

Evidence Review: Impact of Health Communication on HIV Prevention Outcomes

# Charting the Way Forward

## Summary of an Expert Consultation



July 30, 31 and August 1, 2013  
Pier V Hotel  
Baltimore, MD

## Background and Introduction

A wide range of topics was discussed at the recent HIV Expert Consultation hosted by the Johns Hopkins University Center for Communication Programs (JHU-CCP) Health Communication Capacity Collaborative (HC3) project in Baltimore, MD. HC3 is a five-year, global project funded by USAID. HC3 is designed to strengthen developing country capacity to implement state-of-the-art social and behavior change communication programs. HC3's goal is to foster vibrant communities of practice at the national, regional and global level that support improved evidence-based programming and continued innovation.



### Graphic Recording from Day 1

The purpose of this consultation was to convene international experts representing multiple sectors, geographic regions and perspectives to foster a multidisciplinary dialogue and develop concrete recommendations around the impact of health communication on combination HIV prevention. The goal of the consultation was to examine the evidence, identify gaps and provide recommendations on the areas where health communication currently enables and could potentially strengthen preventive behaviors for HIV prevention, including risk reduction behaviors and care, treatment, and support to biomedical interventions. The consultation was divided into three themes, one for each day. Day one focused on a review of the evidence, day two looked at measurement and methods, and day three included a discussion around filling the evidence gaps. The consultation offered an opportunity for programmers, researchers from diverse disciplines, and donor representatives to discuss the key successes and critical challenges in the field of health communication related to combination HIV prevention.

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; and
- Identifying gaps in evidence to orient future publications, data collection, research, and possible collaboration.

# Review of Evidence: Day 1

The consultation kicked off with the results of an initial scan of the evidence regarding health communication and HIV prevention outcomes from developing countries. A draft synthesis document was prepared prior to the meeting and 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).

An effort was made to search for communication-specific interventions focused on HIV prevention due to the vast body of knowledge related to health communication and the limited amount of time to conduct the initial evidence scan. Evidence was then categorized by prevention outcomes as a way to classify it. The synthesis document was presented at the meeting as a draft, living document. The purpose of sharing the evidence scan to date was to stimulate a discussion around search terms to be included going forward and to bring focus to the review.



Participants recommended a number of additional search terms for the next phase of the review including uptake and retention; adherence; loss to follow up; risk perception; self-efficacy; mass media; health education; compliance; people who inject drugs; risk reduction more thoroughly defined to include partner reduction, abstinence and the like; sexual relationship power; social norms; social networks; peer-to-peer and partner communication; pleasure, emotion, values, meaning; youth and mass media; incidence; viral suppression; transmission; gender equality measures; social media; media density; VMMC; PMTCT; and HIV testing and counseling (HTC). Participants suggested that searching by specific HIV outcome may provide the broadest inclusion of articles going forward. While a systematic literature review was discussed, many participants felt it would be a lengthy and time consuming endeavor. A suggestion to narrow a future literature review to a more refined scope within one area of the vast field of health communication and HIV outcomes was made as a way forward.

Building on the need for additional search terms, there was also a great deal of debate around using the term “health communication” and confusion over what is included in its definition. “Health communication” also carries a variety of meanings depending on the discipline within which one works. Some participants suggested “health communication” was far too limited in scope. Terms such as behavioral communication, behavior centered communication, behavioral interventions, social and behavioral communication, and behavioral science were raised as alternatives. In the end, there was no final agreement on which term should be used, though there was agreement that “health communication” must be further unpacked to improve understanding between donors, program planners, implementers and stakeholders through using clearly-defined common language; locating relevant evidence; and expanding search terms to be more encompassing. For the purposes of this document, however, the term “health communication” will be used since an alternative was not agreed upon.

To capture additional information where little is published in peer-reviewed publications, as in the case of VMMC for example, a suggestion was made to refer to the gray literature, using a systematic inclusion process to ensure that sources included meet the minimum criteria to ensure quality. Likewise, for evidence that is relevant but comes from the US, there may be a way to present some of that evidence where there are gaps from developing countries, as long as its origins are clearly stated. Additional attention must also be paid to specifically seeking out literature from African journals since many databases do not index them.

An important point brought up more than once was the social context in which HIV prevention efforts take place. There is rarely much description included in peer-reviewed articles to frame the social context of a study and its greater environment; however, we know one’s social environment plays a role in behavior change. The results of a study, when presented with the context in which they occurred, would provide greater depth to the evidence base related to health communication and interventions.

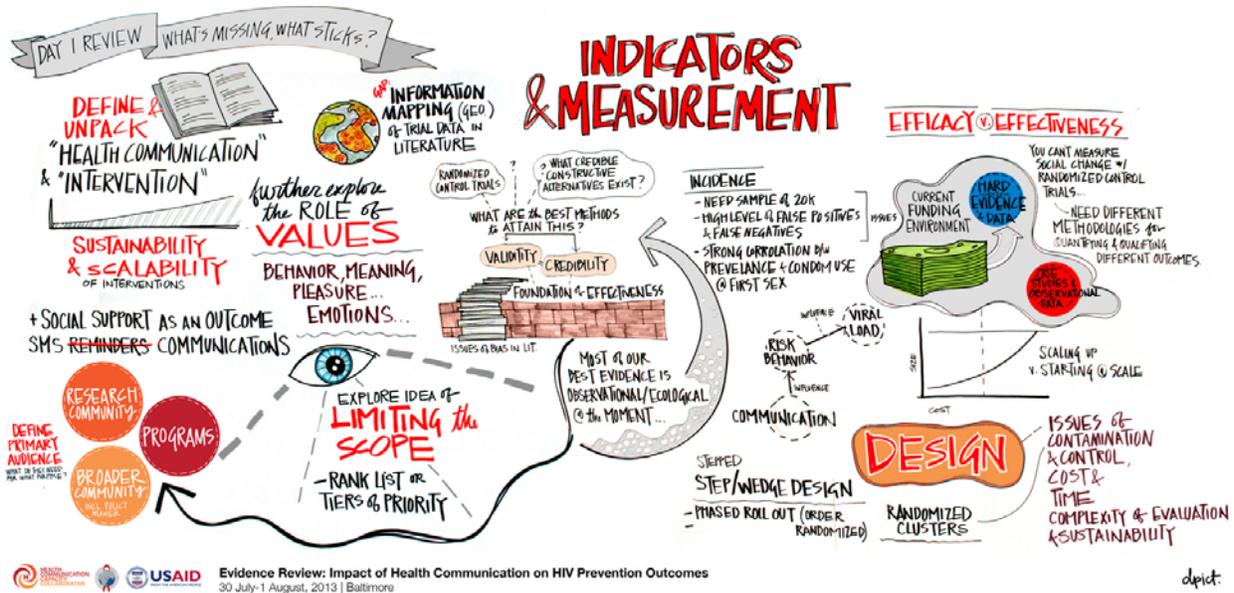
A popular discussion topic that came up frequently throughout the meeting centered on the strength of the evidence. A grading system to measure evidence quality must be used in the next phase of the review and may include use of existing systems such as HASTE or the Downs and Black scale. Along the lines of strength of evidence, some participants expressed their concern and frustration with biases in the literature. One participant explained how some researchers may frame their primary and secondary outcomes as well as results in a way that works to their advantage for publication, but which does not accurately reflect the true data. Another participant described how some researchers may conduct a systematic review but call it a meta-analysis when publishing, even though it does not include any analysis. With mention of other biases, such as publication bias or self-reporting bias, many participants agreed that in the future it would be beneficial to establish standards for what is researched and published in order to encourage stronger evidence across the behavioral sciences.

Another important point shared by both researchers and the donors was the need for more attention given to evaluation. Several of the researchers expressed missed opportunities to publish revealing evidence from their work due to time and financial constraints. Often little time or funding is earmarked

for mining existing data and performing secondary analyses. A greater investment in evaluation by funders would contribute to the literature and evidence base moving forward.

## Measurement and Methods: Day 2

The second day of the meeting involved a discussion around methods for designing and evaluating health communication. The group discussed the challenges in evaluating the impact of health communication programs and the methods most commonly used to do so. Innovative methods for analysis were also captured as participants shared their perspectives regarding behavioral outcomes and their pros and cons.



Not surprisingly, in a meeting between behavioral and biomedical researchers, there was some disagreement around the use and appropriateness of randomized controlled trials (RCTs). Whether it was said that RCTs were the gold standard or that ecological data carried more weight, after much debate, several take-aways surfaced:

- An RCT design would be appropriate when a study is exploring or testing a new concept (proof of concept) rather than something that has already been shown to be effective and is only being replicated or tweaked.
- While RCTs typically measure efficacy, ecological studies are more likely to measure effectiveness.
- It is important to acknowledge the role of confounding factors affecting conclusions in observational studies.
- There is a role for RCTs, but other designs are also needed. An RCT is not the best design, for example, if one is measuring social change.
- RCTs may be time-intensive, and the necessary time may not be available to both conduct the program and evaluate the outcomes.
- Ethical concerns also impact whether or not to choose an RCT design: when evidence regarding a specific approach is significantly strong and there are resources to implement the intervention on a

large scale, not receiving the same treatment could be considered detrimental to a control group of people.

- RCTs commonly offer some reward for participation, but it would be difficult to then take a program to scale without the same intensive resources.
- In the implementation world, randomization should always be pursued but the *trial* aspect may sometimes lead to problems for determining effectiveness and scaling up.
- In programs evaluating the impact of communication, the longer a study runs, the more likely it is that contamination between intervention and control groups would take place, particularly with mass media interventions.
- The field of health communication must make every effort to randomize and demonstrate a good faith effort to be as rigorous as possible if an RCT design is not used.
- Researchers must think carefully about how best they may use existing data to model some of the principles of randomization and triangulate as much as possible using DHS and other data sets to strengthen the reliability of outcomes.
- Researchers also need to ask whether there are good standardized ways to measure elements in the causal pathway and delve deeper.
- The issue of scale and sustainability were also of great importance in these conversations.

Donors and other disciplines are looking for stronger evidence, and the field of health communication must apply as much rigor as is possible. 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 within the field of health communication as well as among biomedical experts.

One recommendation that came from the meeting was to create a ranking of most to least rigorous methods and then, if it makes sense, use the most rigorous method. When the most rigorous method is not the best fit, some alternative methods to consider include:

- Structural equation modeling and propensity score matching were statistical methods identified as valuable alternatives in the analysis stage.
- A stepped wedge approach or an RCT-designed pilot.
- Conduct cross-sectional surveys, ideally with a control group.
- Take non-randomized communities and evaluate them as separate interventions and then do a meta-analysis.

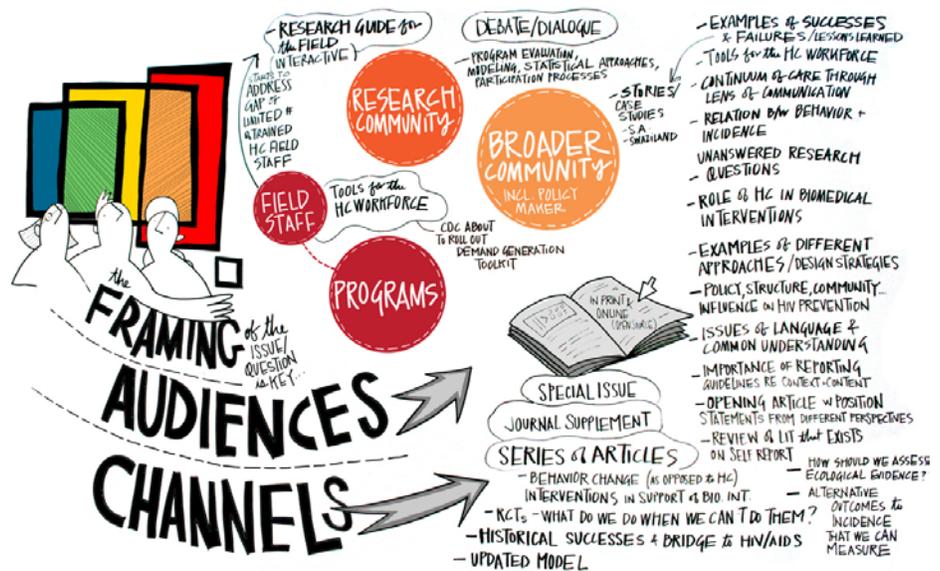
Regardless of the method used, participants agreed that greater triangulation of data is needed. Suggested tools to do this included asking questions in different ways to address self-reporting and response bias issues and including qualitative data where the context can be described in more detail.

## Filling Evidence Gaps: Day 3

The final day of the consultation focused on capitalizing on relationships and bonds created among participants over the first two days as well as how best to fill some of the gaps in evidence related to the impact of health communication and HIV outcomes, highlighting the importance of using health communication strategically in its own right as well as to improve biomedical outcomes.

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.

The consultation served as a starting point for researchers to collectively forge ahead into an area where health communication and biomedical interventions meet – a common thread for discussions about HIV prevention, but where little action has taken place to date. Perhaps because of this, the energy, enthusiasm and readiness for change were evident in the interactions between participants.



A brainstorm of materials and formats needed at the country-level for program planners and implementers

was undertaken to share forward thinking on how best to position health communication in the context of high impact prevention interventions. Attention was drawn to a need for formative research and evaluation, appealing to donors to increase funds and time for evaluation. Formative research and evaluation guides could be created to assist interested program implementers to become more involved in rigorous evaluation as a priority. Program reports should also be considered for publication in order to shift existing but ignored evidence into the peer-reviewed realm.

Breakout groups followed to outline potential journal manuscripts needed to increase the evidence base related to the impact of health communication on HIV outcomes. Participants explored partnerships to

fill the gaps in evidence and agreed to collaborate in the publication of findings across several topics through a journal supplement.

## Conclusion and Way Forward

Health communication has an impact on HIV prevention. This consultation highlighted the diverse perspectives that exist among approaches to HIV prevention, but more importantly, it unified participants behind the goal of investigating how health communication can be used most strategically in combination HIV prevention.

Wider dissemination is planned to ensure information and conclusions drawn from the consultation are shared with the greater HIV community. Specific recommendations and outputs include:

1. An additional literature review will be conducted that builds on the draft synthesis document presented at the consultation. A systematic literature review will follow with additional search terms included as suggested by participants.
2. A package of materials is in development, which focuses on the recommendations from the consultation. It will include evidence of the impact of health communication on HIV outcomes, fact sheets pertaining to specific HIV-related subtopics, presentations for programs highlighting important aspects from the discussions, copies of the graphic recordings from the consultations as well as video highlighting results of the consultation.
3. Webinars will also bring people together for discussion and learning including topics such as:
  - Unpacking health communication and its various terms
  - Measurement and methods
  - mHealth/ICT for adherence
4. Finally, a journal supplement is planned to explore four themes, health communication, design of studies and interventions, measurement and program/implementation science. This supplement will be used to advance discussions highlighted during the consultation and shed light on how health communication has been used most strategically to improve HIV-related outcomes.

Each of these activities contributes to one or more objectives from the consultation by developing consensus around the impact of health communication across the range of HIV prevention programming and providing recommendations to the field to ensure programs strategically position health communication to ensure a high impact prevention portfolio. HC3 invites others to join in this ongoing conversation.

## Appendix A: Consultation Agenda

Evidence Review: Impact of Health Communication on HIV Prevention Outcomes Charting the Way Forward		
<p><b>Goal:</b> Examine the evidence from the developing world, identify gaps and provide recommendations on the areas where health communication enables critical pathways towards preventive behaviors for HIV prevention, including behavioral prevention and support to biomedical interventions.</p> <p><b>Expected outputs</b> include:</p> <ul style="list-style-type: none"> <li>• Consensus around the impact of health communication across the range of HIV prevention programming by health outcome based on evidence of effectiveness;</li> <li>• Recommendations to the field to ensure that programs strategically position health communication for a high impact prevention portfolio;</li> <li>• Recommend way forward to measure and document the outcomes (and intermediate indicators) of communication interventions;</li> <li>• Identified gaps in evidence to orient future publications, data collection, research, and possible collaboration.</li> </ul>		
Time	Session	Objectives
<b>Tuesday, JULY 30<sup>th</sup>: EVIDENCE REVIEW</b>		
9:00-10:30	<p><b>Evidence Review: Risk Reduction</b></p> <ul style="list-style-type: none"> <li>– <b>Causal Pathways: Self-efficacy, etc.</b></li> <li>– <b>Social/community/ gender norms</b></li> </ul>	<p>Introduce participants and establish a platform for open exchange.</p> <p>Present literature review process/limitations, key evidence findings, and causal pathways explanation</p> <p>Reach common understanding of key evidence on HC and its impact on HIV prevention by asking these questions within each health outcome area:</p> <ol style="list-style-type: none"> <li>1. Where has HC had its greatest success/failure?</li> <li>2. What factors contributed to its success/failure?</li> <li>3. Were key channels used successfully?</li> <li>4. What are the gaps?</li> </ol>
10:30-11:00	<b>TEA BREAK</b>	

11:00-12:30	– <b>Condom Use</b>	Same as above
12:30-1:30	<b>LUNCH</b>	
1:30-3:00	<b>Evidence Review: Service -related</b> – <b>Counseling &amp; Testing</b> – <b>PMTCT</b>	Same as above
3:00-3:30	<b>TEA BREAK</b>	
3:30-4:30	– <b>Treatment</b> – <b>VMMC</b>	Same as above
4:30-5:00	<b>Gaps</b>	Summarize gaps
<b>Wednesday, JULY 31<sup>st</sup>: MEASUREMENT &amp; METHODS</b>		
9:00-9:15	<b>Recap of Day 1</b>	Share summary of previous day using graphic facilitation panels
9:15-10:30	<b>Indicators</b>	Discuss specific program monitoring and outcome indicators for health communication within HIV prevention 1. Are there tested indicators? 2. What intermediate outcomes need to be measured? 3. How can this group move these indicators into established international registries?
10:30-11:00	<b>TEA BREAK</b>	
11:00-12:30	<b>Measuring the outcomes of behavioral interventions</b>	Present and discuss evolution in the evaluation of communication programs Discuss challenges in evaluating the impact of health communication programs Define methods for such measurement Share/examine perspectives around methods for capturing behavioral outcomes and discuss pros and cons Discuss innovative methods for analysis
12:30-1:30	<b>LUNCH</b>	
1:30-3:00	<b>Measuring the</b>	Same as above

	<b>outcomes of behavioral interventions (cont.)</b>	
3:00-3:30	<b>TEA BREAK</b>	
3:30-5:00	<b>Measuring the outcomes of behavioral interventions (cont.)</b>	Plenary discussion focused on recommendations for a way forward to the field
<b>Thursday, August 1<sup>st</sup>: FILLING THE GAPS</b>		
9:00-9:30	<b>Recap of Day 1 &amp; 2</b>	Share summary of previous day using graphic facilitation panels
9:30-10:30	<b>Explore collaboration to fill evidence gaps</b>	Explore partnerships for collaboration and/or recommendations going forward where gaps in evidence exist.  Agree on collaboration/publication of findings for journal supplement  Share forward thinking on how best to position HC in the context of high impact prevention intervention
10:30-11:00	<b>TEA BREAK</b>	
11:00-12:30	<b>Explore collaboration to fill evidence gaps (cont.)</b>	Plenary to share ideas
12:30-1:30	<b>LUNCH</b>	
1:30-2:15	<b>Way Forward</b>	Share ideas for dissemination of consultation outputs
2:15-3:00	<b>Evaluation of Consultation &amp; Closing</b>	

Appendix B: Participant List

**PARTICIPANTS**

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