The Potential for a Rectal Microbicide Douche: Findings from an International Survey

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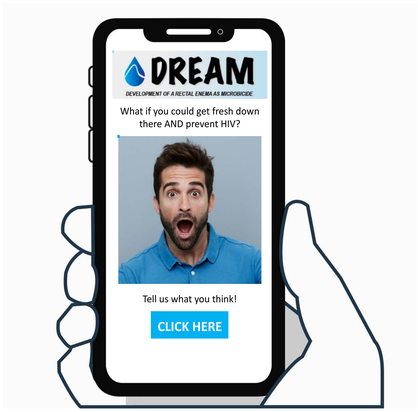
BACKGROUND

- We aimed to describe behavioral aspects of rectal douching before receptive anal intercourse (RAI) in different international settings to inform the development of a behaviorally congruent tenofovir douche.

Since many individuals regularly use cleansing rectal douches before RAI, an HIV-prevention douche could have high acceptability. Administration of tenofovir via a rectal douche results in faster and higher drug concentration in the rectal mucosa than oral administration in clinical studies and provides greater protection than oral Truvada in macaque rectal SHIV challenge studies.

METHODS

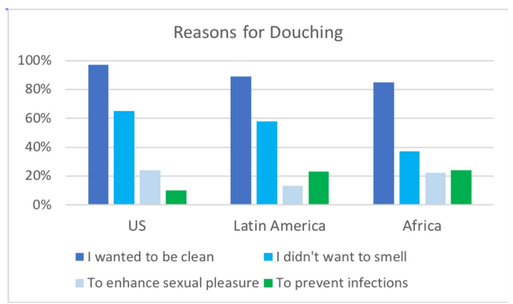
- Using the social media app Grindr, we recruited individuals aged 18 or above, born male, who had engaged in RAI in the past three months.
- Participants completed an anonymous online survey about their rectal douching practices.
- The survey was available in English, Spanish, and French.
- Participants were recruited from:
  - The United States and its territories (50 states, DC, PR, USVI, military PO's)
  - Latin America (10 countries)
  - Africa (35 countries)
- Data were analyzed using descriptive statistics.

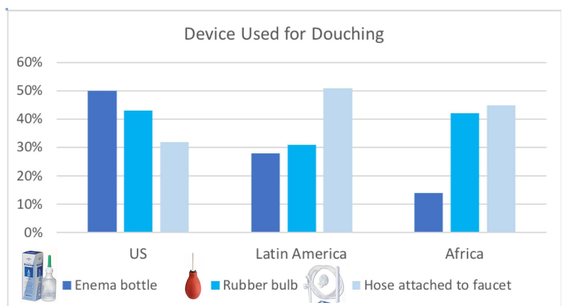


Findings from this international survey demonstrate a high prevalence of rectal douching associated with receptive anal intercourse and high likelihood of using a rectal microbicide douche to prevent HIV.

RESULTS

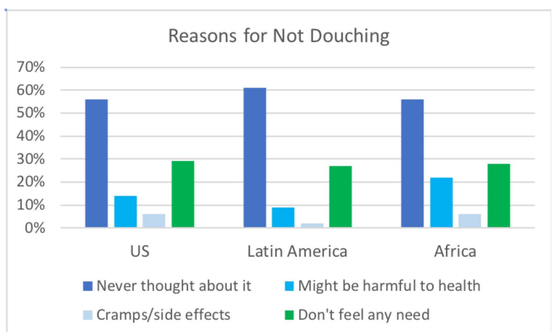
In total, 5,127 participants from 52 countries responded; 87% from the US (n=4,448), 10% from Latin America (n=528), and 3% from Africa (n=151). Among those who reported RAI, 80% in the US, 63% in Latin America, and 73% in Africa reported douching beforehand. Proportions who reported douching after RAI included 27% in the US, 37% in Latin America, and 59% in Africa. Most (90%) douched for cleanliness; one-quarter of respondents in Latin America and Africa believed it might prevent infections.



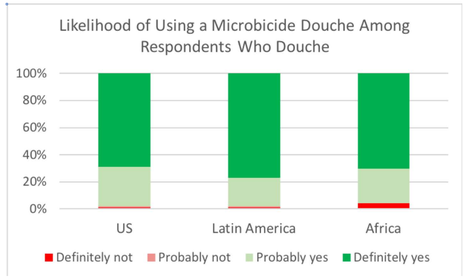


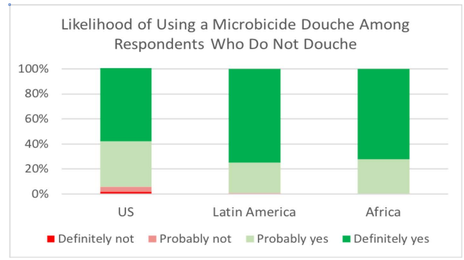
While half of US respondents used an enema bottle, reported use of this device was less common in other regions, with infrequent use in Africa (14%). Instead, a hose attached to a faucet was most popular in Latin America (51%) and Africa (45%), while a rubber bulb was used across all regions (39%). Tap water was the liquid preferred by 89% of respondents in all regions.

Among those who did not douche, most had never thought about it (58%) or did not feel the need (28%).



Finally, 98% of those who douched and 96% those who did not reported likelihood of using a rectal douche to prevent HIV transmission.





LIMITATIONS

Data for this study were collected by self-report, and could be influenced by response bias, although participants were not compensated. Also, recruitment was conducted exclusively via Grindr, so different regional response rates may reflect levels of Grindr's local popularity or differential access to smartphones by the target population. Finally, the reported high use of post-coital douches in Africa requires further exploration.

CONCLUSIONS

- We found a high prevalence of douching associated with RAI and a high likelihood of using a rectal microbicide douche to prevent HIV if one were available, even among those who did not currently douche.
- Ideally, an HIV-prevention douche should be adaptable to various devices, particularly given that enema bottles like those used for douching in current clinical trials are not commonly used in regions outside of the US.

ACKNOWLEDGEMENTS

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