# Communication Preferences of Men who Have Sex with Men (MSM) about Shigellosis: Lessons from Past HIV/AIDS Public Health Messaging

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# Background

- Shigellosis is a highly infectious diarrheal disease caused by *Shigella* bacteria and spread through fecal-oral contamination.
  - o Low infectious dose increases spread of *Shigella* bacteria <sup>1</sup> from...
    - ✓ Consuming contaminated food or water.<sup>2</sup>
  - ✓ Coming into contact with mouths.<sup>2</sup>
  - ✓ Ingesting Shigella bacteria during sexual contact.<sup>3</sup>
- Outbreaks among men who have sex with men (MSM) have been reported in the United States.<sup>3</sup>
- HIV infection has been associated with shigellosis infection.<sup>3</sup>
  - HIV-positive people may be more susceptible to shigellosis, Shigella bacteria may shed for longer periods among HIV-positive people, or both.
- Antibiotic resistance has been documented among MSM with shigellosis globally.<sup>4</sup>
- High rates of antibiotic resistance found among HIV-positive people.<sup>5</sup>
- To date, little is known about the amount of knowledge MSM have regarding *Shigella* bacteria and the disease shigellosis.
- The purpose of this evaluation was to understand the knowledge and attitudes of MSM regarding shigellosis in order to develop effective prevention and control efforts.

## **Methods**

- We conducted six focus groups in Atlanta, GA in 2017.
  - Twenty-four self-identified MSM (mean age = 36) were recruited via flyers posted in coffee shops, gay bars, and a medical office that caters to MSM. Moderators used a semistructured interview guide to facilitate conversations exploring MSM's knowledge and attitudes about shigellosis.
- Focus groups were audio recorded and transcribed verbatim.
- o Four researchers used three transcripts to create initial codes and codebook using MAXQDA qualitative software. Two researchers coded transcripts using thematic coding.

  Researchers discussed and unanimously agreed upon all new codes, then transcripts were re-coded to include new codes.

## Results

### **Knowledge**

- Few had previously heard of shigellosis or Shigella bacteria.
- Some wondered if they had the disease and did not know it.
  - "...the first thing that crossed my mind was, 'Oh, could I have possibly had an infection in the past and not know anything about it?"
- Most wanted to learn more about shigellosis and shigellosis co-infection with HIV.

"...how common is it and how often are people, like, either diagnosed or treated for it?"

"So, for, like, certain, you know, certain things that we use to clean out, you know, douche...can that bacteria still stay on there?"

"How do you know if you've had it or not? What are the symptoms?"

"But the question here is: every time you have diarrhea, do you go in and get tested for Shigella?"

"Yeah, and I would like to hear what the effects would be on somebody who is HIV-positive."

#### **Attitudes**

- Most perceived shigellosis as non-serious and compared it to a stomach virus or eating spoiled food.
  - "Like, maybe I ate something bad, maybe food poisoning, whatever it is it's like if it's gone in a week and that's just a stomach virus."
- Perceptions of seriousness increased among participants when told about increasing antibiotic resistance.
  - "...it's resistant to antibiotics, uh which means that it could develop resistance to all antibiotics and come back a more recurrent thing. So that's definitely a concern."
- Most were concerned messaging strategies would present the gay community as having "another gay disease".
- "...there's a lot of bad...things that are already said about, like, gay people and diseases, as far as like the HIV and whatever that we already

have to kinda deal with and...this would just kinda fuel that because they're not gonna see oh, this affects everybody...."

#### **Communications**

- Most suggested prevention messages should be inclusive.
  - "...I believe the heterosexual people should know about this also, 'cause they have anal sex and they do anal penetration..."
  - "I guess you need something that just says this isn't just for gay men."
- Humor used in prevention messages was thought to catch the attention of the target population.
  - "It should be funny, engaging."
- The color red was believed to be eye-catching, but reminded some participants of the early warning messages about AIDS.
  - "I remember seeing when I was really young...something along the lines of 'gay cancer' and it was in big red letters just like that."

### Limitations

- Results are not generalizable to all MSM populations due to small sample size.
- The location and educational attainment of MSM recruited in Atlanta, GA do not represent MSM in other parts of the United States.
- Qualitative methods used do not allow for causal inferences concerning MSM's knowledge and attitudes regarding shigellosis.

## Conclusion

- MSM believed they would benefit from increased knowledge of symptoms, testing, treatment, and behaviors that increase their risk of acquiring a shigellosis infection.
- Non-stigmatizing prevention messages should be developed and include all sexualities, races, and ethnicities.
- Prevention messages should make use of humor and color in an appropriate manner to catch the target population's attention, while not causing negative reactions.
- Lessons learned from previously developed public health messages about HIV and AIDS should be considered when developing shigellosis prevention messages.

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## **Contact Info**

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