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What is 'Antimicrobial Resistance' and why should anyone make films about it? Using 'Participatory Video' to advocate for community-led change in public health

Paul Cooke, Ashim Shrestha, Abriti Arjyal, Romi Giri, Nichola Jones, Rebecca King, Jessica Mitchell, Caroline Tait, Inés Soria Donlan, Sushil Baral.

Abstract

In this article we discuss the role of Participatory Video (PV) as a tool for developing community-level solutions to 'Antimicrobial Resistance' (AMR) in Nepal. In recent years PV has become an ever more popular tool in development contexts for supporting communities in low and middle income countries to raise awareness of issues that they do not feel are adequately represented in mainstream media. One area of growing interest in this regard is public health. However, PV has not, to date, been used to address AMR, currently considered to be one of the biggest public health issues we face globally. Placing our project within the wider context of 'participatory documentary' practice, we examine the worldview presented in the films this project generated, a dimension of such projects that is, somewhat curiously perhaps, often overlooked, with commentators tending to focus on the *process* of delivering PV, rather than the final *products* made. Here we are particularly interested in questions of *power* and how a close reading of these texts produced highlights the complexity of the power relationships at work in these films, which, in turn, can allow us to reflect in new ways on upon the *processes* at work in the project.

Key words

Participatory Video, Development, Antimicrobial Resistance, Nepal, Participatory Documentary

> We have only watched movies that others had made. I came here to learn about how people from within our community had prepared a film based on the issues that are here. (36 year-old female shopkeeper from Chandragiri municipality in Kathmandu)

Introduction

The last ten years has seen a huge growth in the use of participatory video (PV) as an advocacy tool, particularly in development contexts, as one of a number of arts-based participatory tools designed to maximise community engagement with, and ownership of, the development process. Indeed, in post-conflict societies such tools are frequently considered something of a 'go-to' methodology, described by Craig Zelizer, for example, as 'an essential component of peacebuilding work' (2003: 62) or, as Matthew Flinders and Malaika Cunningham suggest, playing a key role in the production of civil society in the developing world, helping to 'nurtur[e] engaged citizenship' (2016: 5). Yet while there has been a growth in interest in participatory arts

generally, and PV more specifically, there is, as E.J. Milne notes, still relatively little literature that engages critically with such projects. Citing Bronwen Low et al., Milne notes the 'descriptive' and 'celebratory' tendency of much of the recent work on PV: 'In such accounts, participatory video is almost unilaterally regarded as an unequivocal means to empowerment and engagement' (Milne 2016: 401), frequently conceptualised as a way of 'giving' a community 'voice' (Makamba et al. 2019).

As can be seen from our opening quotation, which was taken from a participant in a project the authors of this article ran in Nepal between 2018-19 that sought to develop community-led responses to Antimicrobial Resistance in two municipalities in Kathmandu (our case study in this article), PV certainly has the potential to engage communities in new ways, maximising the value of local knowledge in addressing the issues a community faces. In this article, however, we also wish to build on the more critical approach to PV put forward by Milne and others, developing this argument in two distinct ways.

First, we will examine the use of PV as a community-engagement tool to explore public health issues, a particularly visible area of enquiry where there is an urgent need for critical reflection on PV as a method. Here, we will be looking at how PV can be used to raise public awareness of the problem of Antimicrobial Resistance (AMR), one of the most pressing public health issues we face as a planet, defined by Sally Davies, the former Chief Medical Officer for England, for example, as 'as big a threat as climate change' (Davies 2019). While there is a growing body of literature on the use of PV in public health, especially in development contexts, it has not to date been used within the context of AMR. As we shall discuss in more detail below, there is a particular need for critical reflection on this kind of work where there is the potential for the communication of misinformation that could do a great deal of harm. This is (or at least can be perceived as being) a challenge for many health-related approaches to PV focussed on the prioritization of community perspectives.

Second, while PV projects invariably make claims for the value of this approach as an effective method for 'empowering' communities, 'giving' participants 'a voice' (however potentially patronising such a formulation might be), very little space is generally given to the exploration of the films produced in such projects, that is the specific articulation of this 'voice'. Thus, in this article, we also wish to explore our Nepali PV project not only in terms of the *processes* of community engagement and advocacy it employed – which in this case involved developing both a community-led public health campaign and a critical dialogue with national and regional policymakers – but also the types of *product* it generated. Here we are particularly interested in questions of *power* and how a close reading of these texts highlights the complexity of the power relationships at work in these films and which, in turn, can allow us to reflect in new ways on upon the *processes* at work in the project.

What is 'Antimicrobial Resistance' and why should we make films about it?

Antimicrobial Resistance (AMR) occurs when microorganisms that cause infections evolve ways to survive the drugs designed to kill them. The more a microorganism is exposed to an antimicrobial agent, the more likely it is to find ways to evolve and survive. While AMR occurs naturally, it is currently accelerating on a global level due to the misuse and overuse of antibiotics in the healthcare, veterinary and agricultural sectors. The unmanaged disposal, and run-off, of antimicrobials from human and animal sources allows both waste antimicrobials and resistant genes to enter the environment, risking the spread of AMR on a larger scale. In 2015, the World Bank

released alarming predictions regarding the health and economic cost of failing to regulate AMR this decade. It suggested:

- Drug resistant diseases currently cause at least 700 000 deaths globally each year. 230 000 of these are from drug-resistant TB alone.
- In a worst case scenario this figure could rise to 10 million global deaths per year by 2050 if no action is taken.
- In countries where resistance can be measured accurately (Europe, North America, Australia) the OECD predicts that up to 2.4 million people could die as a result of AMR by 2050.
- The economic damage of uncontrollable AMR is likely to match that of the 2008-9 global financial crisis due to the potential need for dramatic increases in spending on healthcare and food security.
- Consequently, by 2030 up to 24 million people (mainly in LMICs) will be forced into extreme poverty.

(World Bank 2016)

Echoing the World Bank, the World Health Organisation's (WHO) Global Action Plan on AMR predicts that developing countries, such as Nepal, are set to bear the highest burden of drug resistant infections in the coming 30 years (WHO 2015). This is due to a combination of factors including population growth, poor water and sanitation services, and unequal access to healthcare. Nepal, for example, has seen huge population growth in the past 20 years, putting pressure on healthcare, sewerage and food production sectors. The infrastructure of the country lags behind its population boom, with particular pressure being put on agricultural industries to provide for this growing number of people. Additionally, crowded settlements, a predominantly rural population, recent natural disasters, and poor sanitation mean Nepal has a higher prevalence of common diseases (gastrointestinal issues, intestinal parasites, leprosy, and TB) than other South-East Asian countries. Antimicrobial usage to treat these and other ailments is not always regulated by healthcare providers. In combination, these issues mean that there is an over use of antimicrobials generally, and antibiotics in particular. For example, antibiotics may be used to treat simple respiratory symptoms in humans or used for growth promotion in livestock. Such misuse, combined with improper storage and disposal of such drugs, is fuelling AMR in both urban and rural regions of Nepal (Acharya and Wilson 2019).

The publication of the World Bank's report and the WHO action plan, in turn, spurred many governments and multilateral agencies to compile AMR action plans, exploring an array of approaches, including developing new drugs, ensuring equitable access to both drugs and preventative health care, maximising the efficiency of water, hygiene and sanitation systems and raising public awareness and education on AMR. This final approach has been seen as particularly important to many national and institutional strategies. As the Wellcome Trust puts it: 'Community-level understanding is necessary to ensure that all people, from parents of ill children to farmers, understand what antibiotics can and cannot do and why minimising use is in everyone's interests' (Wellcome 2018: 10). That said, delivering community-level behaviour change is a slow process for these kinds of actors, focussed as they inevitably are on policy-level interventions. It was within this context that we developed our PV-based community engagement project. This was a partnership between the Centre for World Cinemas and Digital Cultures and the Nuffield Centre for International Health and Development at the University of Leeds, the Nepal-based NGO HERD

International and the Nepali Ministry of Health and Population. Its aim was to go beyond traditional forms of government-driven public health education to adopt a form of community engagement that would, on the one hand, generate a community-specific public health campaign and, on the other, a dialogue between national and regional policymakers and the people on the ground these policymakers are looking to influence, our starting point being the assumption that policies are going to be more effective if the policymakers understand the specific challenges faced by the communities they are seeking to address. Here our working thesis was that community engagement approaches have the potential to interact with, and impact on, all other critical AMR initiatives, due to their capacity to identify barriers to addressing AMR within community settings and identify contextualised community-led solutions to overcoming those barriers. As we shall discuss in the next section in more detail, we considered PV to be a potentially effective tool in facilitating this type of impact, helping us to co-produce with our community partners the kind of bespoke health campaign that could also provide insight, and generate dialogue with the policymaking-community.

Participatory Video and Public Health

> For every documentary there are at least three stories that intertwine: the filmmaker's, the film's and the audience's. (Nichols 2012: 61)

PV is generally defined 'as a *process* [...]. It can serve as a powerful force for people to see themselves in relation to the community', in order 'to empower people to shape their own destiny' (White 2003: 64, our emphasis). The starting point for the contemporary surge in PV activity is frequently traced to a community filmmaking project set up by the National Film Board of Canada in the mid-1960s to support the inhabitants of the Newfoundland island of Fogo in their efforts to avoid resettlement by the government (Crocker 2003). Filmmakers worked with the island's inhabitants to make films about their lives, the aim of which was, firstly, to raise awareness across the island of the shared nature of the inhabitants' plight. Here film became an extension of the way Benedict Anderson describes newspapers functioning in the Eighteenth and Nineteenth Centuries. The circulation of film images of, and by, the inhabitants of Fogo helped them to see themselves as part of a larger 'imagined community' with a collective purpose (1991: 6). Central to what became known as the 'Fogo Process' was collective critical self-reflection by the islanders of the images produced, which were generally either short pieces of Direct Cinema capturing everyday life or single-shot, individual interviews that attempted to create what Colin Low, the main external filmmaker involved in the process, called 'vertical films', or films which presented non-hierarchical, inclusive images of life that avoided relativizing the voice of participants as, he argued, can happen in multi-voice – what he termed 'horizontal' – films, where one interviewee is contrasted, or indeed played off, against another (Crocker 2003: 129). Through their production, and more importantly their exhibition and collective consumption, participants claimed they gained in 'confidence [and] self-worth', developing a 'better self-image' that valued their local knowledge (Crocker 2003: 130). In turn, the 'Fogo Process' allowed this community, with its new collective sense of identity, to project itself externally in order to advocate for change with the government (Crocker 2003: 123; Corneil 2012; Walker and Arrighi, 2012: 410; Bell 2017).

The Fogo process has been adapted to innumerable contexts since the 1960s, and the idea of such filmmaking being about the *process* of production and exhibition, rather than being about the quality of the products made has remained a central tenet of these kinds of projects (White 2003: 64). However, curiously, focussing centrally on the process can ultimately limit a good deal of the 'empowerment' potential of such projects, which is generally their central rationale. Failing to encourage participants to take pride in the quality of their products potentially limits the level of confidence such projects can generate in participants. As Claudia Mitchell, E-J Milne and Naydene de Lange note, 'this is an area worthy of study but often left out of participatory video studies. The process is of course important, but then so are the producers and their productions' (Michell, Milne and de Lange 2012: 9). In this article we wish to build on the small body of work that explores the texts produced in such projects (Jipson and Paley 1997; Barone 2003; Raht Smith and MacEntee 2009; Butler-Kisber 2010). In so doing, we look to treat participants as *filmmakers*, rather than 'merely' participatory, or community filmmakers. In the process, we also look to draw on the wider tradition of 'participatory documentary' (Nichols 2012: 115-24). This is an aesthetic tradition which foregrounds the active engagement of the filmmaker with her/his subject in the production of the film. There would seem to be obvious overlaps in practice with PV. However, it is not often discussed in connection with this kind of work. Probably the most discussed example of the participatory documentary tradition is Edgar Morin and Jean Rouch's *Chronique d'un été* (1961). This film would seem to pre-empt the Fogo experiment, presenting a series of interviews between Morin and various inhabitants of Paris, as they reflect upon the nature of city life and the legacy of the past. The film ends with a staged discussion between the film's participants who, having watched the footage, debate film's ability fully to capture the nature of their experience. However, unlike the Fogo films, *Chronique d'un été* is seen as a canonical film text rather than the product of a 'participatory film project', where the aesthetic quality of the final project is irrelevant (Walsh 2016: 409). In this article we do not wish to make qualitative comparisons between films such as *Chronique d'un été* and the films made by the participants of our project in Nepal. Rather, we wish to make the point that if participatory documentary is about the active engagement of the filmmaker with her/his subject, participatory filmmaking projects might be considered to be the ultimate radicalisation of this mode of filmmaking, making the subject *into* the filmmaker. However, such projects are generally never conceptualised in this way.

It is here that we would like to turn to the Nichols' quotation that stands as an epigram to this section of our article. For Nichols, the meaning of a documentary is the product of a creative tension between what he terms the three 'stories' that are always at play in any given film text: that of the filmmaker, her/his subject (what Nichols calls 'the film') and the consumer of these films. This is also an important, but seldom discussed, tension in participatory filmmaking projects. Indeed, the relationship between Nichol's stories is often particularly complicated in the films produced by such projects. To whatever extent PV products strive to unify the roles of the film subject with that of the filmmaker, in practice the role of filmmaker is invariably shared between the subject and the project 'facilitator'. Moreover, the motivations of the 'facilitator' and their role as both the producer *and consumer* in such projects is seldom scrutinised. Similarly, the very different ways the meaning of such films is understood in different exhibition contexts by their audience is also rarely explored. A film might be received in a screening in Chandragiri Municipality on the outskirts of Kathmandu, for example, in front of the filmmakers' family or friends, as a great personal achievement by marginalised community members not considered to

be the kind of people who 'make things like that' (Peters et al. 2016). The focus of discussion then tends to change if the film is screened as part of a public event, organised by participants to raise awareness of a specific issue discussed in the film, or as part of a policy development event. The meaning can change still further if the films are taken out of their initial context of production and screened, for example, as part of a presentation at a university by the project facilitator, or used as a tool for fundraising by an NGO supporting the project participants. The curation of the films is always central to their meaning (Maclean 2011: 16). As we shall discuss further below, it is the tension between Nichols' 'three stories' and the implications this has for participatory filmmaking that is an important structuring device in our thinking about the communicative potential of our PV project.

Within the field of Public Health, the use of audio-visual communication methods is reasonably common. In a scoping survey undertaken by some of the authors (currently being prepared for publication), around 50 recent health-focussed PV projects were identified, taking place around the world, with a particular emphasis on work being undertaken in LMICs. A wide variety of health topics are addressed in these projects from HIV/AIDS (e.g. Catalani et al. 2013), Smoking (e.g. Park et al. 2017) and substance abuse (Green et al. 2015), to issues around asthma (Gupta et al. 2013) mental and sexual health (Waite et al. 2011), nutrition (Harou and Dougherty 2017) and maternal health (Ntuulo, Mutanda and Namutamba 2016). Noticeably, there were no studies exploring the potential of PV for addressing AMR.

The complex dynamics at play between Nichols' 'three stories' run throughout the public-health projects reviewed. In line with most writing on PV, a major focus of research is on the participant/filmmaker's 'story'. A dominant theme in this regard is the development of the participants' skills (Willis et al., 2014; Chávez et al., 2004; Warren et al., 2013; Park et al., 2017; Peters et al., 2016; Alix Harou, 2017; CM, 2016; Murphy et al., 2007). Given that PV entails teaching a community group to make videos, there is inherently an aspect of skills building in such work, with many studies highlighting the value participants put on having gained a practical understanding of videography and editing (Warren et al. 2013; Peters et al. 2016; Park et al. 2017). More broadly, studies frequently point to the relationship between skills development and how this helps participants to gain self-confidence, with some studies focussing, in particular, on the therapeutic potential such skills development can have on participants (Mouletsane 2009; Willis et al 2014). A key feature of participatory video projects, and indeed participatory research in general, is the goal of allowing participants directly to shape outputs. Studies repeatedly state that participants were enabled to make creative decisions during the process of video production, and valued the opportunity to control the message within the videos they made (Willis et al., 2014; Waite and Conn, 2011; Green, 2015; Peters et al., 2016; Warren et al. 2016; Gupta et al., 2012; Clabots and Dolphin, 1992). Central to this, the literature frequently suggests, is the iterative approach to the research process such projects tend to adopt which, in much PV work, is built around participants repeatedly reviewing their videos and make alterations, helping them to learn by doing during the project (Warren et al., 2016; Poureslami et al., 2016).

Also often discussed in the public-health literature on PV is the relationship between the producer and consumer of the texts generated in such projects. At times the focus here, in actual fact, still remains on the producers as, themselves, the consumers of the texts generated (Moletsane 2009). However, some research does discuss the importance of having a forum after a video has been shown, where community members are able to reflect creatively upon the video and discuss its

content (e.g. Acosta et al. 2014; Waite and Conn, 2011; Warren et al., 2013; Peters et al., 2016). A number of studies focus, for example, on how PV projects have created spaces for young women to discuss health-related topics that are usually considered taboo. Thus, Waite and Conn describe how female participants felt more able to discuss issues freely during a drama-based PV project than they might have been able to otherwise (Waite and Conn, 2011). Moletsane et al. focus on women with HIV/AIDS in South Africa, examining the extent to which the audience of the PV texts produced felt free to explore taboo topics, using video in a way that, they suggest, would not have been possible using more traditional research methods (Moletsane et al., 2009).

The relationship between the producer and consumer in public health PV projects, and with it the tension between Nichol's stories, can be made more complex still when we consider the relationship between the facilitators of such projects and the community participants. At times the facilitator functions as a co-producer of the project outputs, supporting participants to make their films. Such projects might involve, for example, a researcher working with a community in order to actively raise awareness of a given issue. Christopher Warren et al.'s 2016 study, for example, looks at the use of PV as a method of raising awareness of asthma as a community problem in certain parts of Chicago. At other times, s/he can be a further consumer of the texts produced, treating the films made as research data. For example, projects often involve a researcher working with the community to find out its basic understanding of a given problem, with the aim of designing an intervention to improve this understanding. Or a project might involve PV being used to evaluate the effectiveness of an earlier intervention (e.g. Hanse and Forsman 2001).

In all such cases, it is important to note that there is a very clear power hierarchy at play between the 'expert' facilitator and the community participants, a hierarchy that is explicitly challenged in, and indeed runs counter to, the ethos of many PV projects that operate outside of the public health sphere and work in the tradition of the Fogo Process. In public health, the community is frequently either being tested on what it *does not know*, or a project is built around an educational process through which the community's ostensible *lack of knowledge* can be over come. This is, perhaps, understandable given the nature of public health education. With regard to AMR, for example, the main causes of the problem are well known. There are clearly deliniated global guidelines that exist and are proven to help slow down the progress of AMR, from making sure that a patient finishes their course of treatment to ensuring that antibiotics are only obtained with a prescription from registered health practioners. It would seem self-evident that these facts are not questioned in the course of a participatory project (WHO 2018). However, less frequently focussed on are the reasons why these messages are not received by certain communities around the world, from the point of view of the communities themselves. It was this issue which was the impetus of our project in Nepal. Here, we specifically sought to challenge the implicit power dynamic at work in the knowledge heirarchy of many public health PV projects, instead creating a process where all participants could communicate their knowledge and experience of the AMR equitably. Thus, project facilitators, who were all experts in the issue of AMR and public health, worked to share their knowledge, raising awareness of the issue within the communities with whom we were working, while also themselves learning from, and valuing, the communities' specific knowledge about the challenges they face in avoiding the misuse of, in this case, antibiotics, in full knowledge of the basic facts about AMR and its causes. In so doing, we actively sought to avoid any *extractive* approach to knowledge creation that saw our community partners primarily as sources of data. Instead we sought to coproduce work

that drew equitably on the knowledge of all stakeholders. As we shall see in the next section of this article, this was easier said than done.

Using PV to Source Community-Led Solutions to AMR in Nepal

The aim of our project, which was funded by the UK Arts and Humanities and Medical Research Councils, was to develop, pilot test and evaluate an intervention aimed at preventing and controlling antibiotic resistance in Nepal. Community-led solutions to the growing problem of antibiotic resistance were to be promoted through a PV intervention that would lead to a health-education campaign within communities, on the one hand, and to an advocacy campaign targeting policymakers, on the other. Between January 2018 and June 2019, the team worked consecutively in two communities in Kathmandu: firstly the peri-urban community of Chandragiri Municipality and then the inner-city community of Madhyapur Thimi. In each iteration of the project, over the course of a week-long workshop, a small group of community participants were introduced to the key issues in AMR, as set out in the WHO guidelines, via a number of arts-based interactive exercises designed to allow them to reflect upon these issues from the perspective of their communities. Alongside this, the groups were also given training in film production.

The workshops subsequently led to the production of two cycles of three films focussed on engaging with the issue of AMR from the perspective of their respective communities. Each film was conceptualised as a stand-alone piece. However, they were also put together into two anthology films in which each group also described the nature of the overall project, their approach to the production process and how they wished to curate the films both to their local community and to regional and national policy stakeholders. The longer films, both around 30 minutes in duration, were then used as the centrepiece of two community showcasing events, to which participants, their family and friends, policymakers and other community stakeholders were invited. These events were designed not only to highlight the outcomes of the project but also to start a community dialogue on how this pilot project could be taken forward and developed in the future.

The dominant mode of narration in the films produced was that of docudrama. The majority of the groups presented an everyday situation in their community in which an individual would be faced with a dilemma that put them at odds with the WHO guidance on the correct usage of antibiotics. These situations invariably highlighted the economic and social barriers faced by communities in this regard. The film *Kusum*, for example, made by participants from the Chandragiri Municipality, opens with a mother frantically embracing her dead child, imploring her to wake up. This was an invented scenario for those involved. Nonetheless, it has a strong sense of authentic immediacy, due to its *cinéma vérité* aesthetic, and use of long takes that allow the improvised performance of the non-professional actors take centre stage. The opening sequence is followed by an extended flashback, in which the camera reveals the reality of everyday life for this peri-urban community. We see the child in her sick-bed, set up outside the house, cooking utensils around her. We see other women from the extended family discussing the case as they go to collect water from the local well. Ostensibly unable to afford to visit the hospital, the mother sends her young son to buy 100 NPR (75 pence) of ‘medicine’, handing him the packaging from a prescription used for a non-disclosed previous illness suffered by someone in the family. At the same time, the mother also calls a traditional faith healer to tend to her daughter. This man diagnoses the girl as having been infected by a witch with ‘evil spells’ and prescribes that the mother pays for certain religious rites to cure her. As the child’s

illness persists, the other women in the family urge the mother to take her daughter to the hospital, at which point it is clear that the mother's reason for not going might not be entirely financial. The mother clearly feels a tension between traditional community health-seeking practices and modern medicine, a tension that forces her to engage publicly with the traditional healer, while also engaging indirectly with modern medicine by sending her young son to the pharmacy. The overall message of the film, however, is clear. Modern medicine, used correctly and after seeking proper medical advice, is always the answer. This is made explicit in a moment of a high tension in the film when a local village elder visits the mother and berates her, as she still holds her dead child, for not taking her daughter to the hospital, and making sure that the drugs she gave her were appropriate.

This is a fascinating film and highlights a number of trends found throughout the work produced in the project, central to which is the question of power and the relative value of competing knowledge economies at work in the participants' environment. As previously discussed, this is a key issue in many public health PV projects and here we see it at work in the films themselves. The emotional power of *Kusum* comes from the sense of authenticity that emerges from its *vérité* aesthetic. This is a story strongly rooted in the particular experience of the community that produced it, its *mise en scène* entirely taken from material readily at hand to the community, the colour palate and approach to lighting shaped by the time of day the production crew were available to shoot and the locations they had at hand. However, the community perspective that drives the *mise en scène* is always subordinated to the values of modernity, values that are marked, on the one hand, by a noticeable gender dynamic present in the film and on the other by the film's camera work. While the other women in the mother's family call for her to take her daughter to the hospital, she resists, arguing for the continued importance of traditional health practices and promising that, if they do not work, she will *then* go to the hospital. The final lecture, providing a somewhat heavy-handed moment of public information broadcasting, perhaps, on the WHO AMR guidelines, is delivered by a male village elder who cannot, the film suggests, be ignored. The camera work also emphasises this power dynamic throughout. The local/domestic/traditional knowledge of the mother is presented in a series of high angle shots that emphasise the inferiority of her knowledge. She sits, crouched at her daughter's side, the spectator staring down on her from above, as she makes her traditional offering or gives her daughter a tablet from a silver strip with no indication of what the tablet contains.

Both the gender dynamic found in *Kusum* and the sense of their being a clear value hierarchy in knowledge between many of the (generally female) community members we meet and those (generally male) representatives of the modern health system is found in the majority of the films produced during the project. This frequently goes hand in hand with the use of docudrama working in a tradition of public information broadcasting, a form of communication that has a strong tradition in Nepal (Dutta and Iccha 2006). This mode of communication is particularly pronounced in the set of films made by the inner-city community in Madhyapur Thimi. In the film *Doctor's Advice*, for example, a woman with a bad cough goes to the local health centre in order to ask for antibiotics. Instead of receiving the drugs, she undergoes a long medical consultation, during which the doctor explains not only the dangers of overprescribing antibiotics in humans, but also the need for a so-called 'One Health' approach to the drugs, explaining how the misuse use of antibiotics by chicken farmers (the woman's family also keeps chickens) can further accelerate AMR in humans. Again, the camera emphasises the power dynamic at work. A close up of the woman

coughing is juxtaposed with a low angle, over the shoulder shot from the woman's point of view as the doctor explains the correct way of using the powerful drugs she is requesting. The doctor is the holder of truth; the female patient the willing recipient of his knowledge.

That said, in one of the films produced by the Madhyapur Thimi community, there is a more complex gender dynamic presented: *The Treatment of TB*. As has already been noted in the World Bank's report, TB is a major AMR issue. In this film, we again see the significant role played by community health practices. However, in this case they are presented in a more positive light, while also highlighting the important role women can play in promoting a positive health-seeking culture at the community level. The film opens with a Female Community Health Volunteer (FCHV) paying a visit to a family, where the wife suspects that her husband has TB, having seen blood in his sputum in the last few days. The FCHV programme in Nepal was set up in 1988, initially to support family planning. Over the years the FCHCV's role has expanded to become a crucial link between families and formal health facilities (Khatri, Mishra and Khanal 2017). This particular FCHV works with the woman to convince her husband to visit a TB clinic, where he is prescribed a six-month course of antibiotics. After two months, when the man has started to recover, he stops taking his medicine and stops coming to the clinic. The FCHV is contacted by the clinic staff to check up on the man, who soon gets ill again and now has to start the treatment again from scratch, this time with a higher dosage. The FCHV system is presented as an important community safety net. However, interestingly, when the man returns to the clinic, it is the male doctor who 'disciplines' the patient. In a long take, low-angle, over the shoulder shot from the perspective of the male patient, the spectator is put into the position of the man being given a forceful lecturer on the folly of not finishing the entire course of medicine and staying in touch with the clinic. The public information element of the film is again presented as the domain of male, expert knowledge.

The one noticeable exception to the public information infused docudrama approach to filmmaking in the project is a documentary made by one group of Chandragiri filmmakers: *Antibiotics in Agriculture*. Adopting a largely observational style of storytelling constructed from the voices of participants, the film highlights the role of antibiotics and other antimicrobials in the working lives of three local farmers, focussed on growing tomatoes, pigs and chickens, each farmer relating their own experience from their particular point of view. The film's mode of presentation is very intimate. A series of beautifully crafted close ups give an inside view of the life of the farmers. We learn about their close connection to their plants, which we watch them they carefully prune, and their animals, that they affectionately stroke. The juxtaposition of the three farmers' perspectives also emphasises the interconnectedness of the local farming ecosystem. Each farmer relies on the others for resources and knowledge. We are told, for example, how the tomato farmer learnt his trade by observing his neighbours, or how pig slurry is used as manure for the tomatoes, ensuring that all the local resources are used, and reused to their full potential.

Antibiotics in Agriculture is the least explicitly didactic of the films produced and so is the most open to interpretation by the spectator. This provided a challenge for the project and its concern not to propagate misinformation about AMR. Particularly ambiguous, for example, is the sequence narrated by the chicken farmer, which explains how he uses antibiotics prophylactically in order to prevent his chickens getting sick, the narration accompanied by a sequence of shots of empty drug sachets, evidencing his practice. This is a potentially problematic sequence because it presents

what is considered to be inappropriate use of antibiotics, but which is widespread practice in this part of Nepal. Similarly, the discussion of the ways in which the farmers recycle slurry, presented in the film as an unambiguously good practice, is also potentially problematic, if the slurry contains high levels of antibiotics due to their prophylactic usage in other parts of the food chain. However, while this challenges one of the fundamental values of the project, namely to ensure that the films made do not spread misinformation, the non-didactic, openness of the film's approach to its subject matter, which treats the farmers' experiences with respect, potentially also allows the project to challenge the power dynamic at work in many of the other films discussed above and seen throughout public health PV projects. The way the Chandragiri group mitigated the risk of the film being misinterpreted was via the overall construction of its anthology film, which bookends each of the three individual films made with a brief, 'to camera' presentation by members of the group of the key messages the filmmakers were seeking to communicate. In this case, the filmmakers highlighted the dangers of using antibiotics prophylactically, as well as the need for caution when selling animals that have been given antibiotics recently, as well as their produce (eggs, milk). Here, again, the participants emphasise a 'One Health' approach to AMR. In the process the unambiguous, public information broadcasting approach once more comes to dominate the film's mode of communication.

In the second iteration of the project, with the Madhyapur Thimi community, while the individual films produced all tend towards a public information style of docudrama, the overall approach to the films' curation is more developed. In the second anthology film, the individual stories are linked by sections in which the participants talk about their experience of making the films, from which the key messages the filmmakers wish to communicate emerge more organically than in the first film. In so doing, the knowledge hierarchy we see in the majority of the films is subtly challenged. Through the linking sections we witness the community participants taking ownership of the project more explicitly than they do in the first iteration. The films are shown to be the product of their negotiation of the traditional and modern knowledge economies. We learn, for example, in *Behavioural Change* – a film about an urban small holder – of the competing pressures on both the farmer (playing himself in the film) and the vet he visits that lead to the over prescription of antibiotics, all of which are rooted in all the people involved not having enough time to discuss the situation properly. The farmer wants a course of antibiotics to treat a sick cow. Without diagnosing the animal himself, the vet gives the man the drugs. As a result, the cow does not recover, and the farmer sells contaminated milk into the food chain. While the film produced ultimately gives the same type of message about the correct use of antibiotics we find in most of the other films – and specifically, the value of modern medicine properly prescribed – the farmer's experience is not presented as in anyway invalid. The pressures he faces are very real and the way he negotiates them are very understandable. Moreover, the vet also has to accept a level of culpability for the situation that emerges in the film. It is clear that he should not have allowed the farmer to treat the cow without supervision.

Here we see the project develop a more equitable approach to knowledge creation that points to the need for more two-way dialogue between all the stakeholders involved. This is also alluded to in the overall construction of the two anthology films. In each, the films end with a number of interviews with national and regional policymakers. These interviews, conducted on behalf of their respective communities by members of the HERD international team, emphasise the need for good communication between policymakers and communities if the Nepali national

AMR plan is to be effectively implemented. While it is clear that a key emphasis in this 'dialogue', for policymakers, is for local communities to be better educated on the topic of AMR, it is also clear from the films produced that public education can only be effective if those in positions of power are cognisant of the particular challenges faced by members of the community and that key messages are communicated and contextualised in a way that makes sense to, and values, the everyday experience of these communities. This is a dimension of the project which, as we shall now explore, came out very strongly in discussions with all project stakeholders after our two showcasing events, where we also explored how the project should be taken forward.

Understanding the Value of Local Knowledge

The power hierarchy identified in many of the public health-focussed PV projects reviewed in this article was very evident in our work in Kathmandu. It was clear from participant feedback, particularly during the initial workshop phase, that they fundamentally saw the project as an educational experience. On the one hand, participants highlighted the value they placed in their new found knowledge about AMR:

> We learned that the antibiotics should be taken after proper medical consultation and the malpractice associated with antibiotics that we have been practicing should be discontinued. So, I find that very likeable.' (53 year old FCHV from Madhyapur Thimi)

> I used to buy antibiotics and take them whenever my symptoms got severe. I used to take antibiotics for 2-3 days and discontinued them after I started feeling better. However, after attending this program, I have been taking the complete doses of antibiotics. (37 year old housewife from Madhyapur Thimi).

On the other, and echoing a common experience in PV projects, participants were excited to learn how to make films, while also frequently admitting that they were initially quite daunted by the task. This comes through very strongly in both the anthology films, for example, where participants in both iterations talk of feeling 'overwhelmed' when they saw the cameras at the workshop for the first time, while also feeling 'proud' of learning how to use the camera and put a story together. Participant appreciated, in particular, the hands-on approach to training, which was something they did not necessarily expect:

> You gave *us* the camera and asked *us* to take some videos which we used as we were learning… (34 year old male restaurant manager in Chandragiri)

The reason for the sense of nervousness mentioned in both of the anthology films became clearer in some of the feedback discussions held with participants. This could be attributed, at times at least, to an initial degree of cynicism about the motivation for the project. As one 25 year old male shop worker from Chandragiri suggests, while he was keen to learn about filmmaking, he

> was not sure about it when we were making the videos. We had felt that we would simply learn to make some videos and then you would leave. We did not think that there would be more to it.

This cynicism could also be attributed, it is fair to say, to a degree of 'project fatigue' to be found in both of the communities we worked in:

> Initially, I felt that you might have simply come here to fulfil the quota that your organization had. […] The thing is that there is always someone here with a program. We can see that there are people who provide trainings unnecessarily as well. There are no achievements to be had from that. So that is what I had assumed this to be also. I thought that you were providing training simply because you were here. That was because we were unaware about these things. The reason behind it is that we are left behind when it comes to education. (32 year old male shop owner, Chandragiri)

In addition to the sense of 'project fatigue' alluded to here, this participant also makes explicit that the group's sense of cynicism can largely be attributed to the feeling of disempowerment some members of this community feel, and the perception that although they are continually engaged by various agencies, they are not generally listened to. Yet while many participants, initially at least, felt that their opinion was not sought, they themselves did not seem to suggest what skills and knowledge they *could* bring to the project. Knowledge creation is invariably presented as one-directional: from the project facilitators to the participants.

There was a noticeable shift in the attitude of participants after the showcasing events. Participants continually talk of both their surprise at the quality of the films they made and how pleased they were with the feedback from the audience at these events:

> Before screening our documentary to the audience, we were quite afraid and anxious, thinking people may find it useless. However, the audiences appreciated our documentary and we were pleased by the positive feedback. (48 year old male worker in the agricultural industry in Madhyapur Thimi).

> We felt that we were the boss. [Laughing] We were the most important people there. The bystanders were curious to learn about what we were doing there. (27 year old female pharmacist, Chandragiri)

> The documentary that we had prepared… The thing is that I did not think that everyone would like it. Nevertheless, it was a new experience and we got to express ourselves which I considered to be the biggest thing. But when we showcased the documentary in the workshop, a lot of people, including the elders, told us that we had done a good job. They said that it was heart-warming and realistic. (34 year old male shop worker, Chandragiri)

The sense of empowerment experienced by these participants after seeing the reaction of the audience to their films is, as noted above, common to PV projects from Fogo onwards. Through the process of screening their work, participant came to further value the skills and knowledge they had gained. Knowledge continued to be understood as coming from the external experts. However, for audience members at

the screenings, who ranged from members of the participants' families and friends, to other members of their communities, as well as – and particularly importantly for the sense of empowerment the project screenings generated – key political figures locally and nationally, it was precisely the local perspective on the topic of AMR which was central to the value they found in the films. On the one hand, seeing images of local people with whom many members of the audience could identify was considered to be a particularly powerful and effective means of communicating a complex topic like AMR. Here we might return to the comment used as an epigraph to this article by our 36 year-old female shopkeeper from Chandragiri. As she further went on to explain:

> There are people in the community who do not know how to do any kinds of works. There are people who are only limited to do the household chores. They do not know how to get involved in other works. So, I would say that the people coming from the village to this program and being able to prepare a film is a very big deal.

The audience at the screenings was very impressed by the fact that people like them had made these films, that they had been able to step out from their everyday lives and reflect upon these kinds of bigger issues. This made the films more effective tools for communication. Or, as the Mayor of Chandragiri put it after attending a showcasing event, the project was able to 'mobilize the local people' both as producers and consumers of the films, thereby helping local people to take 'ownership' of the issue.

While the audience at the showcasing events was interested in the ways in which the films explained the WHO guidance – the information that the participants were particularly proud to have learnt –, they spent more time in the feedback discussing the specific contextual factors at work in the films and the need for these to be taken into account when people are looking to address AMR – be that members of the community or policymakers. Thus, and particularly important for the overall project, the audience at the showcasing events did not recognize the knowledge hierarchy we find at work in the feedback from participants or in many of the public health-related PV projects discussed earlier in this article. Both the 'official' knowledge of the health care experts and the local contextual knowledge presented by community participants was equally valued. Audience members appreciated, for example, the need for a One Health approach to combatting AMR that understands the interconnected nature of animal and human health. Referring again to the comments made by the female shopkeeper from Chandragiri, she noted:

> one of the invitees who reached the venue with me mentioned that he was unaware about the use of antibiotics in chickens. In addition, he mentioned that he often used to consume chicken but after watching the film he realized that antibiotics are also used in chickens and people usually consume chicken largely, and consuming such chickens can be harmful to health.

As well as this kind of information, which chimes in with official guidelines, participants also picked up on the challenging role of traditional healers in community health-seeking behavior, which is far more contextually contingent:

> We can still see that the people in the village go to the *dhami-jhankri* [traditional healers] instead of going to the doctors and taking medicines. That was realistic for me. (44 year old female health worker in Chandragiri).

However, what is also clear from the feedback is that people felt it was not enough to simply tell people not to use traditional healers. As a 43 year old female tailor from Chandragiri put it:

> We have to use our medications properly. We should not be careless or depend on the traditional faith healers. We have to have faith in medicines. We should not believe in *dhami-jhankri*… We can have *some* faith in them. But I learnt that we are not supposed to depend only on them.

This participant had seen a whole sequence of films that focussed on the importance of engaging with modern medicine. Nonetheless, she still maintains that the traditional health system has some value. Thus, it is clear that any approach to AMR has to take cognisance of, and potentially try and involve, the traditional health system.

Similar insights came from the showcase participants' observations of the role of young people in the community health ecosystem, an insight drawn from responses to *Kusum* and the role of the child in that film as the purchaser of the drugs for, presumably, his sister. Young people were identified by several members of the audience as important potential agents of change:

> I think that students from grade 1 and higher should be shown the film. Most of the families have the same practice of using the medicines again when they fall ill later. They will get some information looking at it and will go home and tell their families about it. They could tell their friends and family back in the village about it, which would be good. (14 year old female high school student in Chandragiri)

> I think that we should show [the film] to the students who are studying in grade 5 and higher. […] The children studying in the 5th or 6th grades tend to speak about the new things that they see. So it will be easier to implement it at their homes. (34 year old retail assistant in Chandragiri)

Conclusion

It is these last insights that have resonated particularly strongly with the policy community with whom the team has been discussing the project's findings since these showcasing events. Plans are now being formulated to develop a further project in which participants in the original PV research will be trained to become facilitators of a school-based AMR education programme, using the films made during this project as a stimulus for discussion with young people as part of their health-education curriculum. This is also a dimension that the Ministry of Health and Population is interested in considering in the Nepali AMR action plan, which is currently being revised.

This is a potentially very interesting development for the project, signalling a moment of genuine – and rare – two-way dialogue between members of the communities we have been working with and the national policy community in Nepal. It also provides an interesting model for how the impact of an individual PV project can be scaled (frequently seen as a difficult step in the literature), while also

acknowledging the continuing need for the careful curation of the films produced. This is perhaps most clearly exemplified in the documentary *Antibiotics in Agriculture*, discussed above. As we have already mentioned, this film was potentially problematic, in that it offered ambiguous, or even incorrect, information about AMR. That said, it also has the potential to generate the most discussion of all the films produced, due to these very ambiguities. This film, far more than those films that tended towards public information broadcasting, presented the experience of a set of Nepali small holders in all its complexity. Our proposed future project offers a way in which the films can be used to respect, and indeed value, the knowledge of the participants, allowing their audience to reflect on the real barriers to the correct use of drugs like antibiotics in their communities. At the same time, we hope it will also ensure that the young people we will engage will have all the information necessary to develop their own, appropriate solutions to help overcome these barriers and so to mitigate the continuing global threat of AMR.

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Author Information (biog, email, orcid)

Paul Cooke is Centenary Chair of World Cinemas at the University of Leeds. He is currently the Principal Investigator on *Changing the Story*, a project looking at the ways in which heritage and arts organisations can help young people to shape civil society in post-conflict countries. He is also co-lead of 'Community Engagement for AMR' at the university of Leeds, and led the project from which the present article emerged.

School of Languages, Cultures and Societies
Michael Sadler Building
University of Leeds
Leeds
LS2 9JT

p.cooke@leeds.ac.uk

0000-0002-8377-3118

Ashim Shrestha is a filmmaker, trained pharmacist and researcher working for Herd International. Prior to joining Herd to work on this project, where he developed his expertise in PV, he worked as an independent filmmaker.

Herd International,

Prasuti Griha Marg, Kathmandu 44600, Nepal

ashim.shrestha@herdint.com

0000-0003-3644-3383

Abriti Arjyal is Research Coordinator at Herd International and was Co-I on the project from which this article has emerged. She has worked in several areas of public health, including maternal health, child health, reproductive health, nutrition, health system, diabetes and violence against women.

Herd International,

Prasuti Griha Marg, Kathmandu 44600, Nepal

abriti.arjyal@herdint.com

0000-0002-3624-5726

Romi Giri is Qualitative Research Officer at Herd International. Prior to joining HERD, she worked as a Research Officer in Marie Stopes International -Nepal and Center for Research on Environment, Health and Population Activities, where she oversaw various projects on health and social sectors. She was a researcher on the project from which this article has emerged.

Herd International,

Prasuti Griha Marg, Kathmandu 44600, Nepal

romi.giri@herdint.com

0000-0003-4734-6845

Nichola Jones is a PhD Candidate at University of Leeds. Her research focuses on the ways in which participatory video can support public health promotion in Nepal, looking, in particular at the issues of AMR, gender and 'One Health'.

Nuffield Centre for International Health and Development, Leeds Institute of Health Sciences, Worsley Building, University of Leeds, Leeds, LS2 9JT, United Kingdom

hs17naj@leeds.ac.uk

0000-0002-3943-7248

Rebecca King is Associate Professor of International Health in the Nuffield Centre for International Health and Development, University of Leeds. She leads a portfolio of research, which brings together her expertise in participatory community-based interventions, the importance of embedding approaches within the existing health infrastructure, and the critical need to address antimicrobial resistance globally. She co-leads 'Community Engagement for AMR' at the university of Leeds, and was Co-I on the project from which this article emerged.

Nuffield Centre for International Health and Development, Leeds Institute of Health Sciences, Worsley Building, University of Leeds, Leeds, LS2 9JT, United Kingdom

R.King@leeds.ac.uk

0000-0003-3035-9594

Jessica Mitchell is a Post-doctoral Research Fellow on the GCRF funded project "Community Engagement for Antimicrobial Resistance (CE4AMR)" which focuses on providing community-led solutions to antimicrobial resistance (AMR) in low-middle income countries. She joined the University of Leeds in April 2019 with a research

background in zoology, specialising in the reproductive behaviour of Meerkats and Banded Mongooses.

School of Languages, Cultures and Societies
Michael Sadler Building
University of Leeds
Leeds
LS2 9JT

J.Mitchell1@leeds.ac.uk

0000-0002-2892-4630

Caroline Tait was a Public Health Registrar on placement with the Nuffield Centre for International Health and Development, University of Leeds and HERD International during the this Nepal study and contributed to the development of the PV intervention.

Nuffield Centre for International Health and Development, Leeds Institute of Health Sciences, Worsley Building, University of Leeds, Leeds, LS2 9JT, United Kingdom

ugm4cjt@leeds.ac.uk

0000-0002-4781-4111

Inés Soria-Donlan is Project Manager of *Changing the Story* at the University of Leeds. Since 2008 she has worked internationally across the academic, cultural and creative sectors as a producer, project manager, creative practitioner and researcher, with a continual focus on youth, diversity and arts-led participation. She helped to design and deliver the project in Nepal from which this article has emerged.

School of Languages, Cultures and Societies
Michael Sadler Building
University of Leeds
Leeds
LS2 9JT

I.Soria-Turner@leeds.ac.uk

0000-0002-0337-5954

Sushil Baral is an experienced health and development expert of Nepal, specialising in health systems strengthening and health policy and planning at the national and international level. He is the Managing Director of Herd International and was Co-I on the study from which this article has emerged.

Herd International,

Prasuti Griha Marg, Kathmandu 44600, Nepal

sushil@herdint.com

0000-0002-3425-6915