



Challenges to providing HIV risk and prevention information online to gay, bisexual and other MSM: Findings from an environmental scan of Canadian Agency Websites in Canada

**Mark Gilbert, Dulai J, Wexel D, Martin S, Young I, Wilton J, Tooley L,
Donelle L, Michelow W, Hart T, Flowers P, Ferlatte O**

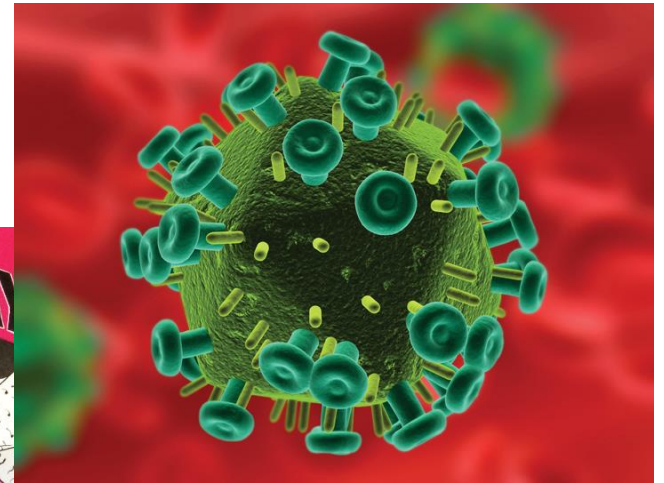
On behalf of the Health Literacy Planning Grant Team



Bottom Up



Top Down



Sero-Sorting 101





Google



HEY JAGDEEP,
WHAT'S YOUR
NUMBER?
Each guy has a number that works for him.
Take the quiz to find your number.



Health Literacy:

“The degree to which individuals are able to...

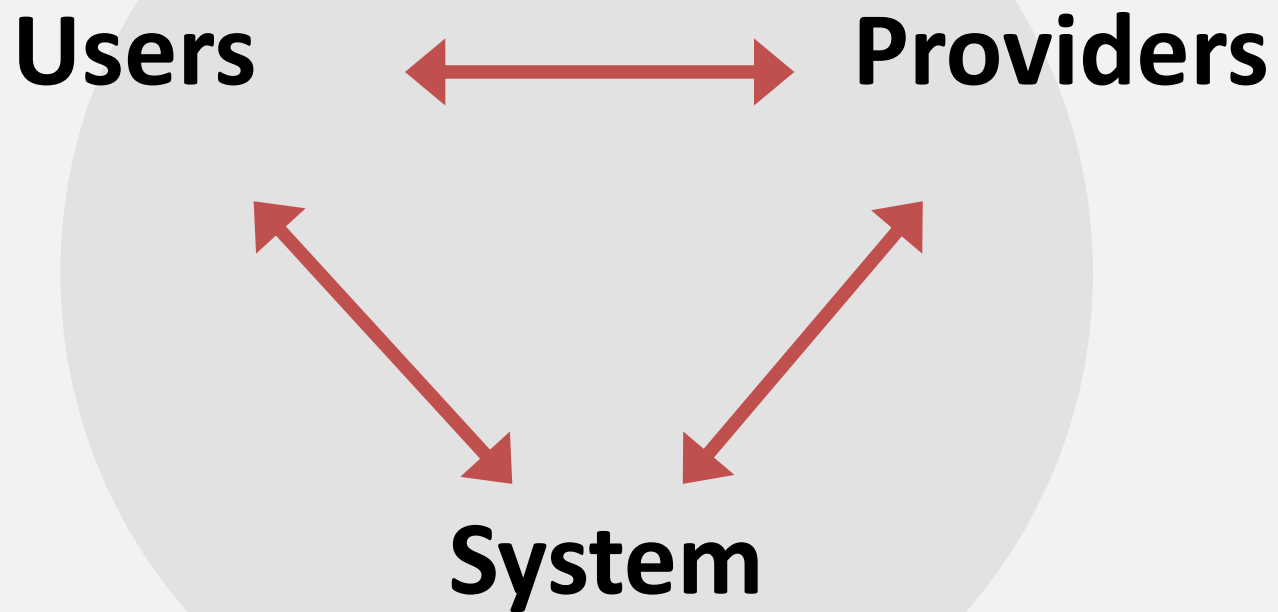
... access, understand, appraise, and communicate health information...

... as a way to promote, maintain and improve health.....

.... in a variety of settings across the life-course.”

Rootman I, Gordon-El-Bihbety D. A Vision for a Health Literate Canada: Report of the Expert Panel on Health Literacy. Ottawa, Ontario: Canadian Public Health Association, 2008.





Why focus on agency providers?

- Providing education to raise awareness of HIV risk, prevention and testing a consistent recommendation and major area of effort
- Evaluations of social marketing campaigns show effectiveness in reaching gay men
- Gay men describe websites and campaigns as being one of many sources of information about new technologies

Survey of 166 HIV negative gay men in Vancouver:

- 72% had heard about the early HIV test (pooled NAAT)
- If yes, source of information:
 - 13% news media
 - 18% printed material
 - 23% internet
 - 22% physician or nurse
 - 13% community based organization
 - 35% from gay or other friends
 - 8% from sexual partners
 - 42% HIM campaign or website**
 - 28% HIM nurse

Gilbert et al. Description of the HIV Negative Cohort, CIHR Team in the Study of Acute HIV Infection in Gay Men, August 2013.



Potential impact

- A critical and systematic examination needs to be conducted:
 - **how** this information is presented
 - what **assumptions** are made about literacy and numeracy levels
- By taking stock of current landscape can:
 - Look at how health literacy of agency providers can be improved
 - Identify gaps for future research

Objective of this study

- To understand the **current state** of information provided about HIV risk and prevention on Canadian websites targeted in whole or in part to gay, bisexual and other MSM
- **Questions:**
 - How do agencies display information on HIV risk, prevention, and testing to MSM through the web?
 - What are the assumptions about levels of health literacy and numeracy on these sites?

Methods

- Eligible:
 - Websites, or online campaigns (since 2011), with information relevant for MSM
 - From community-based or government agencies
 - For the public (lay audience)
- Ineligible:
 - Personal blogs, news & research sites
 - Sites for providers



Search strategy

1. Google search restricted to Canada using broad search strategy*
 - Double review of top 100 results in English, French
 - If link to document, reviewed website for agency producing the resource
2. List of eligible websites from step 1 shared with experts who added other websites or campaigns
 - Double review of suggestions
3. Snowball from reviewed websites

* English: HIV and (risk or chance or probability or prevent) and (gay or bisexual or trans or MSM or “men who have sex with men”)
French: VIH and (risque or prevention or probabilité or chance) and (gay or gai or bisexual or trans or HARSAH)

Website review

- Selection of relevant content:
 - Double review of each site to determine most relevant content
 - If multiple sites from the same agency, reviewed as a group (e.g., one coding form completed)
- Coding form
 - Description of website, audience
 - Risk, prevention, testing topics and how information presented
 - Accessibility: readability, navigability, usability
 - Two reviewers
- Analysis
 - Entered into EpiData, SPSS for analysis

Results

Strategy	Potential agencies	Eligible agencies
Google search	23	16
Expert input	58	30
Snowball	---	4
TOTAL:	81	50

Description of sample (N=50)

CHARACTERISTIC	%
Social marketing campaign	20
Community-based organization	76
Government	22
Other	2
Focus on MSM only	24
Specific section/content for MSM	26
No specific section/content for MSM	50
English	60
French	10
Both	30
HIV only	40
Sexual health including HIV	38
General health including HIV	20
Other	2



HIV Risk N=50

TOP TEN TOPICS	%
Transmission by body fluids	98
Transmission by sex	96
Type of sex (anal, vaginal, oral)	90
Transmission by sharing syringes or drug paraphernalia	88
Transmission by other routes	82
Sex toys	62
STI and role in transmission	60
Substance use & impairment	36
HIV status of partner & self	34
By position (top, bottom)	32

Average number of topics (20 possible)	
No MSM content/focus	8.8
Section/content for MSM	9.6
Focus on MSM	10.6

Less common topics

Viral load 28%

Acute HIV 24%

Risk topics more likely for websites focused on MSM ($p < 0.1$):

Acute HIV (36% vs 13%)

Douching (46% vs 13%)

Mental health problems (36% vs 10%)



HIV Risk N=50

TOP TEN TOPICS	%
Transmission by body fluids	98
Transmission by sex	96
Type of sex (anal, vaginal, oral)	90
Transmission by sharing syringes or drug paraphernalia	88
Transmission by other routes	82
Sex toys	62
STI and role in transmission	60
Substance use & impairment	36
HIV status of partner & self	34
By position (top, bottom)	32

Average number of topics (20 possible)	
No MSM content/focus	8.8
MSM content/focus on MSM	10.0

Less common topics

Viral load 28%

Acute HIV 24%

Risk topics more likely for websites focused on MSM ($p<0.05$):

Acute HIV (36% vs 13%)



HIV Prevention N=50

TOP TEN TOPICS	%
Condoms	96
Lubricants	72
Clean syringes, harm reduction	62
Other barriers (gloves, d. dams)	60
Communication with partners	52
Sex other than anal sex	50
Sex toys	48
Regular HIV testing	38
Substance use strategies	38
Female condoms	34

Average number of topics (20 possible)	
No MSM section/focus	7.4
MSM section/focus	9.0

Less common topics

PEP 28%

Treatment as Prevention 24%

PrEP 10%

Topics more likely if MSM section/focus ($p<0.05$):

Sex other than anal sex (68% vs 32%)

Withdrawal (44% vs 12%)

Emotional or mental health strategies
(24% vs 0%)



How information is provided

CHARACTERISTIC	RISK (N=50) %	PREVENTION (N=50) %
Risks or strategies explicitly compared	62	14
How present info on magnitude/effect:		
Prose	82	41
Numeric	4	14
Equation (HIV + fluid + sex)	16	--
If Prose: Absolute (e.g., high / medium / low)	90	60
Relative (e.g., increases, lowers)	73	93
Text	98	94
Table	20	4
Images, graphics	10	10
Graph or Figure	6	2
Interactive or tailored	4	2
Video	4	2



HOW IS HIV TRANSMITTED?

- HIV is spread via sexual contact with an infected person.
- By sharing needles/syringes with someone who is infected.
- Through transfusions of infected blood and blood products., and
- From an infected mother to her baby before, during birth or through breastfeeding.
- Anyone can be infected by HIV.
- Risky behaviours can increase one's chance of infection.

WEARING CONDOMS IS THE BEST WAY TO REDUCE YOUR RISK OF GETTING AN STI.

If you're going to have sex, have safe sex. You can get an STI through unprotected sex and sharing sex toys with an unprotected person. Whether you're male, female, straight, lesbian, gay, bisexual, transgender or questioning, protect yourself by using a condom. Condoms can reduce the risk of spreading STIs during all types of sex. If you and your partner share sex toys, use a condom and change the condom each time you move the toy from one area of the body to another.

La PEP et la PrEP



La PEP, pour prophylaxie postexposition sexuelle (PPE en français), est un traitement que tu peux prendre après avoir eu une relation anale ou vaginale non protégée avec un partenaire connu séropositif ou au statut inconnu.

Pour que ce traitement soit efficace, il doit être débuté le plus rapidement possible, et ce, dans un maximum de 72 heures après

, les études ont démontré que toutes personnes dans des conditions optimales ont eu un résultat négatif au test. Les professionnels de la santé non spécialisés en VIH peuvent vous aider à comprendre ce sens, il est fort recommandé de consulter des professionnels de la santé pour discuter de la prévention du VIH et des ITSS. Si ce n'est pas possible, ou si vous ne savez pas à qui communiquer, communiquez avec l'organisme VIH de votre région.

ORAL SEX

Kind of sex you're having	Chance of infection being passed to you, IF your partner has the infection at that site			
	Not passed (or possible only in theory)	Not commonly passed	Can be passed	Easily passed
Deep kissing (with tongue)	Chlamydia HIV	Gonorrhea HPV Syphilis		Herpes
Oral sex - without a condom (mouth on penis)	HIV (Receiver)	HIV (Giver)		
Oral sex - with a condom (mouth on penis)	Gonorrhea Chlamydia HIV	HPV Herpes Syphilis		

No risk sex: no potential for HIV transmission and no evidence of transmission	Negligible risk sex: potential for HIV transmission but no evidence of transmission
Low risk sex: potential for HIV transmission and evidence of HIV transmission under certain circumstances	High risk sex: potential for HIV transmis- sion and evidence of HIV transmission

The sex	Your risk of passing on HIV	Some important details
He fucks you (anal sex) without a condom. You are the bottom.	High risk	Inside your ass there are fluids that contain a lot of HIV. HIV can get into his body through tiny cuts or open sores on his cock, through his foreskin or through the lining of his piss hole (urethra). Rough sex can damage his cock and your ass. This increases the risk of passing on HIV.
You put a sex toy in him after it has been in you.	High risk	
You fuck him (anal sex) or he fucks you with a sex toy.	Low risk	

How to use a condom



Pinch air from tip of condom. Put 2–3 drops of lube inside of tip. Place rolled-up condom against the end of penis or sex toy. Unroll it down to the end of penis or sex toy.



Lubricant will reduce the risk of condom breaking during use. Put on outside of condom. Never use oil based lubes like Vaseline, massage oil or butter. ONLY use water-based lubes like KY Jelly.



Right after finishing, hold the condom base of the p toy and pull will keep the from slipping stop any sex being spilled

CHARGE

Virale

 < 40

Indétectable

Une charge virale est dite « indétectable » lorsque le nombre de copies du virus est inférieur à 40 copies par millilitre de sang. Le VIH est toujours présent dans les liquides biologiques et peut être transmis, même en l'absence de transmission et d'indétectabilité virale. Une charge virale indétectable est le résultat d'un traitement efficace.

PORTAIL

Statut VIH



Statut VIH « indétectable » avant avec le VIH au Canada. Les personnes séropositives. Le seul moyen de connaître son statut sérologique est de passer un test de dépistage du VIH. Toute personne ayant une vie sexuelle devrait passer un test de dépistage du VIH annuellement.

Source : Agence de la santé publique du Canada

PORTAIL

THÉRAPIE

antirétrovirale



La thérapie antirétrovirale a pour objectif de réduire la répllication du VIH dans le corps de façon à réduire la quantité de virus en circulation (charge virale). Lorsque la charge est sous un seuil de détection, le système immunitaire se rétablit. La thérapie antirétrovirale prolonge la durée de vie des personnes séropositives et réduit considérablement les risques de transmission du VIH.

PORTAIL

PPE/PrEP

Prophylaxie post/pré-exposition



La prophylaxie consiste à prendre des médicaments contre le VIH après le passage d'un événement à risque. La PPE doit être prise dans les 24 heures suivant l'exposition au virus. Elle doit être prise pendant 28 jours. La PrEP peut être prise sur une base quotidienne pour prévenir la transmission du VIH. Elle est recommandée aux personnes à risque de transmission du VIH.

PORTAIL

HIV Risk Calculator

Very Low Risk

1- What kind of sex are you having?

Getting
Sucked

Sucking

Rimming

Topping

Bottoming

2- Are you?

HIV
Negative

HIV Positive

I don't know

3- Your partner is?

HIV
Negative

HIV Positive

I don't know

4- Are you using condoms?

Yes

No

CALCULATE HIV RISK

For HIV to travel between people it needs 3 things:

HIV positive body fluid + direct access to the bloodstream + risk activity = Possible HIV transmission

1) HIV positive body fluid

The only fluids that can carry and pass HIV are **blood**, **breast milk**, **semen & pre-cum**, **vaginal fluid** and **rectal fluid**.

2) Direct access to the bloodstream

HIV can live inside our bodies but it quickly dies outside the body when exposed to air. To pass between people, HIV needs direct access to the bloodstream. This happens through **sharing needles, fissures** (small tears that happen in the openings of our bodies), and **special cells** in the **vagina**, **bum**, and on the **tip of the penis**.

3) A risk activity

A "risk activity" can allow body fluid containing HIV into the bloodstream.

Ease of finding information

CHARACTERISTIC	RISK (N=50) %	PREVENTION (N=50) %
Information located in pdf	22	22
Information found through google search, on home page, or with one click	26	24
Information easy to find (opinion)	62	72

*Usability score based on LIDO instrument (minervation.com)



Accessibility & Engagement

CHARACTERISTIC	ALL (N=50) %
Language:	
Colloquial	38
Plain	88
Scientific/technical	40
Features:	
Audio	12
Animation	30
Videos	38
Games	2
Quizzes	14
Risk Assessment tools	6
Chat	8
Ask a question	40

CHARACTERISTIC	ALL (N=50)
Reading Ease (median [IQR])	63 [52 - 68]
Reading Grade Level (median [IQR])	10 [8 - 11]
Mean Usability score* (of 54)	37
Clarity of design (18)	14
Consistency of design (9)	8
Functionality (18)	11
Engagability (18)	4

*Usability score based on LIDO instrument (minervation.com)



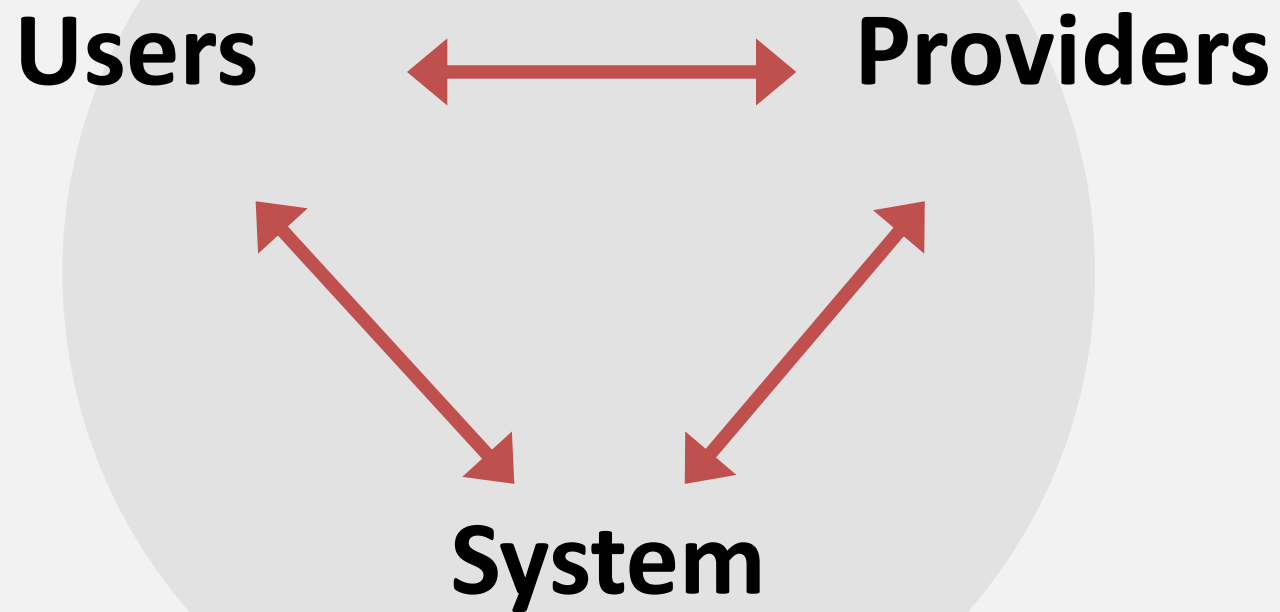
Discussion

- Less provision of emerging topics
- Some challenges in finding information
- Reliance on text and prose
- Technical language, poor readability
- Poor engagement (web 1.0)
 - Consumers of information and not active participants
- Room for improvement – best practices?

Questions that arise

- What influences what topics are provided and what aren't?
- What is the impact of inappropriate information or language?







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