What do the results of ACCEPt mean for chlamydia control policy?

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Outline

• Current policies
• Existing evidence-base
• Gaps in the evidence base
• The implications of the ACCEPt results
• Where next

Chlamydia control policies

• Developed unevenly over the last 30 years - science and politics
• They aim to
  – "reduce the morbidity and subsequent complications" CDC 1985
  – "produce considerable health gains" and "reduce health costs" by preventing reproductive ill health (CMO, UK 1998)
  – "reduce onward transmission to sexual partners and prevent the consequences of untreated infection" (NCSP 2003)

What policies?

• Access to testing and treatment
• Management guidelines
• Asymptomatic screening, e.g.
  – CDC: annual testing women under 25
  – NCSP: annual testing/ change of partner in men and women under 25
• Hugely varied

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Chlamydia control in Europe

- 2007 survey found wide variation in control activities, repeated 2012 (25/27 countries)
- From 2007 – 2012
  - Proportion with no control activities decreased from 45% to 22%
  - Proportion meeting minimum standard * increased from 44% to 72%

* A national STI control strategy/plan, primary prevention, chlamydia case and partner management guidelines, surveillance of cases

Control activities in Europe, 2007 – 2012

Variation in control policies

- Lack of clarity of objectives
  - Reduce reproductive sequelae (individual level)
  - Reduce prevalence and move towards elimination (population level)
- Uncertainty in evidence about both

Reduce reproductive sequelae

- Clinical and population studies show increased risk of PID with chlamydia testing and positive test
- RCT evidence: single test reduces PID by about 35% (some uncertainty / variation)
- Ecological evidence correlates increased testing with reduced PID

Ecological evidence: trends in PID

Sweden 1970 - 2000
Canada 1990 - 2010
USA 1996 - 2008
Australia 1998 - 2014

Manitoba: Time to PID for women following first chlamydia test

Solid CT -ve
Dashed CT +ve

Davies et al JID 2014.
Reducing transmission

- Little empirical evidence
  - e.g. No evidence of reduction in UK 2000 – 2011
- Modelling?

ACCEPt results

- Screening in primary care is feasible and acceptable
- It can increased test volume (80%)
- Screening 20% of 16 to 29 year old men and women each year for 3 years did not reduce chlamydia prevalence in the population when compared with control population
- Not yet reported on reproductive outcomes

Possible interpretations

- Difference in testing insufficient to show impact
  - Testing increased in both arms
- Uptake of intervention insufficient
  - Similar to the Netherlands RCT
- Follow-up time not long enough
- Screening unlikely to reduce population prevalence…?

Implications

- More evidence of how difficult it is
  - to get high annual uptake
  - to have an impact on prevalence
- Opportunity to think about the aims of control policies
- If we aim to reduce prevalence need better understanding of transmission

Chlamydia transmission

- $R_0$...
  - Transmissibility – condoms!!
  - Rate of partner change – education
  - Duration of infection – screening (annual test highly unlikely to interrupt transmission)
- May have to wait for a vaccine

Reduce reproductive sequelae

- Focus on testing young women
- Ensure excellent clinical services for people with symptoms
- Partner notification
- Test male partners, but discuss if/why screen men?
Conclusion

• Is more research needed?
• Yes,
  – primary prevention
  – Partner notification
  – vaccine