



Global HIV Experts Convene to Review the Evidence

A wide range of topics were discussed at the recent HIV Expert Consultation hosted by the Health Communication Capacity Collaborative (HC3) project in Baltimore, MD. Seventeen participants discussed the impact of health communication on combination HIV outcomes. HC3 is a five-year, global project funded by USAID. It is designed to strengthen developing country capacity to implement state-of-the-art social and behavior change communication programs.

The consultation convened international experts representing multiple sectors, geographic regions and perspectives to foster a multidisciplinary dialogue on the impact of health communication on combination HIV prevention. It offered an opportunity for researchers, program implementers and donors to examine the evidence, identify gaps and provide guidance on areas where communication enables preventive behaviors. Participants discussed the main successes and challenges in the field of health communication as well as areas that warrant greater attention.

Specific objectives included:

- Developing consensus around the impact of health communication across the range of HIV prevention programming by health outcomes, based on evidence of effectiveness
- Providing recommendations to the field to ensure programs strategically position health communication to ensure a high impact prevention portfolio
- Recommending a way forward to measure and document the outcomes (and intermediate indicators) of communication interventions
- Identifying gaps in evidence to orient future publications, data collection, research, and possible collaboration

Reviewing the Evidence

The consultation kicked off with a review of the evidence and discussion of

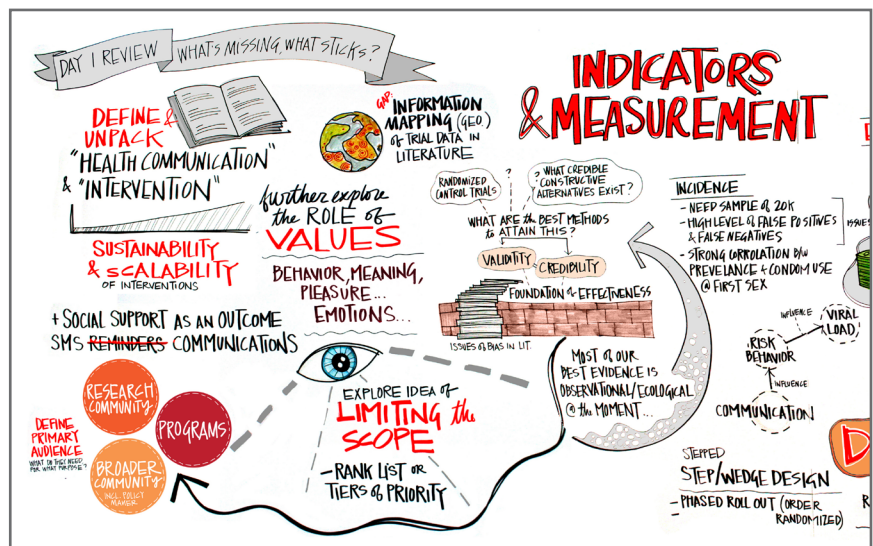
a synthesis document, which highlighted 75 articles focusing on health communication and HIV outcomes in developing countries.

It included various risk reduction outcomes, including variables critical in the causal pathway to behavior change – self efficacy, interpersonal communication and stigma – as well as condom use, and high impact prevention services such as counseling and testing, disclosure, treatment adherence, prevention of mother to child transmission (PMTCT) and voluntary male medical circumcision (VMMC). A sampling of the evidence reviewed and discussed is outlined below.

Condom Use

Condom use was one of the most frequent outcomes of interest in the survey of the literature, discussed in at least 39 of the included articles, meta-analyses and reviews. Overall, programs promoting condom use, increasing knowledge and positive attitudes about the use of condoms for HIV prevention and intentions to use condoms in the future observed positive outcomes.

Several global reviews on the impact of mass media campaigns have found positive effects on condom use (Bertrand et al., 2006; Noar et al., 2008, Wakefield et al., 2010). A global meta-analysis of interventions targeting adolescents found that emphasizing the development of condom use skills is highly effective at increasing condom use and decreasing incident STIs among youth (Johnson et al., 2011).

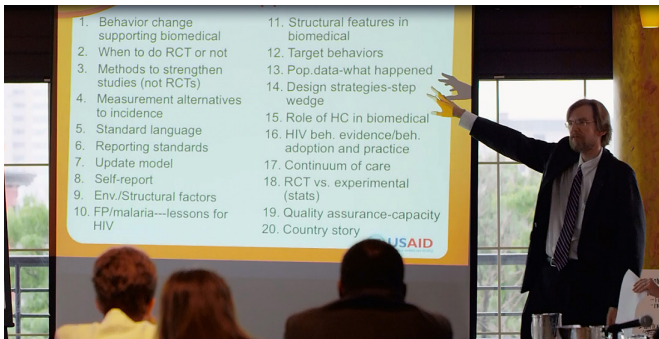


HIV Testing and Counseling

Testing and counseling were found in several instances to increase communication about HIV, while partner/interpersonal communication also influences testing behaviors. Compared to individuals who had not previously been tested, individuals who had been tested and knew their HIV status were significantly more likely to discuss HIV, testing and condom use with peers and sexual partners (Scott-Sheldon et al., 2010).

An intervention by Farquhar et al. found similar results in Kenya. A study in Burkina Faso found that women were eight times more likely to agree to undergo testing after discussing it with their partner, and partner communication was associated with retention in care at every level (Sarker et al., 2007).

An evaluation of HIV-related communication in Tanzania, Zimbabwe, South Africa and Thailand found that frequent communication about HIV increased the likelihood that an individual had been tested for HIV by 1.8-3 times (Hendriksen et al., 2009). A review of 14 mass media campaigns promoting testing found that all interventions had a significant impact on HIV testing (Vidnapathirana et al., 2005).



PMTCT

Another important aspect of HIV prevention, discussed less frequently in the studies identified, is that of PMTCT. As noted by Auvinen et al. in their review of male participation in PMTCT programs in Africa, men have a strong influence on women's participation in testing, PMTCT services and treatment adherence (2010). Clearly more research is needed in this area.

Treatment

When it comes to improving treatment adherence outcomes, several recent studies demonstrate that mHealth communication have had impact (Lester et al., 2010; Pop-Eleches et al., 2011; Kunutsor et al., 2010). Most focused primarily on service delivery and adherence (Deglise et al., 2012; Gurman et al., 2012).



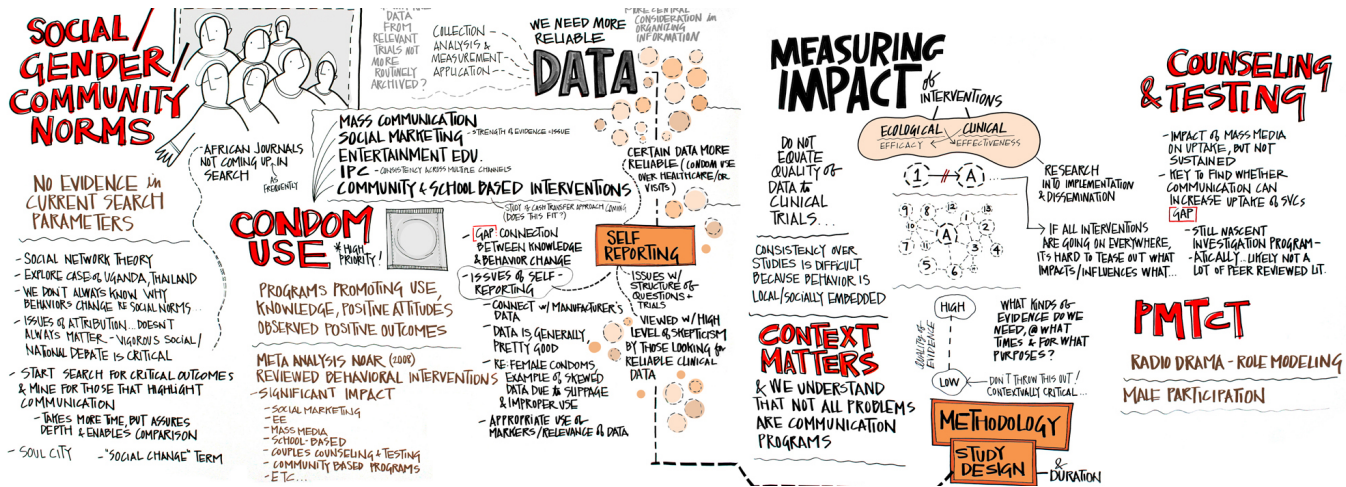
Voluntary Medical Male Circumcision

A major gap identified was the lack of published data regarding the impact of health communication on VMMC though more data is likely forthcoming.

Measurement and Methods

Measurement and methods for designing and evaluating health communication was examined on the second day. The challenges in evaluating the impact of health communication programs and the methods most commonly used to do so were discussed and centered on the following points:

- When to use randomized control trials (RCTs) and how to include as much randomization as possible even when an RCT isn't possible or practical.
- Choosing the most appropriate design largely depends on the purpose of the study and the goals of the research or evaluation.
- All methods may have a time and place, but should continue to be used with an eye towards as much rigor as possible to ensure credibility.
- Researchers should triangulate using DHS and other data sets to strengthen the reliability of outcomes.
- Importance of acknowledging the role of confounding factors affecting conclusions in observational studies.
- When the most rigorous method is not the best fit, some alternative methods to consider include:
 - Structural equation modeling and propensity score matching
 - Stepped wedge approach or an RCT-designed pilot
 - Cross-sectional surveys, ideally with a control group
 - Take non-randomized communities and evaluate them as separate interventions and then do a meta-analysis



Filling the Gaps

Gaps in evidence related to the impact of health communication on HIV outcomes were considered on the last day of the consultation. Participants brainstormed what would be useful at the country level for implementers and developed several manuscript ideas as they explored possible partnerships for collaborations.

Ultimately it was decided that a journal supplement would be developed to increase the evidence base of the impact of health communication on HIV outcomes and that tools around health communication should be created for field staff.

Participants appreciated the unique opportunity to share and discuss issues important to their work with researchers from different backgrounds and perspectives. It was a refreshing change from the sometimes monotonous and narrow-focused meetings where there is a shared interest in moving things forward, but a lack of multidisciplinary engagement and commitment that are critical for driving the agenda forward.

Discussions during the consultation did not always end in agreement, but that was not the point. Rather, challenging each other's views provided fuel for compromise and, furthermore, innovation.

Moving Forward

The studies outlined above, as well as several others, demonstrate the impact health communication has an impact on HIV combination prevention including

both biomedical interventions, which are ultimately compromised of behaviors, as well as sexual risk reduction behaviors.

The consultation highlighted the importance of how we must continue to tackle the question of how health communication can be used most strategically in combination prevention.

Keeping in mind the contexts in which interventions are carried out and the challenges program staff face in their work, the results of the consultation will not only add momentum to the field of health communication, but also be practical and useful for those on the ground.

This is particularly relevant when considering the scale up of efficacious or effective interventions. The momentum created by this consultation further encourages where health communication and biomedical interventions can meet. HC3 invites others to join in this ongoing conversation.

The Collaborative

HC3 is led by the Johns Hopkins Bloomberg School of Public Health Center for Communication Programs (JHU-CCP) in collaboration with Management Sciences for Health, NetHope, Population Services International, Ogilvy PR, and Internews.

It is also linked to a network of organizations throughout Africa, Asia and Latin America.

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References

- Auvinen, J., Suominen, T., & Välimäki, M. (2010). Male participation and prevention of human immunodeficiency virus (HIV) mother-to-child transmission in Africa. *Psychology, Health & Medicine, 15*(3), 288-313.
- Bertrand, J.T., O'Reilly, K., Denison, J., Anhang, R., & Sweat, M. (2006). Systematic review of the effectiveness of mass communication programs to change HIV/AIDS-related behaviors in developing countries. *Health Education Research, 21*(4), 567-597.
- Bessinger, R., Katende, C., & Gupta, N. (2004). Multi-media campaign exposure effects on knowledge and use of condoms for STI and HIV/AIDS prevention in Uganda. *Evaluation and Program Planning, 27*, 397-407.
- Deglise, C., Suggs, L.S., & Odermatt, P. (2012) SMS for disease control in developing countries: a systematic review of mobile health applications. *Journal of Telemedicine and Telecare, 18*, 273-281.
- Farquhar, C., Kiarie, J.N., Richardson, B.A., Kabura, M.N., John, F.N., Nduati, R.W.,...John-Stewart, G.C. (2004). Antenatal Couple Counseling Increases Uptake of Interventions to Prevent HIV-1 Transmission. *J Acquir Immune Defic Syndr, 37*(5), 1620-1626.
- Gurman, T.A., Rubin, S.E., & Roess, A.A. (2012). Effectiveness of mHealth Behavior Change Communication Interventions in Developing Countries: A Systematic Review of the Literature. *Journal of Health Communication, 17*, 82-104.
- Hendriksen, E.S., Hlubinka, D., Chariyalertsak, S., Chingono, A., Gray, G., Mbwambo, J.,...Coates, T.J. (2009). Keep Talking About It: HIV/AIDS-Related Communication and Prior HIV Testing in Tanzania, Zimbabwe, South Africa, and Thailand. *AIDS Behavior, 13*, 1213-1221.
- Johnson, B.T., Scott-Sheldon, L.A.J., Huedo-Medina, T.B., & Carey M.P. (2011). Interventions to Reduce Sexual Risk for Human Immunodeficiency Virus in Adolescents: A Meta-analysis of Trials, 1985-2008. *Arch Pediatr Adolesc Med., 165*(1), 77-84.
- Kunutsor, S., Walley, J., Katabira, E., Muchuro, S., Balidawa, H., Namagala, E., & Ikoona, E. (2010). Using Mobile Phones to Improve Clinic Attendance Amongst an Antiretroviral Treatment Cohort in Rural Uganda: A Cross-sectional and Prospective Study. *AIDS Behav, 14*, 1347-1352.
- Lester, R.T., Ritvo, P., Mills, E.J., Kariri, A., Karanja, S., Chung, M.H.,...Plummer F.A. (2010). Effects of a mobile phone short service on antiretroviral treatment adherence in Kenya (WeTel Kenya1): a randomised trial. *Lancet, 376*, 1838-45.
- Noar, S.M. (2008). Behavioral Interventions to Reduce HIV-related Sexual Risk Behavior: Review and Synthesis of Meta-Analytic Evidence. *AIDS Behav, 12*, 335-353.
- Peltzer, K., Parker, W., Mabaso, M., Makonko, E., Zuma, K., & Ramlagan, S. (2012). Impact of National HIV and AIDS Communication Campaigns in South Africa to Reduce HIV Risk Behaviour. *The Scientific World Journal, article ID 384608*
- Pop-Eleches, C., Thirumurthy, H., Habyarimana, J.P., Zivin, J.G., Goldstein, M.P., de Walque, D.,... Bangsberg, D.R. (2011). Mobile phone technologies improve adherence to antiretroviral treatment in a resource-limited setting: a randomized controlled trial of text message reminders. *AIDS, 25*, 825-834.
- Sarker, M., Sanou, A., Snow, R., Ganame, J., & Gondos, A. (2007). Determinants of HIV counseling and testing participation in a prevention of mother-to-child transmission programme in rural Burkina Faso. *Trop Med Int Health, 12*(12), 1475-83.
- Scott-Sheldon, L.A.J., Carey, M.P., Carey, K.B., Cain, D., Vermaak, R., Mthembu, J.,...Kalichman, S.C. (2010). Impact of HIV testing on sexual health communication in South Africa. *Sex Transm Infect, 87*, 242-247.
- Vidanapathirana, J., Abramson, M.J., Forbes, A., & Fairley, C. (2005). Mass media interventions for promoting HIV testing. *Cochrane Database of Systematic Reviews, 2005*(3), 1-42. Art. No.: CD004775. DOI: 10.1002/14651858.CD004775.pub2.
- Wakefield, M.A., Loken, B., & Hornik, R.C. (2010). Use of mass media campaigns to change health behaviour. *Lancet, 376*, 1261-71.

