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The nature of MSM connectivity in Vancouver, BC and the importance of formative research for highlighting potential 'bottlenecks' among sub-networks when selecting optimal seeds for Respondent Driven Sampling (RDS)

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I have no conflicts of interest.



The Momentum Health Study

- Evidence suggests that expanded access to HAART may play an important role in transmission reduction (Hogg, et al., 2001; Montaner, et al., 2006)
- Potential of HAART to act as a preventive measure at the population level depends on what happens with HIV risk behaviours (Schwarcz, et al. 2007)
- Two serial cross-sections and longitudinal cohort of MSM in Greater Vancouver
- Enrollment began February 25, 2012 and n=51 of 1,000 to date



Respondent Driven Sampling (RDS)

- Chain-referral sampling designed to produce probabilistic samples with minimal selection bias (Heckathorn, 1997)
- Particularly useful to reach hidden populations such as MSM where no sampling frame exists
- Begins with a number of purposively selected seed
 individuals



Momentum RDS

- Participants are issued a predetermined number of coupons to recruit others from their social networks
- Waves of recruitment proceed until sample size reached and equilibrium across key demographic indicators is achieved



Momentum RDS Coupon



Formative Research for RDS

• Defined as pre-planned, systematic and formal use of rapid assessment techniques to explore key issues in implementing subsequent research (Simic, et al., 2006)

For RDS formative research can identify (Johnston, et al. 2010) :

- 1) isolated cliques or sub-networks
- 2) bridges or 'special connectors' linking sub-networks
- 3) 'bottlenecks' arising when recruitment chains remain within highly connected clusters



Methods 1

- We conducted a series of semi-structured key informant interviews (KIIs, n=24) and six focus group discussions (FGDs, n=48) between April and December 2011 with local MSM and service providers to delineate Vancouver MSM networks
- KIIs asked about knowledge of social, culture and economic structures of the MSM communities of Vancouver the contexts in which MSM self-organize



Methods 2

- FGDs used community mapping and post-mapping discussion to explore participants' understanding of Vancouver MSM community structures and the forces that formed them
- Independent thematic analyses were conducted by two members of our research team, employing an iterative and inductive approach
- All KIIs and FGDs procedures were approved by UBC, SFU, and UVic ethics boards



Results

- Vancouver MSM recognize and connect socially and sexually through online networks, organizations, clubs, bars and cruising locales
- There has been significant increased geographic and social decentralization in Vancouver that may be both a consequence of, and perpetuated by a rise in virtual networks and/or by a general assimilation of gay men into mainstream North American urban culture
- Community mapping helped identify factors by which networks are divided and self-organize



- Distinctive subnetworks connect around different 'scenes',
- E.g. 'Party Gays',
 'Drag Queens' and sexual preference,
 ('Bears' and
 'Twinks').





- Potential 'bottlenecks' revealed, depicted here by a solid line that separates the networks of 'Hipster gays' and 'Party gays'
- Reflects the geographic and social decentralization of gay men from traditional West End neighbourhood





- Physical scenes still exist as a part of many networks (e.g. bars, drag shows)
- Virtual networks, facilitated by internet sites and mobile apps, transcend physical 'scenes'





 Some sub-groups also associated with particular substance use patterns (e.g. respondent describes an overlapping twink/ drag network where coke and MDMA use is common practice)





- Movement between sub-cultures or 'scenes' may also be more fluid
- Different behaviours may be associated with different 'scenes' as one individual moves between subnetworks





Implications for Momentum

- 'Special connectors' between sub-groups, who may be important in bridging various networks, included: drag queens, sexually attractive (i.e. 'A-gay' guys) and 'daddies'
- Substance use patterns are associated with particular 'scenes' and sub-networks and may be important indicators to monitor as RDS progresses (See poster P198)



Implications for Momentum

- Importance of virtual networks and online communities prompted Momentum to design both physical and electronic RDS coupons for recruitment
- Informed selection of "seed" participants, to reflect the various sub-networks that exist among communities of MSM in Vancouver



Conclusions

- Formative research can help understand underlying social structures and networks among the population being sampled by RDS
- Identifying factors which structure social and sexual networks can help avoid 'bottlenecks' in sampling and in selecting "seed" participants for RDS recruitment



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References

British Columbia Centre for Disease Control. STI/HIV Annual report. Vancouver, Canada: British Columbia Centre for Disease Control, 2008.

Hogg RS, Strathdee S, Craib K, O'Shaughnessy MV, Montaner J, Schechter MT. Gay life expectancy revisited. Int. J. Epidemiol. 2001;30(6):1499.

Montaner J, Hogg RS, Wood E, Kerr T, Tyndall M, Levy A, Harrigan P. The case for expanding access to highly active antiretroviral therapy to curb the growth of the HIV epidemic. Lancet 2006;368(9534):531-6.

Schwarcz S, Scheer S, McFarland W, Katz M, Valleroy L, Chen S, Catania J. Prevalence of HIV infection and predictors of high-transmission sexual risk behaviors among men who have sex with men. JAMA 2007;97(6): 1067-1075.

Heckathorn DD. Respondent-driven sampling: A new approach to the study of hidden populations. Social Problems 1997;44(2):174-199.

Johnston LG, Whitehead S, Simic M, Kendall C. Formative research to optimize respondent-driven sampling surveys among hard-to-reach populations in HIV behavioral and biological surveillance: lessons learned from four case studies. AIDS Care 2010;22(6):784-792.

Simic M, Johnston LJ, Platt L, Baros S, Andjelkovic V, Rhodes T. Appropriateness of using respondent driven sampling in sex worker populations in Eastern Europe: Emerging evidence and key issues for formative research. J. Urban Health 2006;83(Suppl 7):S6-S15.



More Information?

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THANK YOU!



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