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Rectal Douching and Implications for Rectal Microbicides among Populations Vulnerable to HIV in South America: A Qualitative Study

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Abstract

Objective—While gel-formulated Rectal Microbicides (RM) are the first to enter clinical trials, rectal douching in preparation for anal intercourse is a common practise, thus RMs formulated as douches may be a convenient alternative to gels. Nonetheless, little is known about potential users' thoughts regarding douche-formulated RMs or rectal douching practises, data needed to inform the advancement of douche-based RMs. This qualitative study examined thoughts regarding douches, their use as a RM and current douching practises among men who have sex with men and transgender women.

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JTG, JJK, CRN, JS and WEC conceived and designed the study. CRN and JTG collected the data. JTG, JJK and CRN analysed and interpreted the data and drafted the first version of the article which JI, JS and WEC critically reviewed and edited leading to the final article that ALL authors reviewed and approved for publication.

Methods—Ten focus groups and 36 in-depth interviews were conducted (N=140) to examine the overall acceptability of RM, of which one component focused on rectal douching. Focus groups and interviews were recorded, transcribed verbatim and coded; text relating to rectal douching was extracted and analysed. Sociodemographic information was collected using a self-administered questionnaire.

Results—Support for a douche-formulated RM centred on the possibility of combined pre-coital hygiene and HIV protection, and it was believed that a deeply-penetrating liquid douche would confer greater HIV protection than a gel. Drawbacks included rectal dryness; impracticality and portability issues; and, potential side effects. Non-commercial douching apparatus use was common and liquids used included detergents, vinegar, bleach, lemon juice and alcohol.

Conclusions—A douche-formulated RM while desirable and perceived as more effective than a gel-formulated RM also generated questions regarding practicality and side-effects. Of immediate concern were the non-commercial liquids already being used which likely damage rectal epithelia, potentially increasing HIV infection risk. Pre-coital rectal douching is common and a RM formulated as such is desirable, but education on rectal douching practices is needed now.

Keywords

rectal douching; microbicides; HIV prevention; MSM; transgender women; South America

INTRODUCTION

Despite a worldwide decrease in new HIV infections,¹ the epidemic continues to expand in men who have sex with men (MSM) and transgender women (TGW)² whose primary risk of infection is unprotected receptive anal intercourse. Rectal microbicides (RMs) may provide a new prevention option for these populations when condoms are not used. Since lubricating gels are frequently used for anal intercourse,^{3,4} a gel-formulated RM is the first to enter a Phase-II clinical trial;⁵ however, lubricant use for anal intercourse is not universal, and non-lubricant RM alternatives are desirable.⁶ Because MSM and TGW often prepare for receptive anal intercourse by using rectal douches,⁷ interest in a douche-formulated RM is high among these populations in the United States (US) and South America.^{8, 9} A study conducted in the US, for example, found that 53% of HIV-Negative MSM douched in preparation for anal sex.⁷ Additionally, a study among Peruvian MSM found that while 27% reported a history of rectal douching, 80% reported they would use an RM formulated as a douche if it reduced the risk of HIV infection.⁹ However, to more fully inform development of a RM douche, information regarding potential users' thoughts on rectal douching and practises is also necessary.

The present study used qualitative data to: (1) examine thoughts regarding douches and their use as a RM, and (2) describe current douching practices (liquids and apparatuses used) among MSM and TGW from Peru and Ecuador.

METHODS

As part of a larger study examining the overall acceptability of RM in South America, we performed a sub-analysis of qualitative data derived from focus groups and in-depth

interviews by searching for references to rectal douches/enemas and their use. A heterogeneous sample of 140 MSM and TGW from Lima and Iquitos, Peru, and Guayaquil, Ecuador was purposively recruited by peer outreach workers at a variety of venues (discotheques, community centres, sports facilities). Participants were assigned to either a focus group (104 participants) or an in-depth interview (36 participants). Both focus groups and in-depth interviews were utilised to balance the breadth of ideas and opinions afforded by focus groups with the more in-depth and often personal information yielded by individual interviews.¹⁰ The study cities were selected because of their concentrated HIV epidemics in MSM and TGW (estimated HIV prevalences: Peru, MSM=12.4% and TGW=20.8%¹¹ vs. general population 0.40%¹² ; and, Ecuador: MSM/TGW*: 15.1% vs. 0.31%¹³). Participants were eligible for participation if at least 18 years of age and reporting sex with a male in the previous 12 months.

Using semi-structured guides for both focus groups and in-depth interviews, participants were first asked to discuss a range of topics related to RM acceptability, including formulation preferences (gels/lubricants and douches/enemas) and then asked about practises. Focus groups and interviews were recorded, transcribed verbatim and analysed using atlas.ti v 6.0 (Berlin, Scientific Software Development). Since the focus groups and in-depth interviews followed nearly identical semi-structured guides, a common codebook was constructed permitting analysis of all qualitative data as an aggregate. Coded text related to thoughts about or use of rectal douches/enemas was extracted into tables under four columns: pros, cons, liquids used, apparatuses used. Emergent themes in the pros/cons columns were supported by representative quotes which were translated to English and then back-translated to Spanish to ensure accuracy. Sociodemographic information was collected using a self-administered questionnaire. Voluntary informed consent was obtained prior to study participation and Institutional Review Boards at the University of California, Los Angeles, *Impacta Salud y Educación*, and *Fundación Ecuatoriana Equidad* approved the study prior to implementation.

RESULTS

Sociodemographic information is presented in Table 1.

Pros and cons of a douche formulated RM

Pros: Participants voiced support for a douche-formulated RM:

“It could be accepted due to hygiene.” (*Interview-MSM*)

“...it kills two birds with one stone, because I take care of the hygiene and it’s for [protecting oneself].” (*Interview-TGW*)

Furthermore, participants felt that an RM-enema would provide greater protection than a RM-lubricant:

*HIV prevalence data specific to TGW in Ecuador is not available.

“The ideal would be a type of enema, something like that, because this is going to have more effect, that is, it is going to go deeper [inside your body].” (*Focus Group-MSM*)

Cons: Drawbacks to a douche-formulated RM also emerged. First, discomfort from the effect of an internal cleansing was seen as a potential downside not only to the receptive partner but also to the penetrative partner:

“More than leaving you cleansed you end up really dry, you don’t have anything from your body to lubricate, and in the end your partner is going to be uncomfortable.” (*Focus Group-MSM*)

A further drawback was application practicality:

“Sometimes there’s no time to put on a condom, much less apply an enema.” (*Focus Group-MSM*)

Likewise, the inconvenience of transporting a douche compared to a condom was brought up:

“Because you’re going to have to have a huge tube, you’re going to have to carry it around, aren’t you? On the other hand, you carry condoms in your pocket or a lubricant, as well.” (*Focus Group-MSM*)

Finally, worries about the potential side effects of douches were mentioned as it was felt that harm could result from the procedure involving:

“...forcing something to be inserted into our anus with force. Because when you do that thing, you flush, the flushing, you use the enema forcefully so that [it does] the cleansing, right? And this is extremely harmful to our health.” (*Focus Group-TGW*)

Douching solutions and apparatuses used

A number of liquids used for rectal douching were mentioned, including: lemon juice; tap water; soap and water; camphor; vinegar; a mixture of soap, bleach and isopropyl alcohol; chamomile water; detergent; shampoo; and, (consumable) alcohol. Likewise, a wide range of apparatuses were used for rectal douching, including: “telephone” style showerheads; plastic soda bottles; hair dye bottles; store-bought enema kits; and, syringes.

No differences were detected between MSM and TGW regarding rectal douching thoughts, practises, solutions or apparatuses used.

DISCUSSION

Though previous research indicates high interest in a douche-formulated RM, the present study found specific factors related to current rectal douching practises that would likely impact use of a douche-formulated RM. For example, douche-RMs may appeal to consumers who perceive that an internally administered liquid formulation is intrinsically “better” than a gel formulation or who desire a single product that both cleans internally and protects against HIV. However, concerns also emerged around the comfort and safety of

internal cleansing along with the perceived impracticality of douching compared to lubricant application. These drawbacks suggest that the use of a douche-formulated RM may well be confined to those who already practise the procedure, and the eventual advancement of a douche-RM will need to be weighed against product development costs and their potential to impact incident HIV infection compared to other HIV prevention methods.

While our intention with the overall study was to examine the acceptability of RMs regardless of formulation type and was therefore designed for breadth rather than depth of specific sexual or perisexual behaviours, we were nonetheless surprised – and concerned – with the rectal douching solutions that participants reported. Many of the solutions used as rectal douches in preparation for receptive anal intercourse almost certainly damage the fragile rectal epithelium due to their acidic, corrosive or surfactant nature. Unfortunately, the present study is limited in its ability to completely understand *why* participants who reported using such liquids rectally did so. Given that many of the liquids are commonly used for cleaning and disinfection, it is possible that there is the belief that these liquids will also be effective at cleaning and disinfecting the rectum. It is also likely that use of these harsh products on delicate rectal tissue could *increase* HIV infection risk. These data, though alarming, serve to underscore two important issues. First, the desire these participants had to prepare for anal intercourse, to literally be “clean and disinfected,” points to the need for a much more thorough inquiry into the meaning and practise of anal sex for MSM and TGW, far more than what this study was able to provide, as such issues may impact RM development and deployment. For example, was the use of a bleach douche an “indigenous douche-microbicide,” used to protect against transmitting or becoming infected with a STI? Could the insertive partner have requested the use of bleach for his protection from the receptive partner? Was the use of alcohol for cleansing or intoxication? These unknowns though serendipitously uncovered while exploring RM acceptability deserve further inquiry in their own right because the uptake of any rectally administered HIV prevention product – gel or douche – will not occur in a social vacuum but rather be mediated by users’ beliefs, practises and interactions with sex partners. Secondly, regardless of RM development, there appears to be an immediate need for HIV prevention messages to include information on safer rectal douching practises, specifically with regards to “homemade” douching liquids. Current research underlines its high frequency but otherwise very little else is known about a behaviour that, as seen in the data presented here, could be doing more harm than good.

This study was conducted in two large urban coastal cities (Lima, Guayaquil) and one urban jungle city (Iquitos) in South America and is not generalisable to all South American MSM and TGW. Likewise, the sample was relatively young, educated and *mestizo/a*, thus the findings may not apply to older, less-educated, unemployed or non-*mestizo/a* MSM/TGW. Further, data were from a larger study that did not focus specifically on rectal douching.

Data from this study gives insight into a commonly practised behaviour and provides the basis for expanded in-depth studies examining current rectal douching practises among MSM and TGW, and also provides microbicide developers with additional information to inform the development of a douche-formulated RM.

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Table 1

Sociodemographics of MSM and TGW (N=140)

Characteristics	All (Total N = 140) N (%)	Lima (Total N = 51) N (%)	Iquitos (Total N = 44) N (%)	Guayaquil (Total N = 45) N (%)
Race/ethnicity				
<i>Mestiza</i>	94 (68)	29 (58)	29 (67)	36 (80)
White	26 (19)	13 (26)	8 (19)	5 (11)
Indigenous	4 (3)	4 (8)	0 (0)	0 (0)
Other	14 (10)	4 (8)	6 (14)	4 (9)
Age				
18–29	107 (80)	29 (62)	38 (88)	40 (90)
30–39	17 (13)	10 (21)	5 (12)	2 (5)
40+	10 (7)	8 (17)	0 (0)	2 (5)
Education				
Less than high school	8 (6)	3 (6)	2 (4)	3 (7)
High school	71 (53)	17 (35)	25 (60)	29 (66)
Greater than high school	56 (41)	29 (59)	15 (36)	12 (27)
Employment				
Employed	81 (64)	33 (72)	23 (58)	25 (61)
Unemployed	23 (18)	11 (24)	3 (7)	9 (22)
Student	23 (18)	2 (4)	14 (35)	7 (17)

Due to missing data, variables do not sum to total N's.