Barriers and Facilitators for HIV Pre-exposure Prophylaxis (PrEP) Prescribing among Healthcare Providers

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Background

- Pre-exposure prophylaxis (PrEP) is recommended by WHO as an HIV prevention strategy globally (WHO 2015)
  - More than 90% effective in preventing HIV (sexual transmission) (WHO 2015) (CDC estimates >99%)
  - One pill, once a day
  - Priority populations: MSM, TGW, serodiscordant couples, and others at risk
- India is currently developing guidelines for PrEP prescribing
- The interest in and need for PrEP is growing in India among providers and clients, making it necessary to develop tools for prescribing and messaging
- The Humsafar Trust (HST) studies with online MSM indicate that around 1% population may already be on PrEP (Patel V. et al. 2019)
Study Aims

• Aim 1:
  To assess current sources of PrEP information and barriers and facilitators for prescribing among healthcare providers in Mumbai

• Aim 2:
  To assess preferences for education and tools to aid PrEP prescribing among healthcare providers in Mumbai
Methods

• 13 semi-structured in-depth qualitative interviews
  • Conducted from 1 November 2019 to 28 February 2020

• Inclusion criteria:
  • Currently practicing in Mumbai and holds at least a MBBS degree
  • Has prescribed PrEP, ART, or PEP to MSM, TGW, or other most-at-risk groups
  • Is willing to be interviewed in person or over phone/Skype and provide informed consent

• Recruitment was purposive using contacts of HST and referrals by interviewed participants
Methods

• Interview topics included:
  • Source of PrEP information
  • Current and potential barriers and facilitators for PrEP prescribing
  • Preferences for tools and information regarding PrEP and PEP for provider education and to use with their clients

• Interviewers was trained in PrEP and interviews were conducted in English and Hindi

• Audio-recorded interviews were transcribed, coded by two raters using Dedoose software, and analyzed using the grounded theory approach (Strauss A, Corbin J. Grounded Theory Methodology 1994)

• The study was approved by HST and Washington University in St. Louis institutional review boards
### Demographics

- Most were private practitioners
- Median years of practice: 25 years
- Substantial experience of working with sexual minorities

<table>
<thead>
<tr>
<th>Participant Characteristics</th>
<th>N = 13</th>
</tr>
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<tbody>
<tr>
<td><strong>Age (Years)</strong></td>
<td></td>
</tr>
<tr>
<td>Median (IQR)</td>
<td>55 (33-65)</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td>13 (100%)</td>
</tr>
<tr>
<td><strong>Highest Level of Education</strong></td>
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</tr>
<tr>
<td>MBBS</td>
<td>4 (31%)</td>
</tr>
<tr>
<td>MD</td>
<td>8 (62%)</td>
</tr>
<tr>
<td>DNB</td>
<td>1 (8%)</td>
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<tr>
<td><strong>Type of Practice</strong></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>9 (69%)</td>
</tr>
<tr>
<td>Government</td>
<td>2 (15%)</td>
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<tr>
<td>Both</td>
<td>2 (15%)</td>
</tr>
<tr>
<td><strong>Years of Practicing Medicine</strong></td>
<td></td>
</tr>
<tr>
<td>Median (IQR)</td>
<td>25 (11-40)</td>
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<tr>
<td><strong>Years of Working with Sexual Minorities</strong></td>
<td></td>
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<tr>
<td>Median (IQR)</td>
<td>15 (8-23)</td>
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<tr>
<td><strong>Years Prescribing PrEP</strong></td>
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<tr>
<td>Median (IQR)</td>
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<tr>
<td><strong>Years Prescribing ART and PEP</strong></td>
<td></td>
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<tr>
<td>Median (IQR)</td>
<td>17 (5-20)</td>
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</tbody>
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Results

Current sources of PrEP information

Facilitators to prescribing PrEP

Barriers to prescribing PrEP

Preferences for education and tools

Role of regulatory organizations
Sources of PrEP Information

• PrEP providers in India are having to *self-teach* themselves about PrEP, using international guidelines.

  > I have been reading, I have been speaking to people, I have been contacting medical reps from companies, I have been speaking with stockiest and with pharmacist, with chemist, with people I know who are positive, who have come back from abroad, with friends who stay aboard and gathering my own information and analyzing that, *but no one formally took interest in training me.*” (Male, 33, 12 years of medical practice)

  > “Of course, there was no lectures or nothing, we had to go on the website of WHO and CDC and learn, self-learn basically.” (Male, 55, 25 years of medical practice.)
Sources of PrEP Information

- While some information sources were from conferences and other verified sources, other times, information sources were unverified or from mainstream sources.

**Media and conferences**

“Slowly-slowly we started to know through online medias, through seminars, through studies and conferences we understood what is the meaning of PrEP.” (Male, 33, 9 years of practice)

**Random Print material**

“Yes, I didn’t know about PrEP till about a few years back. Let say I got to know about PrEP as late as may be 2011 or 12, when I believe I just heard about PrEP somewhere. I am not even sure where. 2013 I had been abroad once and 2013 I had picked up a couple of magazines abroad in the US and that’s where I first heard of the name Truvada and I had not even heard about it.” (Male, 33, 12 years of practice)
Facilitators to Prescribing PrEP

- Having a relationship with a community-based organization (like HST)
- Familiarity with the LGBTQ health
- Access to community who are likely to access PrEP

“Actually right after my MBBS I joined Humsafar Trust in 2007-2008. So there I got to know about sexual minority and I got sensitized also in this matter. From there onwards I am really open to sexual minorities.” (Male, 37, 12 years of practice)
Facilitators to Prescribing PrEP

“So, the kind of people who have come up and asked for PrEP are really the kind of people who are highly educated, come back from the US as students etc., heard about it through their own research etc. and then they need someone to facilitate the administration of the medication.” (Male, 40, 25 years of practice)

“As far as MSM or transgender is concerned, even medical doctors are unaware of transgender or MSM population, how to deal with them. In our medical college curriculum, this gender sensitivity problem was not there. basically, it was not taught to us...I was fortunate enough to get into this, I could learn. Otherwise I would have been another healthcare provider who was totally unaware of this.” (Male, 55, 25 years of practice)
Barriers to Prescribing PrEP

Guidelines
- Lack of guidelines on PrEP prescription

Community Preparedness
- Limited awareness among HCPs and communities

Cost
- The cost of PrEP to their patients

Qualifications
- Perception that specialists need to prescribe PrEP
Barriers to Prescribing PrEP

• Lack of guidelines on PrEP prescription
• The community’s lack of knowledge about PrEP
• The cost of PrEP to their patients and the program
• Provider qualification-related beliefs

“I think only because people don’t know about PrEP is the deficit. If they come to know about PrEP definitely there will be huge number of patients who will approach us, who will definitely approach us and take the benefit of the system. [...] It would be a good job actually if people get the benefit of PrEP. Because by this way our main motto is to eliminate HIV till 2030 can be fulfilled.” (Male, 33, 9 years of medical practice)
They will not give PrEP to others. Normal physicians will not prescribe PrEP. He will still send it to us specialists. So even if we get a reference, it is from another doctor.” (Male, 63, 35 years of practice)

Because again the benefit risk ratio has to be managed and in a resource limited country like India you always have to see what is the benefit of drug before the risk. So everything has to be calculated.” (Male, 28, 3 years of practice)
Barriers to Prescribing PrEP

- Perceptions about clients being unwilling to use PrEP, as well as having low self-perceived risk
- Perceptions that PrEP would be a substitute to condoms
- Fear of side effects by providers and that clients would fear side effects too
- Not seeing MSM and TGW as potential clients, but rather PrEP is for specialized for serodiscordant heterosexual couples (reported by ART providers)

“It is good alternative to condom but condom has dual advantage that it can prevent STI also along with HIV but those who are not comfortable with condom, some people don’t prefer condom. For them PrEP is a good option, second to condom.”
(Male, 37, 12 years of practice)

“It’s not easy to get this kind of patient because don’t forget, we are targeting a patient who actually has no disease and saying that you are well, you have no problem, but you should take medicine. Which means that they have to then admit that they have high risk sexual behavior.”
(Male, 60, 40 years of practice)
• While tools for prescribing will be helpful for PrEP prescribing, having guidelines from regulatory bodies, such as NACO, would provide more support

“...if NACO accepts this program it becomes very simpler. Whatever I spoke to you this becomes very simpler and legal. So it would not be unethical also. So ethically speaking NACO should first now accept WHO program of PrEP. If NACO is ready for that we are all ready for that.” (Male, 33, 9 years of medical practice)
Preferences for Tools

Prescribing Pre-Exposure Prophylaxis (PrEP) for HIV Prevention
A Guide for Medical Providers

PrEP 101

Are you HIV-negative but at very high risk for HIV? Taking PrEP can help keep you free from HIV.

What is PrEP?

- PrEP, or pre-exposure prophylaxis, is daily medicine that can reduce your chance of getting HIV.
- PrEP can stop HIV from entering and spreading throughout your body.
- Daily PrEP reduces the risk of getting HIV from sex by more than 90%. Among people who inject drugs, it reduces the risk by more than 70%.
- Your risk of getting HIV from sex can be even lower if you combine PrEP with condoms and other prevention methods.

North Central Health District
PrEP SUMMIT
November 2
12-2:30PM
Georgia Institute of Technology
750 First Street
Macon, GA 31201

Clinic for Care Options

Why, When, and How to Use Pre-Exposure Prophylaxis (PrEP) for HIV Acquisition: Guidance for Midlevel Practitioners

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Preferences for Tools

• There is a need for a PrEP prescription toolkit for providers

“So I think a health care kit, health care tool for the PrEP is absolutely necessary and required for the society.” (Male, 33, 9 years of medical practice)

• Preferences for topics that a toolkit would include are:
  • General information about HIV
  • Information about PrEP medications, effectiveness, etc.
  • Condom use counseling

• Some reported that there should be a course or certificate for providers to obtain to prescribe PrEP
Study Challenges

• Difficulties in recruitment – doctors are a difficult study population to engage due to their time constraints

• Government doctors in private practice would not be willing to be interviewed
Conclusions

Limitations

- Small sample size
- Providers from one city
- Potential sampling bias

Next Steps

- Community consultations
- Multi-city sampling
- Recruitment NACO/SACS?
Conclusions

• Guidelines by regulatory bodies are desired by providers to foster PrEP prescribing
• Many providers are teaching themselves and we assessed providers’ preferences for tools that would aid prescribing
• Facilitators for prescribing included links to CBOs and the community
• Barriers for prescribing included lack of guidelines, limited awareness, costs of PrEP to patients, and the perception that specialty qualifications are needed
• Study findings should be incorporated into future provider educational materials and national PrEP implementation planning

“I just hope whoever is listening to this and if they have any power in their hands they just go ahead and make the right changes. This is not for yourself; this is not for morality; this is just for humanity. Just make the world the better place dammit. Just do it.” (Male, 33, 12 years of medical practice)
Acknowledgements

• Study participants
• The Humsafar Trust Research Team
• Washington University in St. Louis PrEP Program Research Team
• Other Study Collaborators