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Sexual Health

Supplementary Material

Would men who have sex with men support less frequent screening for asymptomatic chlamydia and gonorrhoea to improve antibiotic stewardship? A qualitative study

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Supplementary material File S1 – Verbal Consent Script and Interview Schedule

Interview Schedule

Routine STI screening for MSM on PrEP for asymptomatic gonorrhoea and chlamydia

This schedule is a guide for the semi structured interviews conducted for the above project. The interview aims to cover the following questions, topics, and related issues, but note the wording and order may vary according to the interviewer, setting and participant. Information volunteered by the participant that doesn't directly pertain to a specific question should still be explored and noted at the end of the interview.

Preamble

Thank you so much for volunteering your time today to complete this interview and participate in our study. The interview will focus on your experience and attitudes toward routine STI testing. We will be discussing Chlamydia and Gonorrhoea in particular.

Before we get started, I would like to confirm some information to ensure you qualify for the study:

1. Are you over 18 years of age?
2. Have you been on PrEP for greater than 6 months?
3. In this study we are exploring the experiences of cis-gender men who have sex with other cis-gender men only, and not men who also have sex with women. Cis-gender men refer to people with male reproductive organs. Can I confirm that you are only sexually active with other cis-gender men?

If no to any of questions 1-3: Unfortunately, you do not meet our inclusion criteria for this study and will not be able to participate. Thank you so much for your time, if you'd like I can keep your details and contact you if you become eligible at any point in the future for this study or a similar study?

If yes to questions 1-5: Since you match our inclusion criteria we can continue with the interview.

At this point I would just like to get verbal consent that you are happy to continue the interview and answer a set of questions to follow. There are no right or wrong answers and if there is a question you are not comfortable answering let me know and we can skip it. Your participation in this study is voluntary and as such you may stop the interview at any time or withdraw from the study up until data analysis has occurred.

This interview will be recorded and transcribed. However, please feel free to give your honest opinions as you can be assured your name and contact details will be stored separately to the

recordings. This ensures your answers will remain anonymous in this study and any publications or presentations made using this data.

Are you happy to proceed with the interview?

If No: Thank you so much for your time

If Yes: Great! Do you have any questions before we start? If not, I will begin audio recording now.

The recorder is now on

Before we start with the interview, I would just like to get your verbal consent to participate. Can I confirm that:

1. The study has been explained to you by me or another researcher. Y/N
2. You understand you are free to refuse to answer any questions. Y/N
3. You are free to ask for the recording to be turned off at any time, terminate the interview or withdraw from the study without giving a reason. Y/N
4. You are happy to participate in the study. Y/N

Before we begin, I will provide you with some background information on the topics we will be discussing. If you have any questions or want to bring anything up at any point, please feel free to do so.

As mentioned earlier today's interview will look into your experience with using PrEP and routine chlamydia and gonorrhoea testing, as well as exploring your attitudes towards the current system. I will be using the term MSM a lot throughout the interview which just stands for men who have sex with men. I will be asking you questions about your experience with and opinions of a broad range of topics including

- Sexually Transmitted Infections
- The use of antibiotics and emerging technologies
- PrEP and the current process for testing for STIs such as chlamydia and gonorrhoea

Please note that any potential changes or differences to the current PrEP and testing guidelines we discuss today are purely hypothetical and act to help prompt you to explore certain issues and topics. Your responses are not going to be used at this time to try and change any of the current systems, but rather provide us with information about the opinions of patients. We ask that you give us your honest opinions as the information you provide us with today will be very valuable in highlighting the perspectives of people who take PrEP.

The current testing recommendations for men who have sex with men taking PrEP include 3 monthly routine testing regardless of symptoms. This includes

- 3 site (throat swab, rectal swab, and urine) tests for chlamydia and gonorrhoea
- Blood test for HIV and Syphilis.

This testing aims to pick up asymptomatic infections which can then be treated with antibiotics if required. Asymptomatic means that no symptoms are showing. The 3 monthly time interval is recommended by guidelines for health practitioners here in Australia but also in Europe and America. We are exploring whether this time frame is appropriate and what are community attitudes are towards these guidelines.

If asked questions/asked to elaborate, provide the following information/reasons:

- The fact that asymptomatic chlamydia and gonorrhoea infections in men who have sex with men have no long-term adverse health outcomes and also many of these infections can clear themselves spontaneously with antibiotics. For example, gonorrhoea in the throat may clear in 6-8 weeks without treatment.
- The fact that having an STI while on PrEP does not make you more likely to contract HIV.
- The fact that frequent testing may lead to the excessive use of antibiotics, which has the potential to lead to antimicrobial resistant strains of some STIs.
- The fact that intense testing may be place a strain on PrEP users and fill up clinics unnecessarily.

Again, I would like to reiterate that while we will explore this today, this situation, that is, potentially extending the timeframe for testing to longer than 3-monthly, is purely hypothetical. Guidelines to change practice are only introduced if evidence is found that suggests benefit outweighs risk. This does not include testing for syphilis and HIV (via blood tests at pathology collection centres) as there is current evidence that this is an effective intervention. You would still be able to get an STI screen whenever you would want (symptomatic or asymptomatic), it is just changing the guidelines for when you would be **required** to do it while taking PrEP.

Do you have any questions? Y/N

Great, I will now proceed with the questions

Interview Questions

Part 1 – Basic Information and Background

I'm first going to begin with some basic questions to get to know you and your current situation a little bit better.

1. What is your date of birth?
2. What is your Postcode?
3. What is your country of birth? If overseas, how long have you been in Australia for?
4. What language do you speak at home?
5. What is your highest level of education?
6. What is your current employment status?
 - Full-time, Part Time, Casual, student, unemployed?
7. How long have you been taking Pre exposure prophylaxis (PrEP)?
8. Do you currently have a long-term sexual partner (>6 months?)
 - If yes, is this your only sexual partner?
 - If no, which of following best describes your current status with respect to sexual partners? I'll read out a few options, and you can let me know which best suit your situation (note you may select more than one?)
 - No regular sexual partners
 - Regular casual sexual partners
 - Regular ongoing sexual partner (<6 months)
 - Something else? E.g., "friends with benefits", random partners that are unpredictable, multiple long term sexual partners, etc.

Great, that's all the basic information required. Now I am going to ask you some questions about sexually transmitted infections and your experiences of STI testing.

Part 2 – Perspectives on STI's and current screening guidelines

1. People using PrEP are advised to get tested regularly for STIs, including chlamydia and gonorrhoea. Could you tell me a bit your general experience of regular STI screening whilst on PrEP?
 - Can you describe a usual clinic visit for screening for me? (E.g., how long does it take, is it inconvenient, do you have to take time of work or is it OK and you can squeeze it into your daily routines etc.)

- If the participant states yes to finding it inconvenient: could you, please explain why? (Long wait times, busy clinics etc.)
2. Does attending a clinic for screening regularly ever cause you any anxiety/worry? Could you tell me a bit more about why/why not?
- Does this change depending on who you present to for testing (e.g., do you feel differently attending a regular GP for testing compared to a specialised sexual health setting? If yes, why?)
3. Could you tell me about your motivations for getting regularly tested for STIs?
- Prompts
 - Is it just because you are required to in order to get a script for PrEP?
 - Does knowing you don't have an STI impact the way you feel about yourself?
 - Would you prefer to not have to get tested in order to get a script?
 - Are you concerned about the stigma regarding STIs? Has your previous experience of STIs influenced your perception of stigma?
 - Are you concerned about the health of your sexual partner(s)?
 - Are you concerned about the spread of STIs in the MSM community?
4. I would now like to ask you about your perspective on current guidelines. Could you tell me about how the current testing guidelines (including frequency, number of tests etc.) affect your day-to-day life?
- Prompts
 - How do they impact your life and day to day functioning? (e.g time consuming, inconvenient etc.)
 - How do they affect your sexual practices and behaviours? (do you feel more peace of mind after regular screening)
 - How do you think they impact your sexual health?
 - How do they impact your mental health (e.g. do they provide anxiety, or do they provide reassurance)?
5. How do you feel about access to your subsidised PrEP prescription being dependent on agreeing to 3 monthly STI testing?
- Prompts
 - Is this something you've ever thought about or feel strongly about?
 - How does it make you feel?
 - Do you think you should be able to access PrEP regardless of your health seeking behaviours i.e., agreeing to STI testing?
6. Condoms are one way that people can protect themselves from STIs, but we know that people often do not use condoms, for lots of different reasons. Could you tell me about whether or not you usually use STI protection during sexual intercourse?
- Prompts:
 - What form of protection
 - How often do you use it (e.g., every time or most times?)
 - Is it with everyone or just specific partners?
 - Does being recently tested for STI's impact your use of protection?

- How has going on PrEP (if at all) influenced your condom usage?
- Was not wanting to use condoms a motivation for going on PrEP?

7. Currently, rates of STIs are much higher in the MSM community, when compared to the general population, particularly in those who are on PrEP. Can you tell me a bit about what you think about the current high rates of STIs in the MSM community?

- Prompts:
 - Do you think the levels are high/low increasing/decreasing maybe better?
 - Do you have any thoughts about what is driving these rates (e.g. more partners, less condom use, dating apps, location e.g Melbourne attitudes towards condom usage)
 - Are STIs (chlamydia and gonorrhoea) important from a community health perspective to you? If yes, why? If no, why not?
 - Do you worry about getting STIs such as chlamydia and gonorrhoea in particular?
 - Do you think the potential to get an STI influences people's sexual behaviours and practices?

8. Do you think there is stigma associated with having STIs like chlamydia and Gonorrhoea? (If asked, stigma definition as follows: 'negative attitudes and beliefs associated with people who may have one of the STIs).

- Prompts
 - Why/Why not?
 - Do you think there is different stigma for different STIs e.g. based on available treatment etc.?
 - Does it impact your feelings towards sexual partners when they tell you they have been treated for an STI?
 - Is being diagnosed with an STI such as chlamydia or gonorrhoea more acceptable to other MSM than other STIs?
 - What opinions/thoughts do you think are associated with STIs such as chlamydia and gonorrhoea? (Words may include dirty, irresponsible, HIV, promiscuous etc.)

9. Would you personally be comfortable living with an asymptomatic STI (i.e. you wouldn't know you have it) for a short period of time? For example, having an STI such as chlamydia or gonorrhoea which you have (and can still pass on) but isn't causing you any noticeable health problems.

- Why/why not? Reasons may be related to
 - Personal health
 - Stigma and mental health (e.g., anxiety)
 - Health of partner (Passing the STI on)
 - Health of the population (passing the STI on)

- Not having peace of mind/assurance e.g., cannot prove you haven't got an STI.
- Does knowing you would be following health guidelines impact your comfort with living with an asymptomatic STI?

10. How would you feel passing on asymptomatic chlamydia or gonorrhoea that won't cause your sexual partner long term health problems?

- Prompts

- Does this feeling depend on whether your partner is long term or casual?

As we mentioned before, its important to remember that we are only talking about no long-term health problems for **asymptomatic** chlamydia and gonorrhoea. If any symptoms are present, you should go and get tested as a soon as possible.

I'd now like to ask you some questions about the use of antibiotics. As I mentioned earlier, with routine asymptomatic testing, we have been able to pick up a lot more asymptomatic chlamydia and gonorrhoea infections, meaning we are starting to use a lot more antibiotics to treat these infections. This has led to treating many more asymptomatic infections that normally may have been able to clear on their own. One of the potential consequences of this is the emergence of antibiotic resistance. Antibiotic resistance basically means that bacteria become resistant to the antibiotic and is unable to be treated.

Part 3 – Perspective on Antimicrobial resistance and changing guidelines

1. There are many conditions that people choose not to treat with antibiotics as they can clear on their own. For example, sinusitis can be treated with antibiotics but often goes away on its own within a few weeks. Knowing that Chlamydia and Gonorrhoea can clear on their own, do you think that we should be treating asymptomatic chlamydia and gonorrhoea with Antibiotics?

- Why/why not?
- Do you think there is a downside to taking antibiotics?
- Would your answer be different if we knew it was better for antibiotic resistance overall if we didn't treat them and let them clear on their own?

2. How do you feel about the idea that antibiotic resistance may be able to emerge in some bacterial STIs when antibiotics are used excessively?

- Prompts

- Does this concept of antibiotic resistance worry you? Why/why not?
- Do you think this is something that the sexual health community should be thinking about and trying to address?

3. How do you feel about the idea of MSM on PrEP being tested less frequently in order to preserve the amount of antibiotics for use when needed?

- Does this worry you?
- If being tested less frequently was recommended in guidelines outlined by health professionals, would this influence your decision?

Next, I'm going to ask you a few questions regarding the resources and hypothetical changes to STI testing.

Part 4 – Perspective on changes to guidelines

I'm going to ask you some more specific questions about the STI testing process itself. In this section we will explore potential changes that have been touched on previously. These changes mainly involve changes to the frequency of the 3-site testing for chlamydia and gonorrhoea. HIV and Syphilis testing (performed via a blood test) would remain unchanged in these scenarios as they can be done at pathology collection centres and are important infections to pick up. As mentioned prior any potential changes are purely hypothetical and for the purpose of prompting discussion and your opinions will not influence any changes at this time.

2. Do you think you would get tested for chlamydia and gonorrhoea as frequently as you currently do if you were told you didn't have to?

Now let's imagine a situation where the routine testing for only asymptomatic chlamydia and gonorrhoea while on PrEP was changed to a less frequent routine – say every six months to a year for example. Again, keeping in mind that this is hypothetical and purely to prompt discussion.

3. Can you tell me a bit about how you would feel with having less frequent routine testing of chlamydia and gonorrhoea while on PrEP?

- Prompts
 - What emotions would you feel e.g. anxiety/stress vs relief?
 - Would you feel differently about the healthcare system? (e.g. that they are neglecting you?)
 - How would you feel about your sexual health?
 - How would you feel about the sexual health of your partners?
 - How would you feel about the sexual health of the population?
 - Would this change your sexual practices and behaviours?

4. Would your opinion be different knowing that it may be to help prevent negative outcomes such as antimicrobial resistance? Why/why not?

Part 5 – Emerging testing technology

This next section will involve me asking you questions about emerging testing technology. Current STI tests detect both live bacteria and dead bacteria. Live bacteria will cause an infection that can be passed on to others, dead bacteria will not. Sometimes, you may only have dead bacteria, which means you do not have an infection yet will return a positive test result. They are developing new tests that can tell the difference between dead and live bacteria. Which will be able to tell you whether you have bacteria that can give you an infection and be transmitted to others.

Dead bacteria can be present in your mouth or rectum for a couple of reasons – 1) you have been previously infected and cleared the infection, but some dead bacteria are still hanging around. 2) you recently had sex with someone who still had some dead bacteria present, and they have just passed it onto you.

1. How would you feel if a test reported you were positive for dead bacteria only?

- Prompts
 - What emotions would you feel?
 - Would you still want to be treated or are you happy not to be treated?
 - If yes, can you think of a situation where you might be okay receiving a result for dead bacteria only and not treating it?
 - Would you be worried about the reliability of these tests?
 - Would your confidence in the tests be influenced by who told you to do them? (e.g. GP, Sexual health clinician, community organisation)

FINAL COMMENTS

This brings us to the end of the set of questions for the interview. I'd like to end by asking you about anything else you might want to talk about.

1. Is there anything that we've talked about today with regards to PrEP, STIs and routine testing that you would like to elaborate on?

2. Is there anything you would like to mention or discuss that has not been touched on today?

End of Interview

That's all the questions we have for you today. I'm going to turn the audio recorder off to end the formal interview process.

Thank you very much for coming in today and volunteering your time. Your answers provided today will give us valuable insight into the opinions and perspectives of patients taking PrEP, which are important in guiding future research.

Would you like a summary of the study findings once it has finished? If yes, what email address should I send them too?

Once again thank you so much for participating. If any issues have arisen during this interview, I recommend you contact your GP or clinician.

End the interview