Male Circumcision and HIV Prevention: Research Influencing Action

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Acknowledgements to Tim Farley, RHR, WHO Geneva
Overview of the Presentation

- Building up the evidence to explore the link between Male Circumcision and HIV transmission
- Using the evidence to influence action
- Some reflections/lessons learnt
Male circumcision and HIV infection

Bongaarts, AIDS 1989
HIV and MC Prevalence – Africa
Adapted from Halperin & Bailey, Lancet 1999; 354: 1813
Biological Plausibility for Male Circumcision's Protective Effect

- Decreased target cells (Langerhan's cells)
- Increased keratin barrier
- Decreased genital ulcer disease
- Decreased micro-trauma to penis
- Decreased warm moist environment
Cochrane review of observational studies
Siegfried, N. et al, 2004

- 35 observational studies met the inclusion/exclusion criteria
- 16 in the general population, 19 in high-risk populations (groups or settings)
- 25 cross sectional, 5 cohort incidence studies, 4 case control
- Meta-analysis not possible because of high variation in results
- Therefore stratified analysis by study type (cohort, cross-sectional) and study population (general or high-risk)
Overall Findings

• Studies from high risk groups report a powerful protective effect of circumcision.

• Studies for the general population also indicated preventive effect of circumcision, but results varied more.

• Adjusting for confounding variables gave more similar results (note: observational studies can only adjust for known confounding factors, and then only if they are measured accurately).
Overall Conclusion of the Cochrane Review

- The results from existing observational studies show a strong epidemiological association between male circumcision and prevention of HIV, especially among high-risk groups. However, observational studies are inherently limited by confounding which is unlikely to be fully adjusted for.

- Insufficient evidence to support an interventional effect on male circumcision on HIV acquisition in heterosexual men.

- Therefore Randomized Controlled Trials (RCT) needed in order to be able to decide whether male circumcision could be recommended as an intervention for HIV prevention.
Emerging Evidence 2005

July 2005

- Orange Farm Trial results released
- Joint press conference ANRS, WHO & UNAIDS
  - “Results very promising”
  - Circumcision should not be promoted for HIV prevention pending results from other two RCTs
- Concerns
  - Potential for “risk compensation”
  - High complication rates of circumcisions performed in non-clinical settings
Emerging Evidence 2005

UN Partner Workplan and Actions

- Priority actions pending availability of further evidence
- Support countries assess potential impact of new evidence
  - Country stakeholder consultations
  - Human rights dimension
  - Situation analysis tool kit to assess facilities, potential demand
  - Technical guidance on male circumcision techniques, service package and training modules
- Funded by ANRS, NIH, BMGF, UNAIDS in November 2005
National Consultations on Male Circumcision 2006

- Kenya, Tanzania and Zambia:
  - High circumcision prevalence in selected areas
  - How to extend to non-circumcising groups
  - How to expand safely to meet growing demand

- Swaziland
  - Male circumcision being re-introduced into country
  - High demand in private and NGO sectors

- Lesotho
  - Widespread traditional male circumcision in mountain regions
  - Very limited cutting
  - Huge cultural sensitivities
  - Large tensions between traditional and modern health systems
Regional Consultation, November 2006

Countries
- Kenya, Lesotho, Tanzania, Swaziland, Zambia
- Malawi, Mozambique, South Africa, Zimbabwe

Challenges
- Legal, policy, ethical/human rights frameworks
- How to ensure safe male circumcision practices
  - Training needs, types of provider, post-circumcision care, management and reporting of adverse events, risk compensation
- Whether and how to prioritise (age group, population group, …)
- Cost and sustainability of services
- …
Global Technical Consultations

- Strategies and approaches to male circumcision programming (Dec 06)
  - Targeting, models for scale up, minimum package of counselling and services, capitalise on opportunity to reach young men, stigma, …

- Perspectives from social science on male circumcision for HIV prevention (Jan 07)
  - Cultural and ethnographic dimension of promoting MC, potential risk compensation, integration between traditional and clinical circumcision, women’s role and perspectives, social change communication, stigma, …

- Male circumcision and adolescent sexual and reproductive health programming (Mar 07)
  - Integrating adolescent sexual health counselling and services, effective programming models, …
New Evidence

- **12 Dec 06**
  - Kenya and Uganda trials stopped by DSMB
  - WHO & UNAIDS announced plans for global consultation to review evidence

- **24 Feb 07**
  - Publication of results in *Lancet*

- **6-8 Mar 07**
  - International Technical Consultation on Male Circumcision and HIV Prevention: Implications for Policy and Programming
Impact on HIV incidence: Evidence from observational studies and RCTs

<table>
<thead>
<tr>
<th>Study</th>
<th>Effect size (95% CI)</th>
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<tbody>
<tr>
<td>Overall</td>
<td>0.42 (0.34, 0.52)</td>
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<tr>
<td>High-risk groups</td>
<td>0.29 (0.20, 0.42)</td>
</tr>
<tr>
<td>General Population</td>
<td>0.56 (0.44, 0.71)</td>
</tr>
<tr>
<td>South Africa</td>
<td>0.40 (0.24, 0.67)</td>
</tr>
<tr>
<td>Kenya</td>
<td>0.41 (0.24, 0.70)</td>
</tr>
<tr>
<td>Uganda</td>
<td>0.49 (0.28, 0.86)</td>
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Conclusions and Recommendations from WHO/UNAIDS Technical Consultation

28 Mar 07
- Conclusions and recommendations released

11 key conclusions:
- “The research evidence is compelling”
- “Promoting male circumcision should be recognized as an additional, important strategy for the prevention of heterosexually acquired HIV infection in men”
- “Male circumcision should never replace other known methods of HIV prevention and should always be considered as part of a comprehensive HIV prevention package”
Current Activities to Support Expansion of Safe Male Circumcision Services

- Improve availability, accessibility and safety of male circumcision as part of comprehensive HIV prevention

UN Partners will provide:
- Global norms and standards
- Global advocacy and communications
- Coordination in setting global research priorities
- Support monitoring and evaluation of male circumcision services
- Assessment of legal, ethical and human rights frameworks
- Technical support through Regional and Country Offices

UN Partners will support countries to:
- National programmes to introduce, expand and monitor safe circumcision services
- National advocacy and communication strategies
Collaborations

Inter-Agency Task Team on Male Circumcision
- UNAIDS, UNFPA, UNICEF, WHO (Chair), World Bank

Key partners:
- Bill and Melinda Gates Foundation
- USA National Institutes of Health (NIH)
- French National Agency for AIDS Research (ANRS)
- US Agency for International Development
- Office of the Global AIDS Coordinator
- Centers for Disease Control and Prevention
- Clinton Foundation
- Family Health International
- Population Services International
- JHPIEGO Corporation
- Others …
Conclusions

- We have an effective intervention, but we really don't know how to DO IT
- There will be many unknowns as we move from research findings to practice
- BUT there are also MANY opportunities:
  - MC and adolescents
  - MC as an entry point for sexual and reproductive health
Reflections …

- A good example of the distillation and generation of evidence
- A good example of "sailing the boat while building it" …
- Ensure the involvement of a range of disciplines
- Involve a range of partners
- Despite the evidence there will be people who disagree: emotive>intellectual
- The questions do not stop with the initial evidence …
Thank You