



NATIONAL CENTRE IN HIV EPIDEMIOLOGY AND CLINICAL RESEARCH

> Reproductive Health at Risk: Challenges Associated with Pelvic Inflammatory Disease in remote Central Australia

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### **Background**



PID comprises a spectrum of upper genital tract inflammatory disorders in women

endometritis, salpingitis, tubovarian abscess and pelvic peritonitis

Infection of the upper genital tract caused by microorganisms that ascend from the cervix and/or vagina

- poly microbial aetiology
- chlamydia and gonorrhoea are the most common causes

# UNTREATED & INADEQUATELY TREATED SEXUALLY TRANSMITTED INFECTIONS

## PID sequelae



#### Serious long term consequences:

- tubal factor infertility
- ectopic pregnancy
- pelvic adhesions
- early miscarriage
- chronic pelvic pain
- post partum infection

### At risk



ALL sexually active women under 25 years

In settings with high STI prevalence .....

ALL sexually active women under 35 years

# STI Epidemiology



- 11% of all 2007 notifications for Chlamydia were among Aboriginal people (NT, SA, WA, VIC, TAS)
- 57% of all gonorrhoea notifications were among Aboriginal people (NT, SA, WA, VIC, QLD)
- Highest rates in young women aged 15-19 years

Burden of disease in remote and very remote communities

## **Central Australia Issues**



- High rates of bacterial STI
- Anecdotal evidence
  - PID symptoms unrecognised >>> undiagnosed
  - misdiagnosis as a urinary tract infection
- Primary Health Care delivery is challenged by:
  - frequent staff turnover
  - generalist staff
  - cross cultural communication
  - social mobility



Despite this background......

there has been limited investigation of the diagnosis and management of PID in Central Australia

### **Study Aim**



To review the clinical management of women of reproductive age who present to select PHC centre's in Central Australia with signs and symptoms of PID and/or UTI

How are women with lower abdominal pain, the most common symptom of PID, being assessed and managed?

# Central Australian remote PHC centre's n=5

Reviewed all available medical records of Aboriginal women of reproductive age (14-40 years)

n=686

Clinical presentations with at least one documented sign or symptom of either PID and/or UTI during 2007-2008

n = 345

## Signs and symptoms



160 (23%) women presented 345 times with either S&S of:

#### **PID**

- Lower abdominal pain
- Dyspareunia
- Abnormal menstrual bleeding
- Vaginal discharge

#### and/or

#### UTI

- Dysuria
- Frequency
- Loin/flank pain

# Signs and Symptoms



Clinical presentations (n=345)

S&S of PID only (n=148, 43%) S&S of PID and UTI (n=122, 35%) S&S of UTI only (n=75, 22%)

# Diagnoses by clinician



Clinical presentations (n=345)

UTI diagnosed or queried (n=165, 48%)

Other (n=60, 17%)

STI diagnosed or queried (n=41, 12%)

PID diagnosed or queried (n=39, 11%)

# When a woman reports LAP the following questions should be asked......

Any pain deep inside when having sex?

93% not documented

Vaginal discharge?

74%not documented

Any change in your periods?

88% not documented

When was your last period?

• 82% not documented

# When a woman reports LAP the following investigations should be undertaken.....

Gonorrhoea and chlamydia test

• 63% not documented

Urine pregnancy test

50% not documented

Mid stream urine for m/c&s

69% not documented

Abdominal examination

64% not documented

Bimanual examination, if skilled

• 91% not documented

# PID diagnosed by clinician



#### 39 documented PID diagnoses in 33 women

- 15 diagnosed, 24 queried
- 6 (18%) women had more than one PID episode
- >>> clinical history taking, investigations and examination was also poorly documented
- Treatment was not consistent with the recommended regime in any presentation
- Incomplete treatment regime was administered in 54% presentations
- An STI ZAP pack alone (gonorrhoea and chlamydia treatment) was administered in 18% presentations

### PID cases



According to the study definition of PID:

- clinical presentation of LAP and
- gonorrhoea and/or chlamydia in 2007-2008 and
- aged 14 34 years (STI high risk age group)

68 women presented 110 times with PID during 2007-2008

- 4 presentations were diagnosed PID
- 13 presentations were queried PID

>>> 10% of women of reproductive age had at least one episode of PID during 2007-2008

### Limitations



- de-contextualised
- can only determine whether care was documented
- reasons why clinical decisions were made or care omitted cannot be determined
- a one off
- select communities based on high STI prevalence

### Conclusion



Clinical history taking, documentation, examination, investigations and treatment was overall poor

Contrary to local, national and global guidelines, clinicians were found to have:

- a low suspicion of PID
- a high threshold for initiating PID treatment
- a high suspicion of UTI
- a very low threshold for initiating UTI treatment

#### enzies school of health research

### **Recommendations**

- Ongoing commitment from all levels of the health care sector to STI program
- Education for women to recognise, describe and report PID symptoms
- Ongoing health care provider orientation to sexual health
- Further research into link between STI and adverse reproductive outcomes in this setting

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