

The arts and health messaging: Exploring the evidence and lessons from the 2014 Ebola outbreak

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Written by Jill Sonke and Virginia Pesata.

The arts have been shown to be an effective and efficient means for communicating health information to large audiences. The arts enhance emotional engagement with messages, and thus optimise social learning patterns and motivation to change behaviours. This article explores the roles and impacts of the arts in public health, including recent use of the arts for health messaging in the Ebola response in West Africa.

Arts in public health is defined as a discipline, and outcomes related to use of the arts for health communication are presented along with examples of arts-based initiatives that were engaged to communicate critical health messages within the Ebola crisis of 2014-15. Recommendations for building the evidence base for arts in public health programs and for advancing evidence-based practice are offered.

Use of the arts as a means to educate the public, foster community engagement and social change, and influence behaviours has a long history. Arts-based health promotion has its roots in traditional cultures where storytelling, drama, and music are primary means for enforcing the belief systems that guide behavior.[1] The University of Florida Center for Arts in Medicine defines arts in public health as an emerging discipline that "engages the arts in public health programs for health promotion and disease prevention" (https://artsinmedicine.arts.ufl.edu/2015

(http://artsinmedicine.arts.ufl.edu/2015)). Arts in public health is emerging in alignment with the global priority to enhance population health through wellness and prevention. Within this discipline, artists and public health professionals partner in using the arts to engage and mobilise community members, better understand local cultures, convey health messages, and enhance health and wellbeing through community arts and cultural activities. Such activities themselves have been shown to enhance health and wellbeing, and even to extend the lifespan.[2-8]

This discipline aligns with the discipline of arts in medicine, in which professional artists and arts programs provide patients, family members, caregivers, and other health-related populations with opportunities for creative engagement. The discipline serves as an adjunct to medical care, utilising evidence-based arts practices to support health, healthcare, and wellbeing. Studies of arts interventions clearly document positive outcomes, including reductions in stress and anxiety, reductions in surgical and procedural recovery times, improvements in mood, positive distraction, reduction in the need for pain medication, reduced length of inpatient stay, improved patient-caregiver communication, and cost savings to healthcare systems.[9-18]

Arts in public health outcomes

While systematic reviews of outcomes literature pertaining specifically to arts in public health programs have yet to be published, several literature reviews have been undertaken to identify outcomes related to use of the arts in health promotion.[4, 5, 9, 19-26] These reviews acknowledge a lack of consistent measurement tools and scientific rigor in the literature. They also reveal that the arts can be used to effectively facilitate communication to individuals and communities, to raise awareness of health issues, to promote community engagement, to reach large audiences, and to impact some of the major determinants of health (eg community cohesion, social capital, social exclusion, and access to healthcare services). Key studies find that the arts are used effectively in

health education to create memorable messages and to change behaviors or beliefs, with outcomes often enhanced by strategic approaches and multiple modes of communication such as mass media, community mobilisation, and use of mobile technologies.[26-30]

One of the clearest areas of impact related to the arts in public health is in use of the arts for health communication or messaging. Health communication, by definition, focuses on making evidence interpretable, persuasive, and actionable. [31] A major systematic review of public health messaging literature published recently by the U.S. Department of Health and Human Services defines four key components of effective health messaging programs: 1) tailoring the message; 2) targeting messages to audience segments; 3) using narratives; and 4) framing messages.[31] The arts have been shown to be a uniquely effective means for accomplishing all of these components, and to be a highly effective and efficient tool for broad dissemination of critical health information, particularly when they are used as a part of multi-modal structured messaging approaches.

Creative media, including images, theatre, song, and dance, give meaning to health information and can improve understanding, retention, and utilisation of information. [32, 33] Recent studies indicate that incorporation of the arts into health-promotion programs can enhance both health behaviours and outcomes,[8, 23, 34, 35] and that when direct participants share information with others, even greater behavioural effects are found in those reached indirectly.[30, 36] Involvement of community members is a vital factor for the success of messaging interventions, as is the level of clarity of the message being relayed. The arts enhance this clarity, as well as understanding of health messages. Additionally, persistent and repetitive messaging, which is easily accomplished through art forms such as music, increases knowledge and positively influences behavioural change.[26]

Arts and health messaging in the Ebola response

For many months at the onset of the Ebola epidemic in West Africa, efforts to control the spread of the virus were compromised by the inability for culturally appropriate health messages to be disseminated, understood, and acted upon in an efficient manner. Public health efforts were slow to engage and mobilise communities, and to utilise local knowledge and culture for communication.[37] Health information was eventually

assimilated into the affected areas, but not until long after the spread of the virus was out of control. Grassroots arts initiatives, including popular music, murals, and radio drama, were critical components in the ultimate dissemination of health information. A repository of these arts initiatives has been compiled (see http://arts.ufl.edu/repos/)

Arts responses to the Ebola crisis

Early in the crisis, grassroots efforts by local artists emerged. One of the earliest responses was the song Ebola in Town, written and produced by Liberian rap artists, Shadow and D12, in May of 2014. Within three days of its internet release, the song was playing on Liberian radio stations and in dance clubs, and soon topped the local charts. While the lyrics were improvised by the artists and not informed by health professionals, the song demonstrated the power of popular music to convey Ebola messages and paved the way for the release of dozens of other songs and music videos created through

Figure 2.





Figure 3.

collaborations between artists and health professionals to deliver more targeted messages.

UNICEF took a strong role in supporting local musicians to create songs, including the popular Ebola is Real, and also catalogued and helped disseminate the music (see Soundcloud: https://soundcloud.com/unicef-liberia (https://soundcloud.com/unicef-

liberia)). In addition to music, storytelling and drama were engaged by many local and international organisations to communicate messages and fight stigma.[39] PCI Media, in partnership with UNICEF Liberia, launched Stop Ebola Now: Through Creative Storytelling, a campaign including serial radio dramas, call-in radio and TV shows, and arts-based community mobilisation campaigns, including songs, billboards, and use of mobile technologies to help inform and engage the public with critical information (figure 2; see http://mediaimpact.org/) ebola/). The International Organisation for Migration (IOM) Liberia, the Liberia Ministry of Health and Social Welfare, WHO, and UNICEF together engaged a local artist to create a graphic story in comic book format, called Spread the Message, not the Virus (figure 3; see http://liberia.iom.int/2014/12/10/ (http://liberia.iom.int/2014/12/10/) comic-book-spread-the-message-not-the-virus/).

Radio is a primary means of communication in Ebola affected regions, and served as a natural host for dozens of radio dramas that used the power of mass media and drama to communicate messages in an appealing, engaging, and personally relevant manner. In Sierra Leone, Search for Common Ground, through its Talking Drum Studio project, responded by shifting the focus of its weekly radio drama – the most popular in the country – to Ebola (see http://www.(http://www.)) newyorker.com/news/daily-comment/ebola-culture-makers). Film and video have also played significant roles in raising awareness and reducing stigma both within and outside the affected regions. The Liberia Film Institute implemented a major capacity-building and nationwide Ebola prevention outreach project, Ebola Must Go, including ten new films focused on Ebola and a national film festival.

PCI Media, in partnership with UNICEF and Vulcan Productions, also produced #ISurvivedEbola, a series of videos and radio programs that feature Ebola survivors from Liberia, Sierra Leone and Guinea sharing their stories and perspectives (see http://isurvivedebola.org/campaign)). The multimedia campaign was the first to directly engage Ebola survivors in delivering key messages to affected communities, and to highlight stories of hope and resilience in the midst of the ongoing epidemic.

These efforts and many others have attracted widespread attention and enthusiasm, both locally and abroad, reaching massive audiences more quickly and efficiently than standard health messaging approaches. While the general public often views health professionals with distrust, such as has been demonstrated in Ebola-affected areas,

artists are generally viewed as peers and non-threatening to community members. They are also available resources in affected areas, and have a unique understanding of local cultures and expertise in human engagement.

Social learning is an important component of these programs. Recent studies in the affected regions have shown that even under extreme conditions, communities can rapidly internalise positive health messages, abandon negative health messages, and refine known health messages through social learning constructs.[38] When people engage emotionally with correct information through the arts, they share that information with others, creating an organic and meaningful dissemination of knowledge. In all of these ways, the arts have been demonstrated to be an ideal tool for the delivery of complex health messages in efforts to rapidly educate people affected by a widespread health issue. While the arts programs engaged in the Ebola response have not yet been formally evaluated, their impacts on awareness and the dissemination of targeted messages are unquestionable.

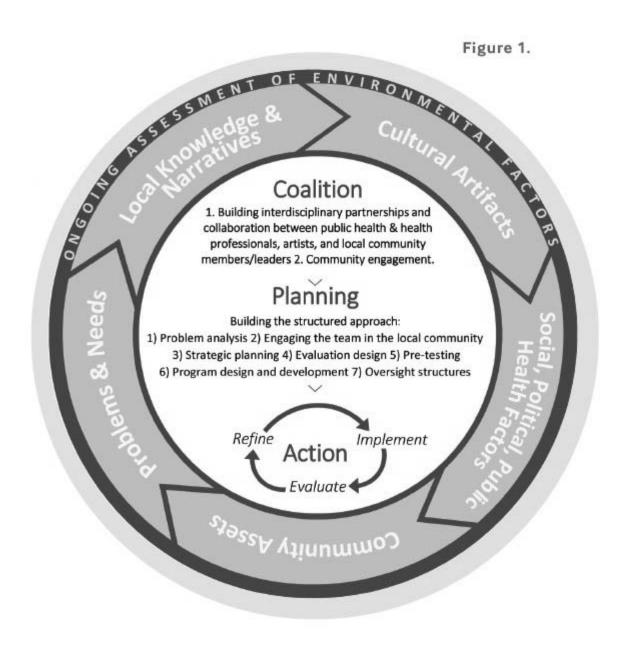
Structuring utilisation of the arts in future epidemic responses

Spurred by the lack of systematic review consolidating the literature and by the urgency created by the recent Ebola outbreak in West Africa, the University of Florida conducted a systematic review of the arts and health messaging literature, as well as a study of use of the arts in public health in Uganda, where the arts have been highly utilised in public health since the 1950s. The findings of these studies define six key concepts that can guide effective evidence-based use of the arts for small and large scale health messaging.

- 1. Effective health messaging programs are multi-modal, highly structured, and interdisciplinary. Arts-public health partnerships are highly synergistic, and arts-based messaging campaigns are most effective when designed within broadly interdisciplinary partnerships and within a comprehensive set of messaging modalities. Planning, leadership, and oversight by a range of interdisciplinary partners are crucial elements for success.
- 2. Effective arts-based health messaging programs are built on clear theoretical foundations, and on local knowledge and culture. Social learning theory is at the heart of arts-based health messaging. Effective programs also utilise local knowledge, leadership, history, and culture.

- 3. Various forms of drama, music, and the visual arts can be used to focus and clarify health messages. Serial dramas presented via radio, television and live forum, popular and traditional music, and visual arts modalities including murals and illustrations simplify, clarify, and focus health messages, providing a means for communication that is engaging, relevant, memorable, and compelling.
- 4. Through culturally and personally relevant narratives, the arts engage people emotionally and can facilitate behaviour change. Effective behaviour change interventions must be embedded in local realities. The arts facilitate dialogue, allow communication around culturally sensitive subjects, and reveal underlying social issues that influence behaviours, including social and cultural beliefs, stigma, and tradition. Familiar scenarios and characters that elicit empathy spur audience members to consider their own realities and make new choices.
- 5. Arts-based messaging campaigns utilising celebrity artists and mass media formats can reach large target audiences. Mass media formats such as serial radio drama, popular music, and murals are effective means for rapid and large-scale messaging. Effective programs target population segments, design themes around behaviour change using behavioural theories, include strong evaluation frameworks, and integrate a wide range of interpersonal reinforcement activities. Involvement of celebrities utilises expansive social networks and brings credible message endorsement.

Peer-to-peer social learning expands the reach of arts-based messaging and can catalyse even greater behaviour change than direct learning. Messages relayed through social learning and parasocial interaction, such as interaction with performers and arts media, are effective in changing behaviours.



The studies also found that the most effective arts-based health messaging programs were developed through broad interdisciplinary partnerships that invested considerable periods of lead time, sometimes more than one year, into indepth community-based program planning and mobilisation processes. Figure 1 consolidates these processes into a best practice model for planning arts-based health messaging initiatives.

Collaborating with the global outcomes community to measure impact

There is a clear need for better quality studies on the use of the arts in public health, particularly in low income and low resource regions, where research capacities are limited but programs are often prevalent. Much of the research performed on arts-based public heath campaigns is of moderate to poor quality. Additionally, inadequate attempts to measure changes in knowledge, behaviour, and other outcomes without adequate timeframes, sample sizes, and consistent epidemiologic and other measures are consistently reported.[20, 26-28, 29, 39-41]

In addition to large-scale epidemiologic studies that can measure impact at the population level, a higher value—in the context of traditional research hierarchies—needs to be placed on qualitative and mixed methodologies that can illuminate how arts interventions make a difference and can lead to the development of a theoretical basis and best practices for the discipline. Clift et al suggest seven approaches that are also important for assessing arts and health programs: 1) retrospective qualitative evaluations; 2) prospective evaluations; 3) experimental evaluations; 4) economic effectiveness studies; 5) systematic reviews; 6) development of theoretical frameworks; and 7) emergence of an academic community of arts and health researchers.[42]

The case of health messaging in the Ebola response highlights the importance of establishing outcome measures for artsbased public health interventions and presents an opportunity for retrospective studies that can significantly inform the development of best practices pertaining to health messaging in both urban and rural areas. It must not be overlooked that in the Ebola response, the arts were employed at both the grassroots and formal levels to reach large populations of people with critical health information, which is presumed to have played a significant role in slowing the spread of the virus. In order to now measure this impact, qualitative and quantitative study designs representing multiple disciplinary perspectives are needed. With this evidence, the arts and local artists can be rapidly engaged in future public health crises to mobilise, inform, and empower communities, and to build social capital that can be leveraged in more locallybased, culturally appropriate, and effective responses.

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