

Professor Margaret Reid

**Challenges around screening for
chlamydia trachomatis
in Scotland**

What is *chlamydia trachomatis*?

- A bacterial genital/STI
- Common sexually transmitted disease
- Asymptomatic in 70% women and 50% men
- Subclinical - “the natural history of the disease is still uncertain” (Oakeshott and Hay 1995)

Screening programmes

- No national screening programme
- Pilot schemes funded by Government Departments of Health England and Wales, and Dept of Health Scotland
- Different approaches (postal, opportunistic)
- Different settings (GP, Antenatal, TOP clinics, Colposcopy)
- ***Most pilots with women only***

Current testing status

- testing very variable across settings
- relatively recently introduced into general practice
- routine in TOP clinics and colposcopy
- long time routine in GUM clinics

Chlamydia Trachomatis

- One of the 'new' STIs
- Screening – a blueprint for the future?

Challenges with

- guidelines
- prevalence data
- implications of contracting *chlamydia*
- the tests
- treatment
- the settings
- the approaches
- partner notification

Guidelines

- CMO's Expert Advisory Group on *Chlamydia trachomatis* (England and Wales) 1998
- SIGN '*Management of Genital Chlamydia trachomatis infection*' No 42 March 2000

Both recommended

Opportunistic testing for

- **Women younger than 25 years and sexually active**
- **Women aged 25 years or older with two or more partners or a change of sexual partner in the last year**

Men?

- “There are little data on men outwith GUM clinics. It is therefore not possible to make a recommendation on opportunistic screening in men” (*SIGN Guidelines 2000*)

Why screen?

- Serious long-term health effects (especially for women)
- Ectopic pregnancy
- Chronic pain
- Health implications for infants born to infected women
- *Cause of PID ->infertility*

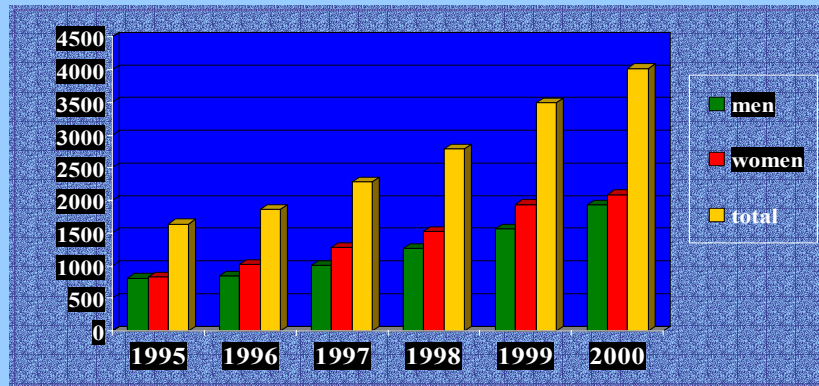
Infertility

- Scholes study (1996) - established by RCT the link between *C.trachomatis* and PID
- Honey systematic review 2002
“The use of pelvic inflammatory disease as a study outcome is problematic”

Prevalence rising but

- Evidence base
- UK studies?
- Setting?
- Type of test used in testing for prevalence?

Rates of Infection 1995/96-2000/01 (Scotland)

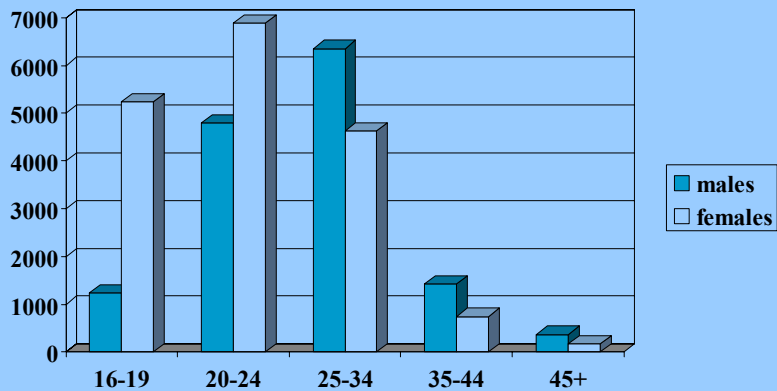


Source: ISD Scotland

“Data on the prevalence of *C.trachomatis* infection are incomplete” (CMO 1998)

- Gen practice 4.5%
- Antenatal clinics 4.6%
- Gyn clinics 4.8 %
- Family planning 5.1%
- GUM clinic 16.4%

Cases of Chlamydia Trachomatis by age



The test

- 'older' test - urethral or endocervical swabs (->cell culture or antigen detection)
- 60%-80% sensitivity
- majority of epidemiological research based on older tests

DNA testing

- First void urine sample - nucleic amplification assay test such as PCR or LCR
- Introduced from 1998/9 onwards
- Sensitivity approaching 100%
- Less invasive as testing urine

First void urine - how important ?

- Norman study - 223 women responded to questionnaire - “which part of the flow did you take your sample from?”
 - 38% - start of flow
 - 47% - middle
 - 2% - end
 - 14% - collected all, then filled sample container

Gender issues

LCR more effective in diagnosing
C.trachomatis in males than females

Clad et al 2001 Germany

- Sample of 1690 asymptomatic women and male sex partners; range of length of relationship 2 months-> 10 years+
 - 63 males /78 couples - 81%
 - 42 females /78 couples - 54%
- Authors argue need to screen both males and females

antibiotic treatment

- 1 dose -azithromycin - 1g stat
 - 7 days - doxycycline 100mg- twice daily
 - 10 days - lymecycline 300mg once daily
 - etc
-
- ?follow-up?

Screening dilemmas

- Who to screen? Males? Females?
- Through which service?
- How to contact?

SETTINGS

■ Primary care

- opportunistic
- postal
- family planning

■ Secondary care

- antenatal clinic
- colposcopy/gyn clinics
- termination clinic

Postal screening – published studies

- kit sent to individual, send urine/vaginal flush sample to lab
- Danish studies
 - 93.4% female high school pupils returned samples
 - 92.3% women VE at a GP returned 3 home samples (Ostergaard et al 1998)
- Bristol study - 83% men and women in one practice returned sample

Postal sampling - Wilson study (Scotland)

Interview data revealed...

- Difficulties with posting!
- Letter boxes too small
- Kits returned
- Addresses incorrect

GPs.....

- GP acknowledges that “not all GPs will be comfortable talking about sexually transmitted infections opportunistically”

What is the appropriate strategy for screening for *C.trachomatis* in antenatal and gynaecology settings in Scotland?

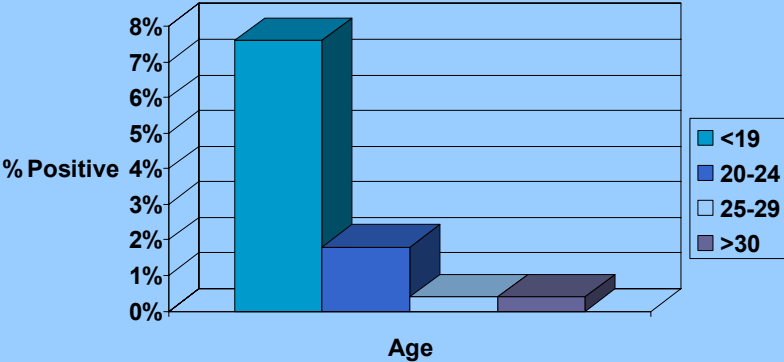
Norman et al

- Prevalence in 3 settings
- acceptability
- cost effectiveness

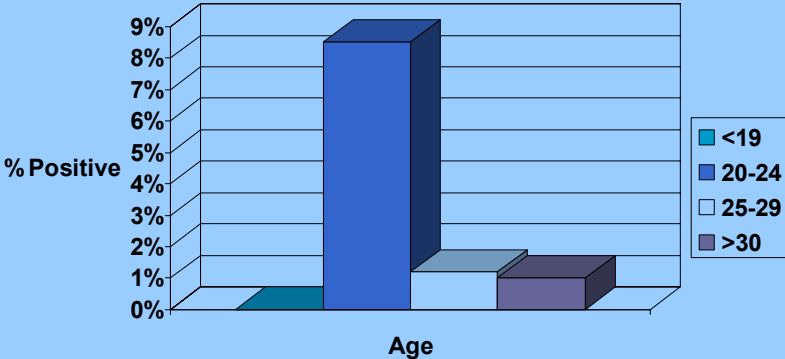
Proposed sample

- Settings: Antenatal, TOP, colposcopy
- Age groups
 - 15-19
 - 20-24
 - 25-29
 - ≥ 30

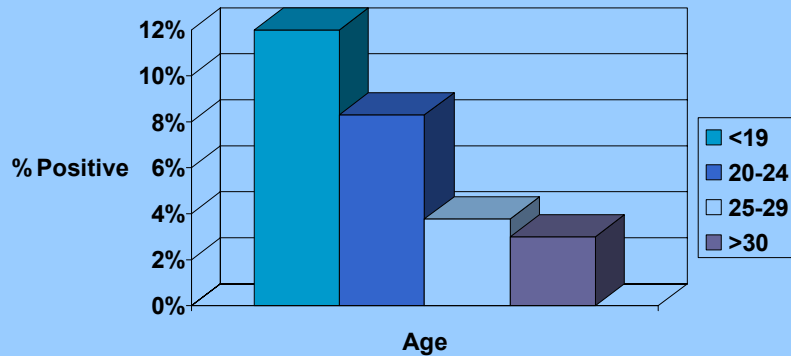
Antenatal - Aberdeen



Colposcopy - Aberdeen



Termination of Pregnancy - Aberdeen



TOP - settings

- Highest rates but ...
- difficulty in maintaining contact
- mobile numbers
- no letters to home
- no trace/tracing

- Hopwood *et al*/Norman *et al*

Repeat infection

- What known?
- How soon?
- How often?
- cost-effectiveness of treatment?

Screening men

- “When a man comes to see a male GP there is this macho-male interaction where it becomes difficult for discuss the nether regions and do any kind of investigation. But women are quite used to be asked to get on a couch and have a lollipop stick inserted where the sun doesn't shine.....” *Dr Banks/Medical Interface June/July 1998*

Regular screening...?

- 96% women agreed that regular testing was a good idea
- 90% women thought men should be tested regularly

Men tested?

- 76% would want their partner to be tested for *chlamydia*
- 47% think that their partner would attend

Women positive about screening

- “Was glad to be offered this test. It is something all women want to do/need to do but don't ask their GPs 'cos of embarrassment, but I definitely feel it should be routinely offered.”

– *antenatal patient, Glasgow, age 25-29*

Women said.....

- I feel it would be counter-productive to screen women and at the same time not offer the tests to men.
– *Antenatal patient Glasgow age 30+*
- I feel that testing for *chlamydia* should be made more aware to men and women and should have the same, if not more, awareness to people as the smear test does.
– *Antenatal patient, Aberdeen age 25-29*

Once diagnosed...

- Treatment for women infected
- Tracing of partners
- ‘Social’ implications for woman and her partners

Sexually transmitted diseases

- “the fall of the race”
- “decline of the family”

Moral issues

- Shame
- Blame
- Stigma

Partner notification

- Review of partner notification notes “the societal and relative cost-effectiveness of different strategies (of partner notification) are still poorly understood” (*Cowan et al 1996*)

Informing partners

- Duncan and Hart article - BMJ 2000
- Interviewed 17 women with current or recent diagnosis of *C. Trachomatis*
- 3 themes identified
 - *perceptions of stigma associated with STIs*
 - *uncertainty about reproductive health*
 - *anxieties regarding partner reactions to diagnosis*

Government plans.....

- Can identify
- Can treat
- Acceptable
- Age groups identified correctly

- but it evidence base for future action?