

SCREENING FOR CHLAMYDIA TRACHOMATIS: BARRIERS FOR HOMELESS YOUNG PEOPLE

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Key words: Chlamydia, screening, barriers, homeless, young

ABSTRACT

Objective:

The study explored homeless young people's knowledge and attitudes of *Chlamydia trachomatis* (Chlamydia) and its screening.

Design:

Semi-structured interviews using focus groups.

Setting:

An inner city clinic for homeless young people.

Subjects:

Homeless young people aged 16 -26 years.

Outcomes:

Perceptions of Chlamydia and its screening.

Results:

19 males and 6 females aged 16 - 26 years participated. Content analysis confirmed a lack of knowledge, prior education and misinformation about Chlamydia and barriers to being screened. Ideas for informing young people about Chlamydia included advertising on billboards, in free newspapers, and improved school sex education programs.

Conclusions:

Homeless young people have poor knowledge of Chlamydia and its screening and barriers to the screening process. Culturally-specific education and health promotion programs and services are needed.

INTRODUCTION

The bacterial infection *Chlamydia trachomatis* (Chlamydia) is one of the most common sexually transmitted infections (STI). The Chlamydia bacterium can infect the cervix, fallopian tubes, throat, anus and male urethra. The infection, often asymptomatic, may go unrecognised and people are often unaware of its spread through unprotected sex (Department of Human Services 2003). A very simple, sensitive, non-invasive screening test is available using the nucleic acid DNA amplification technique Polymerase chain reaction (PCR) which has almost 100% specificity. It identifies the Chlamydia bacteria in a first passed urine sample (the Chlamydia Strategy for Victoria 2001).

Hayley et al (2002) reported a 6.6% prevalence of Chlamydia among Montreal street youth in Canada and recommended homeless youth needed to be tested for and educated about sexually transmitted infections at each clinic visit. They argued that collecting urine samples represents non-invasive screening and increases the likelihood that young people will agree to be tested. Prompt treatment and notification of sexual partners following a positive test is desirable to control Chlamydia transmission in homeless youth.

Chlamydia is the most common STI in Victoria, Australia. Reported cases doubled between 1994 and 1999 and notifications increased by 36% in the 4th quarter of 2003 compared with 2002 (Atkin 2004). The highest incidence occurred in the 20-24 year age group.

A number of studies of homeless young people indicate they have a high risk of Chlamydia (Rew and Horner 2003;

Kelly et al 2000; Rossiter et al 2003; Hillier et al 1997; Lovett 1994). The reasons cited for the high risk include: limited knowledge of where to access health care; cost of services; lack of services for females; not understanding the consequences of Chlamydia and health professionals' failure to understand the issues facing homeless young people.

Australian guidelines recommend annual screening for all sexually active women under 25 years to diagnose and treat Chlamydia infection early and that regular screening and treatment programs should be available, particularly to at risk groups including homeless young people (Australasian College of Sexual Health Physicians 2003; Hocking and Fairley 2003). These recommendations follow trends in America and Britain (Hart et al 2002). Promoting the health benefits of screening programs is an important health intervention (Dunn 2003a). However it is not clear how to improve the low screening rates in homeless young people or the most effective way to inform them about Chlamydia.

AIMS

The present study aimed to explore the knowledge and attitudes of homeless young people attending an inner city clinic about Chlamydia, the screening process and their ideas to increase awareness and screening in the group. The study was conducted to address the increase in Chlamydia noted among the young people attending the Young People's Health Service (YPHS).

METHOD

Study setting and the sample population

YPHS is a nurse-led health service providing opportunistic health interventions to homeless young people in inner Melbourne. Most people accessing the service are aged between 12 and 22 years and have lived in a variety of places since leaving home: with friends, on the street, youth refuges, or in supported accommodation (YPHS Annual Report 2002-2003). Transient shelter often means health care is inadequate.

Sampling process

All homeless young clients over sixteen years attending the YPHS between December 2003 and March 2004 were invited to participate. Pamphlets describing the study were distributed in the month prior to commencing the study and continued until recruitment was completed.

Five focus groups were held on separate days over a two-month period. Recruitment occurred on the day participants presented to the YPHS. Homeless young people suggested this recruitment method because their lifestyles did not enable them to plan ahead. Although six young people planned to attend a group they failed to present on the day. Informed consent was obtained on recruitment.

Focus group process

The author (AR), who is experienced at communicating with this population, facilitated the focus groups which continued until there was no further new information.

Although education is not usually an aim of focus groups, in the current context opportunistic education was necessary and enhanced the discussion particularly about health promotion ideas for the infection.

The discussion was audio-taped and author (DH) recorded non-verbal responses and interactions within the groups. Each group was coded with a letter and participants within each group were given a number that they displayed during group sessions to maintain confidentiality.

All participants agreed to abide by the group 'rules': respect other group members by allowing them to speak and addressing each other using the designated identity codes. Food and drink was provided to groups.

A series of semi-structured questions guided the discussion. The questions were piloted with five young people aged between 16 and 21 years to assess the clarity and suitability of the language. Ethics approval to undertake the study was obtained from the Royal Children's Hospital Human Research Ethics Committee.

DATA ANALYSIS

The audiotapes were transcribed verbatim and reviewed by the researcher and research assistant. Constant comparative data analysis was undertaken to compare data from each group successively and identify emerging themes using the framework method (Ritchie and Spencer 1994).

RESULTS

Demographic data

A total of twenty five young people participated in five focus groups (see table 1) which also shows demographic characteristics.

| Group | Age range | Gender | | Last year of schooling completed |
|-------------|-----------|--------|--------|----------------------------------|
| | | Male | Female | |
| A n = 6 | 18 - 25 | 5 | 1 | 10 - 12 |
| B n = 5 | 16 - 24 | 3 | 2 | 8 - 12 |
| C n = 5 | 18 - 26 | 4 | 1 | 10 - 12 |
| D n = 5 | 20 - 21 | 4 | 1 | 10 - 12 |
| E* n = 4 | 16 - 21 | 3 | 1 | 10 |

*A four-week-old baby was breast-fed during group E but caused minimal disruption.

Themes from the focus group discussions

Lack of knowledge

Most participants were not aware Chlamydia existed and their responses indicated a lack of understanding of the infection. Many participants indicated they had heard of the word 'Chlamydia' and understood it was a sexually transmitted infection but they did not have detailed information. One male in the second group said:

If you can have a test and it can be cured then it's not so bad. (B1: male)

Most young people incorrectly believed they were at greater risk of acquiring HIV/AIDS than Chlamydia and did not know about prevention; in particular condom use was not recognised as a way of preventing the infection. Lack of understanding was complicated by the asymptomatic nature of Chlamydia. One male summed up the feelings of many participants when he said:

How can you seek treatment if you don't know you've got it? (B3: male)

However six Group A participants indicated they were aware the infection could cause pain and possibly fertility problems for women if it was not treated for example:

I think not only can it cause problems with fertility in the future for women, but it can cause a lot of pain as well. (A2: male)

A recurring theme in all focus groups was that young people want to know about Chlamydia, the screening processes and health services.

School sex education not helpful

Some participants gained information about Chlamydia during school sex education programs. However they indicated they thought these programs were 'boring', 'inadequate', 'not relevant to their needs', 'something to be avoided if possible' and only recalled a limited amount of information from these programs. Sometimes the information they recalled was incorrect:

...it was just never really interesting to listen to because all they did was speak about it, they never showed diagrams or pictures. Every time the sex education came I'd go home. (E4: male)

Other sources of Information

Some of the girls learned about Chlamydia when they were pregnant during antenatal programs. However, by the time they received the information they were already at risk of Chlamydia and other STI's.

When I had my first child there were pamphlets there [at the antenatal program in the hospital] (D2: female)

'Dirty girl disease'

Chlamydia was described by the few who did know something about it as 'bad', 'dangerous', 'something to do with the body', 'not something you wished you had

and 'hard to detect, I think'. Young males who knew about Chlamydia were only aware that it affected females and made comments such as 'it's a girl disease' and 'not so important for males'. Male participants implied any risk of Chlamydia was the responsibility of young women:

I've heard its something to do with the clitoris, a fungus, it's a female thing. (A4: male)

Male infertility issues and protecting the future

No participant was aware of recent research showing Chlamydia can compromise male fertility although this complication is rare (Gough 2004a). Males became increasingly interested in Chlamydia after learning about the possible compromised fertility and asked questions such as:

Does it lower your sperm count? If you were to have kids and you had it, would your kids come out all deformed? (E2: male)

Similarly females were unaware of the consequences of Chlamydia on their fertility.

Screening process and barriers to screening

Most participants were unaware of Chlamydia screening processes, which reflected their general lack of knowledge about Chlamydia. At least one person in each focus group believed screening required a blood test. If they were aware of urine screening, they were unable to differentiate between the first passed urine specimen used to screen for Chlamydia and a mid-stream specimen needed to detect urinary tract infections. 'Taking a swab' was mentioned but without any real understanding about what was involved. Participants who believed screening required a blood test felt they would be 'screened for everything' including infections when they had a blood test for any reason:

They do the same as when they test you for hepatitis because I've been blood tested before. (E1: male)

When the urine screening process was explained, participants said collecting the first passed urine test was acceptable to them.

Participants indicated they feared being embarrassed by participating in STI screening programs and noted that embarrassment might prevent many young people from being screened. Other inhibiting factors included being frightened of the unknown and denial:

It's one thing to read about it and another thing to think about it and another to do something about it. (A4: male)

Several participants indicated young people were unlikely to broach the subject of Chlamydia with a health professional if they did not know screening was available.

Not having money and not being able to attend bulk billing health services were significant barriers to screening:

They don't bulk bill [services not charging a fee]. (C3: female)

No one has the money to go to the doctors. (C1: male)

Most young people in the study felt having 'food, money and somewhere to sleep' were more important than addressing their health needs.

How to inform others

Participants made a range of suggestions about how to inform young people about Chlamydia. The young women who attended antenatal care during their pregnancies were very positive about the information they received in antenatal programs and generally agreed that the education provided had been very useful. They also indicated the information would be most useful if it was provided before they commenced sexual activities. However, they were unable to agree on an appropriate time or year level for the education. Group B indicated Chlamydia education given within school programs should be 'more interesting'.

I think school is the best way to tell kids about Chlamydia. (B4: female)

Participants suggested using 'sensational advertising' and explicit images of grossly mutilated genitals on a billboard might be a way to get the message across to homeless young people, because they felt shock tactics would be effective.

Other suggestions for sex education included information in MX, a free inner city paper that targets young people, which is widely read by the target group, static and electronic billboard advertising, a television advertising campaign similar to the genital herpes program, pamphlets distributed by community and/or religious groups and advertising on condom packaging.

Humour was also mentioned specifically as a way of attracting the young people's attention:

Humour to make it funny. It's insensitive to do but it just makes people look. They have this like ad at this place I was staying at that said 'never use beer as a lubricant' I thought it was a joke. I looked closer and it was a thing you shouldn't have sex with someone without their consent. I was like 'shit we shouldn't joke about this', but it is funny. (A5: male)

Another male said:

You could give pamphlets to Jehovah's Witnesses and Mormons to distribute during their door knocking. (C2: male)

Incentives for attending screening programs

Several incentives were suggested to encourage homeless young people to attend Chlamydia screening programs (see table 2).

Table 2: Suggested incentives made in the focus groups to encourage homeless young people to attend Chlamydia screening programs.

| Male | Female |
|--|--|
| Have a mobile health van services and free health care) | Make health things free (bulk billing) |
| Improve the advertising for Chlamydia screening people | A 'taking care of yourself' health promotion program for young |
| Provide food as an incentive to attend | |
| Have 'mobile' health professionals | |
| A self-testing process to be used by the young person (similar to a 'home pregnancy test') | |

One female felt Chlamydia screening could be promoted as a way of 'looking after yourself'. A greater knowledge and understanding of the infection and the screening process, and easy access to screening and treatment services, were seen as vital to encouraging homeless young people to take responsibility for their health care. One young person had an unrealistic expectation of how easy it could be to treat:

...just think though that if everyone in the world had them two pills [Azithromycin], we'd wipe Chlamydia out. (D3: male)

DISCUSSION

The increasing prevalence of Chlamydia at YPHS was a major reason for undertaking the study. Although the study did not set out to assess knowledge, participants lacked knowledge about Chlamydia, which indicates homeless young people attending YPHS are at high risk of contracting Chlamydia. This finding is consistent with the Australian Institute of Health and Welfare (2003), which reported increasing rates of Chlamydia and noted young people are unaware of the infection and its associated health sequelae. In addition, many young people are unaware their partners are at risk of sexually transmitted infections (Drumright et al 2004).

As with other studies, common barriers to screening in this population were lifestyle stresses of not having food and shelter taking priority, cost of services, embarrassment, and fear of the unknown. The most common barriers were lack of knowledge about the infection and screening process and denial that they could be at risk (eg. Chlamydia seen as a 'girl disease'). Future Chlamydia education programs need to address shared responsibility between both sexes.

Even though the young people's experience of sex education programs within the school setting was largely negative and to be avoided if possible, they believed information about Chlamydia should be given within the school system. In 2004 new sex education programs were

introduced into public schools after years of delay. They were designed in response to current research indicating that young people want comprehensive education within safe and supportive school environments (Dunn 2004b). The quality and extent each of these addresses Chlamydia is as yet unknown and will need evaluation.

The final year of schooling in Victoria is completed in Year 12 at approximately 18 years of age. Less than a third of participants in the current study had completed that level of schooling; half left school at the conclusion of Year 10 (approximately 16 years of age). Therefore Chlamydia education would need to have been provided in Year 9 or earlier to reach this extremely vulnerable, high risk group. The Third National Survey of Australian Secondary School Students, HIV/AIDS and Sexual Health was conducted in 2003 and focused on young people in Years 10 and 12. The findings indicated that, although knowledge of sexually transmitted infections remained poor, it had improved over the past five years (Smith et al 2003). Young people who completed Year 12 have a lower incidence of Chlamydia than those who left school earlier (Debattista et al 2002). Therefore the timing and method of sexual education programs is important.

Some young people in the current study believed they were screened for Chlamydia when they had a blood test, which was consistent with Lovett's study in the same population (Lovett 1994). They believed they had acted responsibly and taken care of themselves and a current or future sexual partner by having a blood test. It seems likely that health professionals did not inform young people that specific screening tests were needed to detect Chlamydia which is not covered by a blood test.

It is necessary to provide information about Chlamydia in a relevant format to encourage young people to participate in screening programs (Blake et al 2003). Participants in the current study believed it was extremely important for their peer group to know about Chlamydia and suggested a variety of ways to inform them about the infection, screening and treatment. Advertising the importance of regular screening may encourage young people to initiate discussion.

It appeared to be difficult for some participants to understand that Chlamydia is often asymptomatic, even after they were provided with education. Participants suggested using sensational advertising and explicit images of grossly mutilated genitals on billboards as effective ways to get the message across to homeless young people as well as using humour in advertising. However, perhaps other sorts of tests need to be piloted with this client group to get across the often silent nature of this infection.

The Australasian College of Sexual Health Physicians recommends annual screening for at-risk women under 25 years of age. While women have more recognisable health consequences from Chlamydia than males, our male participants expressed a desire to know more about

the infection and testing. It is now postulated that the resurgence of Chlamydia in some countries may be because of a failure to include men in screening programmes (Chen and Donovan 2003; Low and Egger 2002).

The fact Chlamydia can be treated and cured provided a sense of optimism for the participants. However there was an element of simplicity in their responses. For example thinking if everyone in the world was simultaneously given Azithromycin the infection would be wiped out. Suggestions for policy, health promotion, research and clinical practice arising from this study are summarised in table 3.

Table 3: Suggestions for practice, education and policy changes

1. Provision of health services free of charge for homeless young people appears to be important. All general practitioners, share concerns about lack of money being a barrier to young people accessing health care (Viet et al., 1995).
2. Health professionals encouraging and explaining Chlamydia screening and education programs to young people.
3. Evaluating the new sex education programs introduced into schools in 2004 as to whether they address the issues raised by the participants in this study. Particularly they need to be seen as relevant and engaging for this group.
4. Future screening programs and research should include both sexes as most currently concentrate on the female experience.
5. Considering innovative ways of working with the homeless young group. Having 'mobile' health professionals and/or a mobile health van as suggested by our participants.

LIMITATIONS

The sample was small with a greater proportion of males than females in the study, meaning there was a greater representation of the views of young males. It is possible that better educated homeless young people who were able to understand the project participated and they may not represent all homeless young people. The group is difficult to access given they are transient, however, the opportunity to participate was offered to all the young people who presented to the service. The study was specifically limited to homeless young people who access the YPHS inner city clinic in Melbourne.

CONCLUSION

Young people in the focus groups were genuinely concerned about their ignorance of Chlamydia, a sexually transmitted infection they are most at risk of contracting and which could have serious implications for their future sexual and reproductive health. Creating health promotion programs that effectively target this group is the future challenge. Health professionals working with this vulnerable young population need also to opportunistically educate about Chlamydia, screen and treat to reduce the prevalence of the infection and improve health outcomes for the group.

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