
- HIV infection control issues in the fertility clinic
Ensuring a healthy mother, child and family

- Reproductive health counseling, including contraception and pre-conception counseling, should be offered to all HIV-positive people at the time of HIV diagnosis and on an ongoing basis.

- Men and women should be counseled on all aspects of pregnancy planning, such as maintaining a healthy diet and lifestyle, the risk of genetic disease occurrence and integrated prenatal screening, as outlined in current Canadian practice guidelines—regardless of their HIV status.
Antiretroviral and other drugs in pregnancy planning

- Clinicians should review all medications HIV-positive men and women may be using including antiretroviral therapy antidepressants, pain medications and hepatitis treatment to ensure they are safe during conception and pregnancy.

- HIV-positive women who do not require combination antiretroviral therapy for their own health should be advised to start treatment after the first trimester of pregnancy.
The NHPPG contains scenario-based recommendations for the prevention of horizontal transmission in the following categories:

- HIV-positive woman and HIV-negative man
- HIV-positive single woman or HIV-positive woman in a same sex relationship
- HIV-positive man and HIV-negative woman
- HIV-positive single man or male same sex couple
- HIV-positive man and woman
Results - Options for Conception

- Intercourse +/- timing ovulation
- Home insemination
- Sperm washing with intrauterine insemination
- In vitro fertilization (incl. intracytoplasmic sperm injection)
- Sperm donation
- Adoption
Results: Guideline Highlights

Infertility investigations and treatment

- HIV-positive people should be counseled about fertility issues that occur in the general population, including genetic disorders and age which is a major factor when considering fertility issues.

- Infertility investigations and treatment should be offered to HIV-positive people if required.
Results- Guideline Development

- **HIV infection control in fertility clinics**
  - Fertility laboratories should follow Canadian Standards Association guidelines for infection control when handling HIV-positive materials.
  - Storage of potentially infectious materials in segregated containers and incubators reduces the risk of HIV contamination.
  - Bio containment straws for specimen storage should be utilized to further reduce the risk for cross-contamination of samples.
Presented at the 1st Int. Workshop on HIV & Women, 10 - 11 January 2011, Washington DC

Knowledge Translation - Pamphlets

- available in French & English at www.catie.ca
Next Steps:

- Guidelines under review by the SOGC/CFAS and AMMI for endorsement and publication
- Distribute final Guidelines
- Continue KT activities, workshops and pamphlet distribution, on a broader scale and to monitor the uptake of the guidelines and revise as required
Conclusions

The NHPPG has the potential to

- increase the quality and quantity of pregnancy planning in the HIV-positive population through the provision of safer options for conception
- reduce the risk of horizontal transmission of HIV between partners
- reduce the stigma associated with pregnancy and HIV
- increase access to pregnancy planning and fertility services for PLWHIV in Canada.
Presented at the 1st Int. Workshop on HIV & Women, 10 - 11 January 2011, Washington DC

Acknowledgements

Thank You!

Our Team

Canadian Fertility Program Investigators and staff

NHPPG Development Team