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# **Hormonal Contraception and HIV Acquisition: Getting on the “Same Page”**

**Zambia  
October 2015**



## HIV-negative men

- Whether HIV-negative men are at higher risk of acquiring HIV from women living with HIV who are using HC compared to men whose partners are HIV positive and do not use HC

## Women living with HIV

- Whether women living with HIV who use ART and HC will experience drug-drug interactions that diminish the effectiveness of their HC method (Jennifer Tang)
- Whether women living with HIV who use HC will experience faster disease progression than women who do not use HC

## HIV-negative women

- **Whether HIV negative women who use specific methods of HC are at greater risk of acquiring HIV than HIV negative women who do not use specific methods of HC**



# WHO, Medical Eligibility Criteria (MEC)

- Provides evidence based guidance on who can safely use contraceptive methods
- 2014 MEC expert group reviewed evidence on hormonal contraception and HIV acquisition
  - Commissioned systematic review of relevant studies



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## **Hormonal Contraception and HIV Risk**

### **Polis et al Contraception 2014;90:360-90**

- Systematic review of 23 reports from 22 studies published by January 15, 2014
- Added 3 new reports, updating WHO analysis
- Divided into “unlikely to inform primary questions” or “informative but with important limitations”
- Purposely did not do meta-analysis because of varied methodology, potential confounding



# Summary of Evidence, Acquisition

*(C.Polis, 2014)*

Method	Acquisition
Patches, Rings, EC	No Data
LNG-IUD	No Data
OCPs	No Current Concern
Implants	No Current Concern
NET-EN	Some Concern (limited data)
DMPA	Concern

**Systematic review concluded that the relationship between injectable HC and HIV risk is inconclusive (22 studies)**



## **Why hasn't the research determined if the association between DMPA and HIV is causal?**

- All observational data
  - Varying quality of the research
  - Secondary analysis: HIV acquisition was not the primary question driving study design
  - Problem of confounding factors
    - Condom use
    - Other unknown factors



- Two recent analyses of observational data:
  - A meta-analysis concludes that there was evidence of a “moderate increase” (40%) in HIV risk for women at “high risk” of HIV infection and a 30% increase among women in the “general population” (*Ralph, 2015*)  
*10 studies*
  - An individual participant data (IPD) meta-analysis concludes that DMPA use may increase risk (50%) of HIV acquisition (*Morrison, 2015*)  
*18 studies*
    - Hazard ratio reduced to 1.22 when only the studies with lowest risk of bias included



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## And the research keeps coming...

- Prospective study of discordant couples in Zambia (1994-2012) (*Wall MK, 2015*)
  - Followed 1,393 serodiscordant couples longitudinally, women neg, man positive
  - Found no association between HC and HIV acquisition risk in women
    - RCT planned to start in late 2015/16 (**ECHO Trial**)
      - FHI360, WHO, WITS, U.of Washington and local research partners
      - Sites in SA, Zambia, Swaziland, Kenya
      - Randomized to use: Jadelle, <sup>8</sup> DMPA, Cu T IUD







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# Take Home Message

- Despite additional studies, uncertainty remains about the possible role of DMPA in HIV acquisition
- The use of hormonal contraception for women at high risk of HIV continues to be a WHO MEC category 1 with no restrictions
  - Women and couples at high risk of HIV acquisition should also be informed about and have access to HIV preventive measures, including male and female condoms irrespective of the family planning method they choose.





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# Resources

- Hormonal contraceptive methods for women at high risk of HIV and living with HIV 2014 Guidance statement, WHO: [http://www.who.int/reproductivehealth/publications/family\\_planning/HC\\_and\\_HIV\\_2014/en/](http://www.who.int/reproductivehealth/publications/family_planning/HC_and_HIV_2014/en/)
- **USG HC-HIV Technical Brief:** <http://www.usaid.gov/sites/default/files/documents/1864/hormonal-contraception-and-HIV.pdf>
- **HC/HIV Acquisition Update:** [http://www.usaid.gov/sites/default/files/documents/1864/HC-HIV-BriefUpdate.pdf?utm\\_source=March+6%2C+2015&utm\\_campaign=2015.02.27&utm\\_medium=email](http://www.usaid.gov/sites/default/files/documents/1864/HC-HIV-BriefUpdate.pdf?utm_source=March+6%2C+2015&utm_campaign=2015.02.27&utm_medium=email)
- **USG HC-ART Drug Interactions Brief:** [http://www.usaid.gov/sites/default/files/documents/1864/HC\\_ART-brief.pdf](http://www.usaid.gov/sites/default/files/documents/1864/HC_ART-brief.pdf)



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*Thank you!*

