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Using creative methods for public health messaging

Experiences from an informal settlement in Kenya during the pandemic

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Action against Covid -19 transmission in Nairobi (ACT Nairobi)

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Bob Orengo in a photo taken from the "Kaa Rada" music video created through the Action Against Covid-19 Transmission in Nairobi (ACT Nairobi) project.
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Contents

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Key messages

- This report provides an overview of Action Against Covid-19 Transmission in Nairobi (ACT Nairobi), a community-based, participatory public health project in an informal settlement of the city. The project sought to leverage citizen science and creative forms of expression to help combat misinformation about Covid-19, and encourage residents to take feasible steps to help reduce the spread of the virus.

- The project used creative channels to communicate messages that integrated up-to-date public health information and local knowledge from community "champions". Local participants produced murals, comic books, puppet shows, music videos, cell-phone videos ("cellphilms"), personal video diaries and digital stories.

- The project led to sustained activity and self-initiated use of such methods in other contexts. For example, participants established a community-based organization to continue creative engagement and messaging for health and environmental issues, and teachers use techniques learned in training to instruct students on other topics.

- The project suggests that public health messaging from trusted community sources creates conditions for local communities to understand and respond favourably. Message makers and recipients who live in the same community have a shared understanding that can help tailor messages to the local context to help combat misinformation, conspiracies, and rumours.

- The authors argue that creative methods can engage the community in new and familiar ways, and they urge other public health campaigns to employ such approaches. These methods of communication can reinforce key messages by creating memorable experiences and long-lived artefacts (such as murals) that can have impacts beyond the lifecycle of a given project.

1. Introduction

Background

When the Covid-19 pandemic began in 2020, many anticipated that the worst impacts would arise among the world's most vulnerable people, including the approximately 1 billion people living in informal settlements (UN Statistics, 2019).

In March 2020, the first Covid-19 cases in Kenya were detected, and the government of Kenya implemented a number of directives to prevent its transmission. These included school closures, remote working where possible, bans on public and social gatherings, and travel restrictions. Mandatory mask wearing in public places was introduced in April 2020. However, masks were not provided free of charge, and many families struggled to afford them. Social distancing and handwashing were also recommended, but living in densely populated, informal settlements with poor sanitation makes this extremely difficult.

Despite the problems facing informal settlements, at the time the pandemic began, there were grounds for hope that they could cope if equipped with the right tools. Indeed, in April 2020, UN Habitat posted on Twitter (now known as X):

> *"...communities in informal settlements have a powerful asset: resilience. They self-organise, identify their needs and tailor innovative low-cost solutions to meet those needs. They need to be empowered immediately. Preparedness [to the pandemic] is the key."*

Against this backdrop, the Action Against Covid-19 Transmission in Nairobi (ACT Nairobi) project sought to enhance public health understanding about the virus and its transmission in a low-income, informal settlement. Conducted over a six-month period (June through November 2020), the project provided residents with scientific information about the virus, offered training in creative communication, and involved them in generating public health messages through creative communications vehicles: murals, comic books, puppet shows, music videos, video diaries, and cell phone videos ("cellphilms").

The project was conducted in the informal settlement of Mukuru, which includes more than 100 000 households spread over 3 villages and across 650 acres (Muungano wa Wanavijiji, 2018). Families live in cramped conditions in corrugated metal shacks, with limited access to electricity and sanitation. Residents live a hand-to-mouth existence and face many daily challenges, including food and employment insecurity, gender-based violence, and a fragile healthcare system straining to cope with an already high burden of disease (Corburn et al., 2017; Kyobutungi et al., 2008).

This report describes key aspects and outcomes of the project and provides related academic background on specific components. It underscores the potential for creative methods to disseminate public health information; incorporate relevant, local knowledge; and involve local residents in the processes. The experiences of the ACT Nairobi project lead us, the authors, to encourage public health practitioners, policymakers and researchers to consider such creative approaches when designing public health campaigns.

1.1 Using creative methods for community-based research and engagement

Arts-based creative methods

It is not a new idea that the arts can be a powerful force for empowerment that gives voice to marginalized groups and can have a "humanizing power" (Belfiore & Bennett, 2010). In creative research, the methods developed for working with people are varied and relational; they disrupt traditional research hierarchies and constructions about knowledge and expertise. Practice-based research or "arts-based research" enables "discovery through drawing, through imagery or through sound, in which something is discovered that could not have been discovered by any other method" (Biggs & Buchler, 2008). Creative and arts-based research methods utilize traditional and emergent artistic practices to identify, analyse and gather data through culturally relevant means. This makes them highly pertinent for participatory and community-based research (Coemans & Hannes, 2017).

Community-based research

Community-based participatory research engages community stakeholders as equal partners in the research process (Baum et al., 2006). The researchers and the research participants share power, and together they control the direction and focus of the research project. The aim is to ensure that the research empowers and benefits the community (Wassenaar, 2006). Research situated within the community in this way combines both researcher and local knowledge, enabling access to social capital within the community. (Froggett et al., 2011).

Creative methodologies for community engagement have been widely used in sub-Saharan Africa as part of HIV/AIDS, Ebola virus and malaria health campaigns (Bunn et al., 2020), as well as for transport planning (see iCMiiST, British Academy). When these initiatives are community led, a wealth of local knowledge, social and cultural understanding is incorporated into the promotional messages. This process also informs how messages should be disseminated, and so increases their effectiveness (Sonke & Pesata, 2015). Given the community transmission pathways of Covid-19, community engagement was essential for reducing the spread of the infection (Gilmore et al., 2020).

Murals, music, film and theatre can reach large audiences, target difficult-to-reach groups (Davies et al., 2012; Fraser & al Sayah, 2011) and can be disseminated in a Covid-safe manner. We have observed that public health messages in Mukuru are commonly disseminated using a process known locally as "sensitisation", which involves collaboration between an established non-governmental organization (NGO) and/or local government and community-based organizations, and harnesses creative media tools such as graffiti and music. These approaches have been used to address health issues, such as hygiene, cholera, sex education and transmission of HIV.

1.2 The ACT Nairobi project

The ACT Nairobi project was a community-based, participatory project that used creative methods to uncover community concerns and priorities relating to Covid-19, and to develop locally relevant, arts-based messaging about ways to help reduce its transmission (such as by social distancing, handwashing and wearing facemasks correctly). The ACT Nairobi team was made up of an established interdisciplinary UK-Kenya partnership of creative practitioners, academics, scientists, and 21 community champions who are also activists, artists and musicians. The project built on previous and ongoing participatory and arts-based research projects including the Africa-European AIR Network, the Tupumue lung health project, and other work that has used citizen science to assess air pollution.

The UK team hosted online knowledge exchange workshops and shared pre-recorded training videos with Mukuru community champions. Initial sessions provided basic information on Covid-19 and answered community participants' questions about its spread. Subsequent online sessions offered instruction about how to undertake and deliver visual arts, puppetry, music, digital stories, video diaries and cellphilms to share information to help reduce the spread of the disease. These sessions sought to explore the lived experience of the pandemic and to think about ways to communicate key messages, including promoting handwashing, social distancing, and the correct use of facemasks.

Workshops provided monitoring and evaluation training, introducing community champions to methods such as surveys and in-depth interviews that they might consider using to assess future activities.

The project provided equipment (e.g., cameras, tablets, laptops and software) to facilitate creative working and ensure that everyone could work in a Covid-safe manner. Community champions received payment for taking part in the workshops, and an additional allowance to cover costs (of mobile data needed for online meetings and workshops, and for the purchase of facemasks and hand sanitizer).

Participants created murals, printed comic books, and videos shared on YouTube to counter prevailing misinformation and convey public health information about Covid-19.

2. Components of the Mukuru project

Answering the community's questions about Covid-19

This project relied on community champions, who were well-connected people from Mukuru, and also served as co-researchers. These community champions in Mukuru knew more about the settlement and people's experiences than the project staff.

At the time of the project, the prevailing information circulating through the community about Covid-19 was confusing, sometimes incorrect, and often contradictory. We asked the community champions about what questions they and others in their community had about Covid-19. Three types of questions surfaced:

1. Questions that scientists could already answer. For example, "What is the best way to wash your hands to kill the virus?"
2. Questions that no one could answer immediately, but that small-scale research in Mukuru could help answer. For example, "What proportion of people in Mukuru have access to a mask and facilities to wash it?"
3. Questions that no one could answer and that would require large-scale research to answer. For example, "What are the long-term effects of having coronavirus?"

The project sought to answer these questions as far as possible. For this very time-limited project, we focussed on the first kind of question: those that scientists already could answer. We worked with the community champions to think of as many questions as they could, first in a Zoom meeting with breakout groups, and then in discussions in Facebook and WhatsApp groups. This iterative process meant that we were able to get more in-depth questions, and not just the first ones that came to mind. We then looked for someone to help answer the questions. We approached the Centre for Virus Research at the University of Glasgow, Scotland. Shirin Ashraf, an expert in emerging infections and virus discovery with experience in Africa, answered the group's questions on Zoom and later by email, and the group continued to discuss questions in the Facebook and WhatsApp groups. The Mukuru Youth Initiative turned some of the questions and answers into memes in Sheng (a Swahili-English cant used in the area) and English, to share on social media to help inform local communities. The full set of memes can be viewed here.

Figure 1. Meme created by the team and circulated on local social media

2.1 Visual arts: comics, logos and murals

Visual arts, in the form of comics, murals and facilitated drawing, have been a focus of research across a range of disciplines. The main contribution of the visual arts is that they enable new means of communication and provide wider expressive possibilities. It has been noted that "traditional methods may fix and limit meaning in a reductive way, while creative methods can more accurately reflect the multiplicity of meaning that exist in social contexts" (Kara, 2020). The use of the visual arts was dually beneficial in this project, as community members gained new artistic skills through creating artistic outputs and also benefited from sensitization to key messages.

The visual arts used in the Mukuru project focused on three primary areas: comics, logos and murals. The initial focus on the logo was intended to deliver professional and practical skills to the community and draw important links between the design process and the overall planning, design and implementation of a communications strategy. This process, like others, was delivered both through online workshops and in discussions between artists and community members on the ground. The comic books were developed in much the same way, encouraging local, idiosyncratic messages to be included in the comic and for them to have a "slice of life" feel, portraying the moments of everyday life. The process focused on how to construct a narrative in the comic and how to use established conventions such as close up, middle and establishment shots to bring emphasis and connect to characters.

The comics reflected the diversity of themes that arose around Covid-19 awareness, such as hygiene, myths and myth-busting, transportation, government intervention, school closure and humour. The comics reflect the participants' learning and understanding of the workshop material and its application into highly original and effective pieces of comic communication. Individual pieces were collated into one 32-page comic book "*Mukuru Komesha Korona*" (translates as Mukuru Stop Corona), made entirely by local artists for their local community. A digitized version of the comic book can be viewed here.

Mural creation is an established practice in Mukuru and therefore required less direction than other forms used in the project. The murals created took inspiration from the comics, which used the format of the comic strip in the finished murals (see Figure 3).

Person in mask:

"Guys, what do you know about corona?

Others:

"There is no corona."

"Corona is a scam orchestrated by the government."

"Corona only infects the elderly."

Person in mask:

"Guys, listen up, I'll tell you the truth."

Figure 2. Comic-book pages featuring artwork by Mika Obanda and Gladwell (who asked to be credited with his first name only) from Wajukuu Arts.)

Others:

> *"Corona is a scam and it can't catch someone who drinks alcohol"*

Person in mask:

> *"Corona is real and it can catch anyone. It's not a scam and drinking alcohol cannot stop it from spreading."*

Overall, the visual-arts package utilized the expertise of community artists and formalized the design process to build capacity in the community and develop greater independence and strategic thinking around the implementation of future communication campaigns. Although the methods are not novel in terms of form (comic books, logos and murals), the online delivery of workshops and the cultivation of unique voices on the ground resulted in original, highly visible outputs. The comic was used as a teaching tool in local schools and was part of community libraries in various parts of Mukuru. Anecdotal reports indicate that children indicated that they preferred to read the comic in Sheng, a cant used in the area.

Figure 3. Mural on the side of a building in Mukuru by ACT Nairobi community champions Freshia Njeri, Mika Obanda, Victor Chege and Gasto (who askd that his first name only be used) from Wajukuu Arts. The mural was designed following participation in visual arts workshop sessions and in accordance with Kenyan government guidelines.

Photo: Mika Obanda.

It is evident from the outputs that a clear understanding of design thinking resulted in thoughtfully constructed images which communicated a range of pertinent information. "*Mukuru Komesha Korona*", for example, incorporates diverse and individual impressions of a unique and difficult time for the residents in Mukuru. It is a highly original output and represents the start of a dialogue between community members that can be built upon and expanded.

The comic books were printed, initially in a small run, but due to high demand a total of 4250 comics were printed and made available to the community via churches, libraries, youth groups, health centres, recreation centres and schools.

The murals, all situated in prominent public spaces such as intersections and marketplaces. We estimate that half the population of Mukuru will have seen at least one mural.

2.2 Puppetry

There is a strong tradition of puppets being used to provide clear messages at times of great cultural tensions and crisis, including during war. They have been used as part of social campaigns in India and in places such as prison camps (Smith, 2015). Educational puppetry has been used in Kenya, including to raise awareness of diseases (Ngunjiri, 1995; Mworogo 1996; Kei, 2012; Eshuchi, 2013; and Silanka, 2019). ACT Nairobi aimed to add to the already established practices in Kenya and support respected artists in developing their own styles of puppetry.

Working remotely in a series of online workshops with community champions, Matt Smith presented a series of puppetry techniques and shared ways to use cheap, available materials to tell stories, give advice and provide information in a light-hearted, informal style. Different forms of puppetry (e.g., lip syncing and shadow puppetry) and approaches (e.g., narrative and technical methods) were discussed and developed through collaborative sessions. Champions chose their own narratives and forms of puppetry. The champions developed the content and language for the puppets based on Covid-19 health messaging.

Mika Obanda, a puppeteer in Mukuru, with his puppet telling a story about social distancing. The narrative for the story was devised using lessons from an online learning workshop that provided examples of how to communicate messages using puppets. Photo: Jared Omae.

UK academics and champions explored whether puppets could be used as tools remotely to raise awareness of issues, and to understand the challenges and limitations of puppetry when applied to different contexts and cultures. Smith (2015, 2016, 2018) suggests that when puppetry is used in an applied community context, the aim of

"The use of puppets is a way of mobilizing people... we are able to gather the audience first and they will be ready to listen to the message."
– Rose Nyangweso

ethical practice is to work sensitively with the members of the community and let them tell their own stories. Puppet making and performing can help a community provide information through stories in a hands-on and eye-catching way. Puppetry was used in an effort to bring joy and playfulness to the community and to help combat the stress caused by the pandemic.

Seven puppet skits were created and filmed. The skits were widely shared on school and community WhatsApp groups, YouTube channels and other social media. The puppet skits can be viewed here.

2.3 Music

Music is a powerful and accessible communication tool and is an important driver of social and cultural change. Using music as a framework for public health messaging is not uncommon in Africa; songs and music videos have been used to successfully convey important public health messages to individuals and groups in the continent. For instance, the United Nations Children's Fund (UNICEF) *and Médecins Sans Frontières* (MSF) supported grassroots efforts using music to convey health messages in relation to Ebola (https://soundcloud.com/unicef-liberia, Ebola is Real) and HIV/AIDS (Bastien, 2009; Banda & Mambwe, 2013). The video that accompanies a song provides further opportunity for visual reinforcement of the messages relayed in the lyrics, and music videos can easily be shared and viewed via *Y*ouTube and other broadcast media. Radio and television broadcasts and live performances can reach large audiences including those who are illiterate.

Music engages us on an emotional level (Juslin et al., 2008), and one of the reasons music is effective for messaging is that song structure utilizes rhythm, repetition and catchy refrains. These can help to reinforce messages and make them more compelling and memorable, creating public health "earworms" (catchy songs) (Jakubowski et al., 2017).

Compositions that incorporate regional traditional and/or popular music genres can help to ensure that health communications are culturally appropriate (Frishkopf et al., 2016). Local musicians are often well respected in the community and seen as trusted sources of information. Hence, musical interventions potentially have more validity and authenticity within that community. Working with local musicians can facilitate access into existing social networks, including opportunities to target youth, who may otherwise be difficult to reach (McConnell, 2016).

For the ACT Nairobi project, professional and non-professional musicians from the community research team worked together to write and record two songs: "You Can Get It" and "*Kaa Rada*" (Swahili for "'Be Careful") (see Figure 4). The video for "*Kaa Rada*" reinforces the message that facemasks and social distancing are important for reducing the transmission of Covid-19. The "You Can Get It" video showcases some of the creative outputs that were developed in the project, again reinforcing the messages promoted in the song lyrics. There is a joyousness and positivity embedded

in the music, which provides a valuable counterpoint to many of the other Covid-19 communications. The songs were shared via YouTube, WhatsApp groups and other social media, and local and national radio, with an estimated reach of 10,000 people.

Figure 4. Still from "Kaa Rada" ("Be Careful") music video, featuring Nelmo Newsong Munyiri. The music and video were written and filmed as part of the ACT Nairobi project and promote the importance of facemasks and social distancing to avoid transmission of Covid-19.

"I'd say all of [the messages] are effective, including music, because there are so many mediums of listening to music, starting with our community radios, social media...[because] so many people in Mukuru are on social media." – Peris Saleh

2.4 Digital stories, cellphilms and video diaries

Cellphilms – first defined by Dockney & Tomaselli (2009) – are short films made on mobile phones used for participatory visual research. These were used alongside digital stories and video diaries. These participatory research methodologies offered a reflective space to capture situational awareness and behavioural change, and to understand local people's responses to Covid-19 in Mukuru.

For some participants, video diaries, cellphilms and digital stories enabled them to draw on different and personal literacies, providing a means to use forms of expression and communication that appealed most naturally to them. These techniques offer a range of options for conveying narratives and lived experience, recognizing that arts-based methods are not always "crystallized and fixed" (Belfiore & Bennett, 2010) and that there is no single, 'best' model of engagement for leveraging social change. Instead, focus was on the alliance partnerships between community champions and their communities, or as Matarasso (1997) put it, the relationships "between intention and means...between art and society" (Matarasso, 1997).

Community champions were trained in three creative methodologies in the following order: video diaries, cellphilming and digital storytelling. Each of these methodologies built on the content of the last, culminating in a unique approach to digital storytelling that absorbed different elements of all three media. In all, 79 pieces of media were collected, consisting of 61 video diaries, 13 cellphilms and 5 digital stories. These captured both the immediate physical environment and the depth of personal experience of the community champions behind the cameras.

"Starting with the digital storytelling, we were sharing our own experiences of Covid-19 in the community, so you will find what we are talking about is what's really happening on the ground." – Peris Saleh

Combining these methodologies in new and innovative ways enabled community champions to creatively build on their existing skills and to develop insights into areas of importance for both the researchers themselves and their community as the project developed. Structuring the skills development for community champions in this way simultaneously encouraged them to develop methodological and creative innovations in digital storytelling that responded iteratively to their own research interests.

The outputs suggest that it was the incremental development and subsequent integration of research skills which enabled stories to be told in digital formats. These stories provide a unique mode for understanding recurring themes and for sharing these experiences with others. Some examples of the cellphilms and digital stories can be viewed here.

Thematic analysis of the digital content identified the main and sub-themes (the overarching themes) for each digital format, which were then fed into word clouds. Word clouds display the most frequently occurring themes in the largest sized text. They show the lived experiences of residents in Mukuru during the Covid-19 pandemic.

"I learned video editing on WeVideo and cellphilming and also some basic things about filming." - Howard Abwao

Figure 5. Word cloud 1: overarching themes from the video diaries.

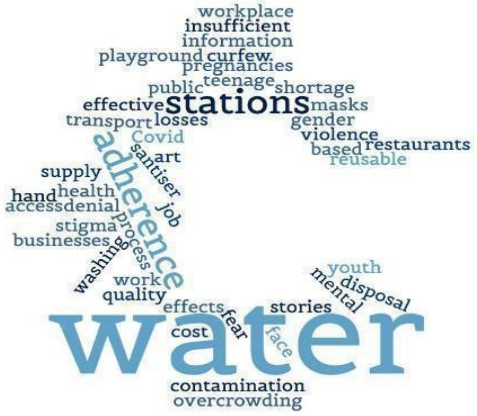


Figure 6. Word cloud 2: overarching themes from the cellphilms

"The digital storytelling brought out the personal experiences of individuals in Mukuru clearly, how COVID-19 has affected people." – Howard Abwao

As Figure 5 shows, a key theme from the video diaries was water, and the cellphilms focused on handwashing, mask-wearing and social interactions ("greetings") (Figure 6).

Within the sub-theme of water, key issues were importance of access to water stations and, by implication, the ability to wash hands, as part of the sanitization effort. Access to water due to water shortages and overcrowding at handwashing stations speaks to the social anxieties witnessed by our community champions.

"I have learned how to differentiate and survey and interview and also come up with the questions. [In] most projects I have been involved [with], you are just given the questions to do the surveys. But with this project we came up with everything from scratch, and for me that is a plus."
– Peris Saleh

Monitoring and evaluation training

In the wider research literature, evidence of the impact of arts-based and creative methodologies is inconsistent and not always well reported. Evaluation frameworks and evaluation practice are often not well defined or evidenced (Daykin et al., 2017). We wanted to provide some basic monitoring and evaluation training to the champions. This was not research-standard evaluation training, but rather an effort to introduce the concept of monitoring and evaluation, and to present some simple techniques.

The training was delivered over a series of online workshops. During the first workshop, we supported the champions to develop an online survey on Google Forms to explore people's perceptions of Covid-19, sources of information about the pandemic, use of Covid-19 prevention measures (e.g. handwashing, masks, social distancing) and attitudes towards Covid testing. The second workshop provided training on designing interview topic guides relating to the impact of Covid-19 for surveys and in-depth interviews, and training on data collection protocols. These techniques were trialled within the champions group, peer-to-peer. Consequent workshops provided training on how to interpret survey findings, including simple quantitative and qualitative data analysis methods, use of graphs, and report writing. Finally, we invited the champions to reflect on the value of the training provided.

"I think I learned more out of evaluation than the other work packages. I learned to develop Google forms...and how to interpret survey data like bar graphs and charts... [and} how to analyse interviews and write a report...I loved that."
– Howard Abwao

It was not possible to evaluate the impact of the ACT Nairobi project on community members. Lockdown restrictions prohibited in-person data collection. Online surveys were not possible, due to budget and time constraints, and the limited access to smartphones and mobile networks in the wider Mukuru community.

A comic produced in the ACT Nairobi project in a community library in Mukuru.

"We had a programme at St. Michael's secondary school that was meant to keep students busy and out of the slums. It involved non-academic training including art and design...since we as teachers are not professionals in those areas, we applied the knowledge we had. I managed to guide [the students] on how to make and use puppets to communicate information. They made hand puppets. We also did some drawings of masks and the coronavirus; this is all thanks to the knowledge acquired from the ACT [Nairobi] project."
– Rose Nyangweso

Project legacy

There is clear evidence of a sustained legacy from ACT Nairobi, whereby the professional and personal skills developed in the project continue to be used and further developed by the champions.

Since the ACT Nairobi project, the champions have formalised into the community-based non-profit Zindua Creative Organisation. The Zindua Creative team were instrumental in the successful delivery of the Tupumue lung health project, and are now entering into other projects and funding applications on their own.

Two of the champions we worked with are teachers. Both have gone on to use the skills training they received through the project in other classroom activities. Many of these methods were novel to the children, who responded with great enthusiasm.

The teachers also shared the infographics, comics, music videos and digital stories in the classroom as educational tools that gave students new information about Covid-19 transmission. For example, one student remarked:

> *"I have seen how soap breaks down the outer layer of the virus. Now I understand why they insist that we sing 'Happy Birthday' as we wash hands at school."*

Regarding the comic, one student said:

> *"If it were not for those cartoons there is a lot I would not have understood. Now I know why they had to close schools for that long."*

"Since I am a teacher in a school in the community, I had a ready audience [for] topics on the coronavirus-prevention strategies."
– Howard Abwao

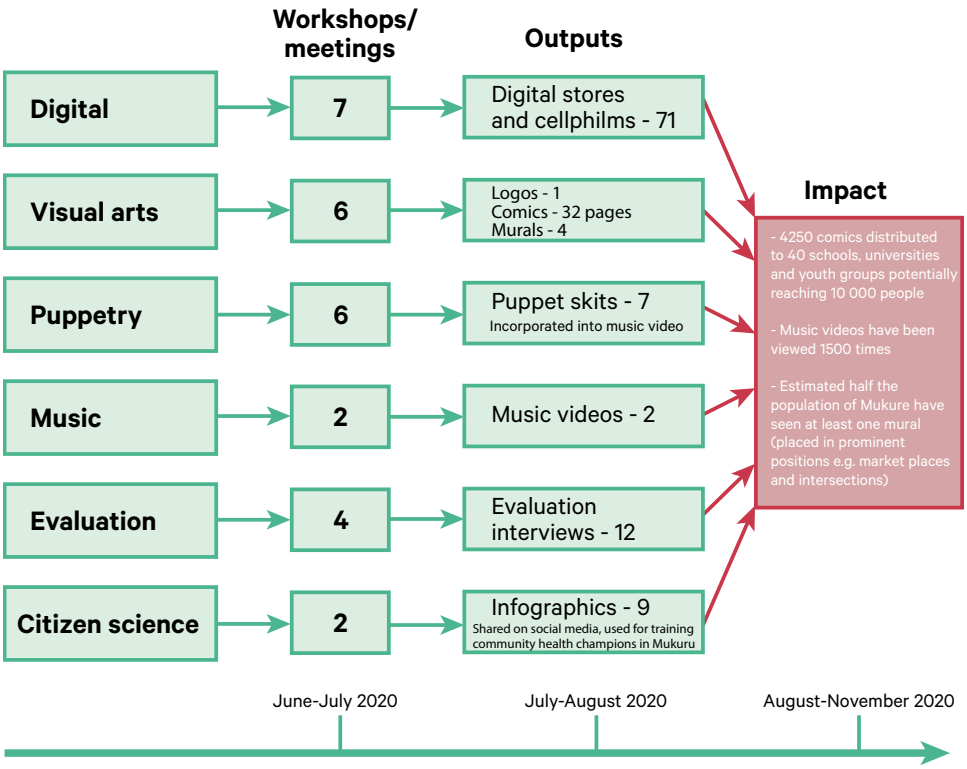
Howard Abwao teaching his students about Covid-19 transmission, using materials developed during the ACT Nairobi project. Photo: ACT Nairobi project

"I am a part of many organized groups, community organizations and cooperatives. These methods will help me to mobilize and organize the community and to train others who don't have these skills. To even take it a step further I would like to take this to rural areas so that they can be empowered with skills on how to engage with projects to develop their community."
– Bob Orengo

"The project gives a platform to be able to practice my art and also pass information. I'd like to use more art to do research and collect information."
– Nelmo Munyiri

Some of the champions belong to the community group, the Mukuru Youth Initiative, which has continued to use the arts-based approaches and other skills developed in ACT Nairobi. During the remainder of the pandemic, the Mukuru Youth Initiative utilised outputs from the project to provide training for community health champions.

Figure 7. Visualization of ACT Nairobi workshops, outputs and impact.



Discussion

Over the course of the six-month project, we generated a wide array of creative outputs which communicated a complex topic to thousands of people of all ages. Here we discuss insights and challenges in the interest of helping others learn from our experiences.

Project overview

Figure 7 shows the number of online workshops conducted during the ACT Nairobi project and provides a brief overview of outcomes. Even in a short time frame, the project led to numerous and diverse outputs, which collectively contributed to an impactful and multifaceted information campaign .

"People here live from hand to mouth. They don't have time to go and research about Covid-19. If you write a very long post about Covid, people won't have time to read. But when we use art to explain a whole concept people are able to internalize and interrogate it more."
– Nelmo Munyiri

"It was a good opportunity to inform and sensitize my community about Covid-19 and how they can protect themselves against [the viurs]." – Bob Orengo

"Each workstream had a UK lead or managers who gave us advice, but they were not there standing behind our backs like overlords. I loved that the project managers guided and did not come to dictate what to do. That was a plus for me because I really owned this project and every output."
– Howard Abwao

Challenges faced

The nature of life in an informal settlement, further compounded by the difficulties of life during the pandemic, also affected project participation, and the engagement of community champions in the ACT Nairobi project ebbed and flowed over the six months of its duration. The priorities of day-to-day existence were not always compatible with the timetable of the project. As one champion asked, *"What should I do? Join the meeting or feed my kids?"*

Benefits of context-appropriate content

In terms of efficacy, visual outputs work well within the context of informal settlements, where access to communications technologies is lacking and inconsistent, and where word on the street is a key source of news. Information is generally shared informally by local activists and influential members of the community. The public artworks used in this project provided information directly to people where they live. By their nature these artworks are inclusive. They do not require either prior or specialist knowledge.

Boost in local ownership

Pandemic-related restrictions on travel and in-person contact meant that much of the project relied on virtual interactions. We observed more independent activities occurring among community champions in the ACTNairobi project than in other projects conducted in person with the same UK and Mukuru partners. We interpret this as evidence that the virtual nature of delivery of workshops and consultations fostered a greater sense of local ownership among the champions.

Indeed, because UK team members were unable to facilitate meetings in person, champions self-organized. They created content individually within home or community settings, and worked together to develop ideas (such as for the comics, murals and puppetry). The virtual workshops and consultations were designed to provide a clear understanding of tools and their application as they related to either community messaging or personal-narrative development. The emphasis was always on content to empower and build upon the champions' existing expertise and support their involvement across multiple activities.

The community champions reported that the virtual delivery had a direct impact on their sense of ownership and enabled a high level of investment in the project, which was seen as a vital dialogue between community members for the benefit of their own community. This sense of ownership is also evident in the nature of the outputs, which are usually highly personal, community centred and innovative, often coming from wide-ranging discussions in organized meetings.

"I think these arts-based methods are tools to bring out what people did not even know they could bring out."
– Howard Abwao

"I want to challenge myself and do something that is tangible so that [in the future] I can...look back... and say that [was] my work." – Rose Nyangweso

An advantage of working virtually is that many of the workshops were delivered as recorded presentations, which can then be watched again. These recordings became valuable resources enabling champions to revisit ideas for teaching comic making, puppetry, and other artforms. The videos can be used to develop skills and enhance capacity building beyond the scope of the project and to address future concerns.

Conclusions

This project utilized arts-based approaches for both knowledge production and knowledge dissemination; that is, it combined conducting qualitative research *through* through the arts and practice-based research *for* the arts. This culminated in the production of a range of physical and digital outputs centred on communicating messages to mitigate the transmission of Covid-19.

Through these diverse creative methods, the community champions were able to tell their own stories and articulate truths about their own "here and now". This approach and these methods made effective tools for narrative development. Ultimately this narrowed the gap between the messenger and the receiver. We argue that this made communication more effective.

We urge researchers, whatever their field, to use creative methods to gain rich insights into people's lived experiences and to reach audiences who would not usually see or hear research outputs. Reaching out to artistic organizations in the project locale is a good starting point for finding collaborators in this effort.

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