Social marketing interventions to increase HIV/STI testing uptake among men who have sex with men and male-to-female transgender women

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Limited evidence from developed countries suggests that multi-media social marking interventions can significantly increase HIV testing uptake among men who have sex with men. In the absence of studies from under-resourced settings, it is unclear whether such interventions would also promote HIV testing uptake in those settings.

RHL Commentary by Noestlinger C

1. INTRODUCTION

Globally, the HIV epidemic disproportionally affects men who have sex with men (MSM) and male-to-female transgender women. MSM make up the majority of both people living with HIV and of new HIV cases in many regions (Europe, North-America, Latin America), while newly emerging epidemics have been reported for regions like Asia and Africa (1).

HIV testing is a cornerstone of HIV prevention, but it has been challenging to increase its uptake, especially among hard-to-reach populations. Increasing evidence suggests that “test and treat” approaches would significantly curtail the HIV epidemic in specific populations at higher risk of HIV infections (2). HIV testing links HIV-positive MSM to treatment and care, offering both individual and public health benefits such as improved HIV diagnosis and adoption of sexual risk reduction strategies. Combined testing for other sexually transmitted infections (STI) can be equally important, since they may have a role as co-factors facilitating HIV transmission and acquisition(3).

Unrecognized HIV infections are one of the driving forces of ongoing HIV transmission among MSM and transgender women. Thus, new approaches are needed to increase the uptake of HIV/STI testing in this target group. To date, only few effective evidence-based interventions for the promotion of HIV/STI testing have been packaged for diffusion and almost all of them have been developed for high-resourced settings (see for example reference 4).

Since interventions based on social marketing principles have been shown to impact positively on various health-related behaviours (e.g. tobacco control and condom use), they could constitute a promising approach to increase HIV/STI testing uptake. Such interventions systematically apply social marketing techniques to intervention development, implementation and evaluation. They are consumer-oriented and use a variety of different communication channels (including mass media or multi-media campaigns) to achieve behaviour change. This review (5) aimed to assess the impact of social marketing interventions on HIV/STI testing uptake in the target group of MSM and transgender women compared with pre-intervention or control
groups derived from the same population.

2. METHODS OF THE REVIEW

The review authors conducted a literature search on interventions that used social marketing principles to promote HIV/STI testing uptake in the target group of MSM and transgender women. They included studies with a sound methodological design, i.e. randomized controlled trials with a control, controlled clinical trials with a control, interrupted time-series and pretest?post-test design studies. The outcomes included were HIV infection and STI infection rates. The quality of evidence was assessed using the GRADE approach, as usually adopted for Cochrane reviews. A meta-analysis was conducted on the selected studies to synthesize the findings.

3. RESULTS OF THE REVIEW

According to the selection criteria, only three cross-sectional pretest?post-test interventions were available for inclusion in the final analysis. All three studies had been conducted in high-income countries (Australia, UK, and USA). Data were reported only for MSM; male-to-female transgender women had either not been included or had not been analysed separately in the studies.

To measure outcomes, one study had used self-reported syphilis testing, another had used laboratory reports and the third study used both self-reported HIV testing and laboratory reports. None of the studies had measured change in HIV incidence or prevalence as an outcome of the intervention.

The UK study, implementing a multimedia HIV testing campaign (posters, advertisements in gay newspapers, leaflets, and palm cards), had aimed at gay and bisexual men in London with a special focus on MSM. The intervention involved peer images and increased HIV testing uptake by 4.5 (p < .001) times in the intervention group compared to controls. The increase was highest among the specific subgroups targeted (MSM migrants, MSM of black origin, and young MSM).

The US-based study was a short-term impact evaluation of a social marketing campaign using multimedia (posters, alert banners on gay web sites, radio and television spots) designed to reduce syphilis infections among MSM in South Florida in 2004. Venue-based surveys were conducted shortly after the campaign began and 6 months later to assess changes in exposure to campaign materials, awareness, knowledge about syphilis, perceptions of risk, sexual behaviour, clinic visits, and testing and treatment for syphilis among participants. The intervention did not produce a significant impact.

Finally, the Australian study had evaluated a social marketing campaign (using multimedia and an Internet chat-room and a hotline) which ran in 2004 in Victoria to increase rates of HIV/STI testing among MSM. Self-reported data showed no increase in self-reported HIV testing, but an increasing trend was observed in the proportion reporting specific STI tests over time (anal swab and urine tests increased from 26% to 39%, and 42% to 50%, respectively) and a steady increase in the amount of STI testing at the clinics detected through the laboratory reports. The latter trends were not attributed to the campaign as such since they began already before the intervention.

The meta-analysis of these three studies revealed that multimedia social marketing campaigns significantly increased HIV testing uptake [odds ratio (OR) 1.58, 95% confidence interval (CI) 1.40?1.77]. However, the campaigns were not effective in increasing STI testing uptake (OR 0.94, 95% CI 0.68?1.28). Overall, the quality of evidence was low and risk of bias was high in the included studies.

4. DISCUSSION

This Cochrane review is a scientifically rigorous attempt to estimate the impact of social marketing-based
interventions to increase HIV/STI uptake. The review is the first of its kind and is relevant because it aims to deliver much needed evidence for best practices and subsequent scaling up of interventions. While several studies have looked at issues in relation to HIV/STI testing uptake, when applying robust criteria for their study design, only three studies could be integrated in this review. The low scientific precision that existing interventions in this field have been evaluated with, is an inherent feature of the available studies, probably due to the complexity of adopting social marketing principles to HIV/STI testing promotion and measuring its outcome in real life settings.

The evidence available from these studies, however small, suggests that multimedia social marking interventions can significantly increase HIV testing uptake among MSM. Since none of these studies were developed for or evaluated in under-resourced settings, it is unclear whether such interventions could also promote HIV testing uptake in those settings.

4.1 Applicability of the results

The reviews’ findings have to be evaluated against the overall context in which prevention of HIV for MSM and transgender people currently takes place. Epidemiological surveillance of MSM in many countries to date has been inadequate to determine the true burden of HIV among MSM and the needs of MSM, especially in under-resourced settings.

It should also be noted that the studies included in this review have been carried out mostly in clinical settings, while social marketing principles could be expected to have a greater impact in community-based settings due to the specific promotion principles they apply. However, the methodological requirements for scientifically sound evaluations using randomized controlled trials as the ‘gold standard’ will make such interventions even more difficult to be evaluated due to constantly changing conditions in real-life settings.

4.2 Implementation of the intervention

Programming for MSM is highly under-funded, especially in under-resourced settings with a high HIV prevalence (6). It is thus not surprising that few methodologically sound studies have been carried out. The scarcity of existing interventions may also point to the social and political context in which such interventions take place. Currently, several countries are striving to criminalize homosexuality, which will negatively influence the health-seeking behavior of many MSM. They may not seek medical care and HIV-testing out of fear of double stigmatization as being gay and HIV-positive. In that sense, structural interventions that create supportive environments for MSM and transgender people are needed to implement targeted prevention strategies, such as those that use social marketing principles to increase HIV/STI testing uptake.

4.3 Implications for research
While the review’s authors rightly call for studies that adopt more rigorous study designs in the future, there is also a need of developing different evaluation frameworks that are better adapted to measure the outcome of complex interventions. Measuring efficacy in randomized controlled trials simulates an ideal environment, while in under-resourced settings in particular innovative designs are needed to evaluate effectiveness under real-life conditions – for instance through the use of combinations of various prevention tools in different social environments, such as describing programme impact pathways, using a combination of qualitative and quantitative methods with nested designs and triangulation of different data sources (7). Also, to determine what will work best and under which circumstances, better implementation and dissemination research is needed, including detailed process evaluation to identify the elements of social marketing interventions that render such interventions effective. Future research should aim to evaluate the use of social marketing interventions particularly using Internet technologies for setting where resources are low and stigma for MSM is high, since the anonymity provided by the Internet may reduce prevention barriers.

References


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