

# Prospective Evaluation of a Local Multi-media Campaign Targeting Men Who Have Sex With Men (MSM) in Vancouver, British Columbia

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## Background

- Attempts to reinvigorate HIV prevention efforts among MSM include an upcoming Canadian ad campaign.
- Post-campaign evaluations may, ironically, be biased toward finding highest levels of risk among those exposed most to a message. Ideally, individual change should be related to campaign exposure.
- We used a rare opportunity to evaluate prospectively a local HIV multi-media campaign.

## Objectives

- To relate campaign exposure and change in sexual risk behavior and HAART optimism in a cohort of MSM in Vancouver.

## Methods

### The Vanguard Project

- The Vanguard Project is a prospective study of HIV incidence and risk behaviors that began in May 1995.
- Eligible participants are males between the ages of 16 and 30, living in the Greater Vancouver area, which have not previously tested HIV-positive.
- The study is open to all men who have sex with men, regardless of whether they self-identify as gay, bisexual or straight.
- Confidential, self-administered questionnaires were completed on an annual basis.

### The “Cocktails or Condom” Campaign

- The “Cocktails or Condom” campaign was broadly disseminated from Feb-April 2002.
- The message of the campaign was that combination antiretroviral drug “cocktails” are neither a cure for HIV nor easy to take on a daily basis.
- The campaign was intended to help correct mistaken beliefs about antiretroviral therapy and to stimulate critical reflection and community dialogue.
- Saturation of the community of the message included targeted venues (gay bars and businesses, physician offices, community health centres) and public spaces (roadside bus shelters).
- All campaign media included referrals to telephone and web-based sources of additional information concerning HIV prevention and medications.



### Measures about the Campaign:

- Wave 8 (Oct. 2002-Sept. 2003) of the Vanguard questionnaire included questions pertaining to the ad campaign.
- Colour reproductions of the campaign ads were included in structured post-campaign questionnaires that assessed:
  - exposure to the campaign,
  - where it was seen,
  - reaction to it,
  - self-reports of changes to thoughts or actions attributed to the campaign.
- Pre and post-campaign measures included unprotected anal intercourse (UAI), self-reported STD incidence, depression, and treatment optimism.

### Statistical Analysis:

- Group comparisons were performed using Contingency table analysis for categorical variables and Wilcoxon rank-sum tests for continuous variables.
- Matched pair analyses to assess change in binary variables.
- Multivariate analysis of covariance to assess change in continuous variables.

## Results

- 289 men were included in the analysis.
- Median age 30 (IQR 27- 34) years.
- They were surveyed a median of 11 (IQR 6-15) months after the campaign.
- The majority (198 or 69%) recalled seeing the campaign a median of 15 (7- 30) times.
- Posters (88%), newspapers (58%), and bar cards (53%) were more commonly seen than TV (15%) or the Web (8%).
- Men who did and did not recall seeing the campaign were not significantly different with regard to sociodemographic characteristics, risk behaviors, or depression.

- Among 198 who recalled the campaign, no significant pre-post changes in depression, risk behavior or treatment optimism were observed.
- 54 (28%) said the campaign influenced their thoughts or actions.
  - These men were MORE likely to report engaging in post-campaign casual partner UAI (OR=4.7, 1.9-11.7, p=0.001), both insertive (OR=4.1, 1.6-10.5, p=0.002) and receptive (OR=3.1, 1.1-8.7, p=0.03).
- A positive, albeit non-significant dose response was observed between campaign exposure and change toward high risk behavior and incident STD.

**Table 1\*. Characteristics of 289 Vanguard Project cohort study participants, by self-reported exposure to “Cocktail or Condom” HIV prevention ad campaign.**

Characteristic	Recalled Campaign (n=198)	Did not Recall Campaign (n=91)	p-value
Has Regular Sex Partner <sup>1</sup> , n (%)	135 (70)	65 (73)	0.55
Number Regular Partners <sup>1</sup> (median, IQR)	1 (1, 2)	1 (1, 2)	0.37
Any anal intercourse <sup>1</sup> , n (%)	114 (86)	55 (86)	0.94
Unprotected <sup>2</sup>	88 (77)	43 (78)	0.89
Anal Insertive intercourse <sup>1</sup> , n (%)	100 (77)	46 (73)	0.55
Unprotected <sup>2</sup>	76 (76)	34 (74)	0.79
Anal Receptive intercourse <sup>1</sup> , n (%)	106 (81)	48 (77)	0.57
Unprotected <sup>2</sup>	78 (74)	38 (79)	0.46
Has Casual Sex Partner <sup>1</sup> , n (%)	135 (70)	53 (60)	0.08
Number Casual Partners <sup>1</sup> (median, IQR)	6 (2, 12)	4 (2, 12)	0.63
Any anal intercourse <sup>3</sup> , n (%)	101 (76)	36 (72)	0.58
Unprotected <sup>4</sup>	48 (48)	18 (50)	0.90
Anal Insertive intercourse <sup>3</sup> , n (%)	89 (67)	28 (56)	0.17
Unprotected <sup>4</sup>	40 (45)	10 (36)	0.39
Anal Receptive intercourse <sup>3</sup> , n (%)	75 (57)	29 (62)	0.56
Unprotected <sup>4</sup>	28 (37)	15 (52)	0.18
High Risk Unprotected Anal Receptive intercourse, n (%)	32 (16)	12 (13)	0.52

**Table 2\*. Characteristics of 195 Vanguard Project cohort study participants who saw “Cocktail or Condom” campaign, by self-reported influence of the campaign on their thoughts or actions.**

Characteristic	Campaign Influenced Thoughts or Actions (n=54)	Campaign did not Influence Thoughts or Actions (n=141)	p-value
Has Regular Sex Partner <sup>1</sup> , n (%)	38 (70)	96 (70)	0.91
Number Regular Partners <sup>1</sup> (median, IQR)	1 (1, 2)	1 (1, 2)	0.96
Any anal intercourse <sup>1</sup> , n (%)	34 (89)	79 (85)	0.50
Unprotected <sup>2</sup>	26 (76)	62 (78)	0.81
Anal Insertive intercourse <sup>1</sup> , n (%)	30 (79)	70 (77)	0.80
Unprotected <sup>2</sup>	22 (73)	54 (77)	0.68
Anal Receptive intercourse <sup>1</sup> , n (%)	31 (82)	74 (80)	0.88
Unprotected <sup>2</sup>	23 (74)	55 (74)	0.99
Has Casual Sex Partner <sup>1</sup> , n (%)	40 (75)	94 (69)	0.35
Number Casual Partners <sup>1</sup> (median, IQR)	6 (2, 12)	5.5 (2, 12)	0.85
Any anal intercourse <sup>3</sup> , n (%)	32 (80)	68 (74)	0.45
Unprotected <sup>4</sup>	<b>23 (72)</b>	<b>24 (35)</b>	<b>0.001</b>
Anal Insertive intercourse <sup>3</sup> , n (%)	30 (75)	58 (63)	0.18
Unprotected <sup>4</sup>	<b>20 (67)</b>	<b>19 (33)</b>	<b>0.002</b>
Anal Receptive intercourse <sup>3</sup> , n (%)	23 (58)	51 (56)	0.88
Unprotected <sup>4</sup>	<b>13 (57)</b>	<b>15 (29)</b>	<b>0.03</b>
High Risk Unprotected Anal Receptive intercourse, n (%)	13 (24)	19(14)	0.09

\* No significant differences were observed with regard to months since the campaign, age, race, ethnicity, education level, employment status, stable housing, income, sex trade market, injection drug use, or depressive symptom scores.

## Conclusions

- Patterns of recollection of the campaign (table 1) were consistent with its broad distribution.
- Those influenced by the campaign were most likely to be those at highest risk.
- Post-campaign evaluations are subject to biases; prospective designs and extraordinary care in the selection of endpoints are recommended.