TACKLING ANTIMICROBIAL RESISTANCE VIA SCHOOL-BASED ENGAGEMENT IN NEPAL

PREPARED BY

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CE4AMR

Photo credit: Nichola Jones

BACKGROUND

The social challenge of antimicrobial resistance (AMR) requires immediate attention. Human behaviours including antibiotic misuse are exacerbating the ability of bacteria (and other microorganisms) to survive drug treatments on a global scale. In 2017 a collaboration between The University of Leeds (UK) and HERD International (a health research organisation based in Nepal) was awarded funding to pilot test the ability of participatory video methods to explore AMR in Nepal. Two communities were trained to create short films telling their AMR stories, these are now used as advocacy tools to change local behaviours, and influence policy making.

Following these intended outcomes participant feedback requested that films be shared with school students. The reasoning being that AMR-aware children could influence antibiotic purchasing and usage decisions within their homes thus impacting certain behaviours which are known to drive AMR. The CE4AMR team wish to act on this community feedback by developing a school-based AMR education programme. We suggest this must provide meaningful engagement with AMR specifically for children, but also space to develop confidence and advocacy skills. Children and young people are already recognised as powerful advocates on other global challenges, such as Climate Change where their efforts have led to international changes in policy, practice and behaviour. Perhaps the AMR space represents another opportunity to harness the creativity and passions of young people to drive much needed changes?

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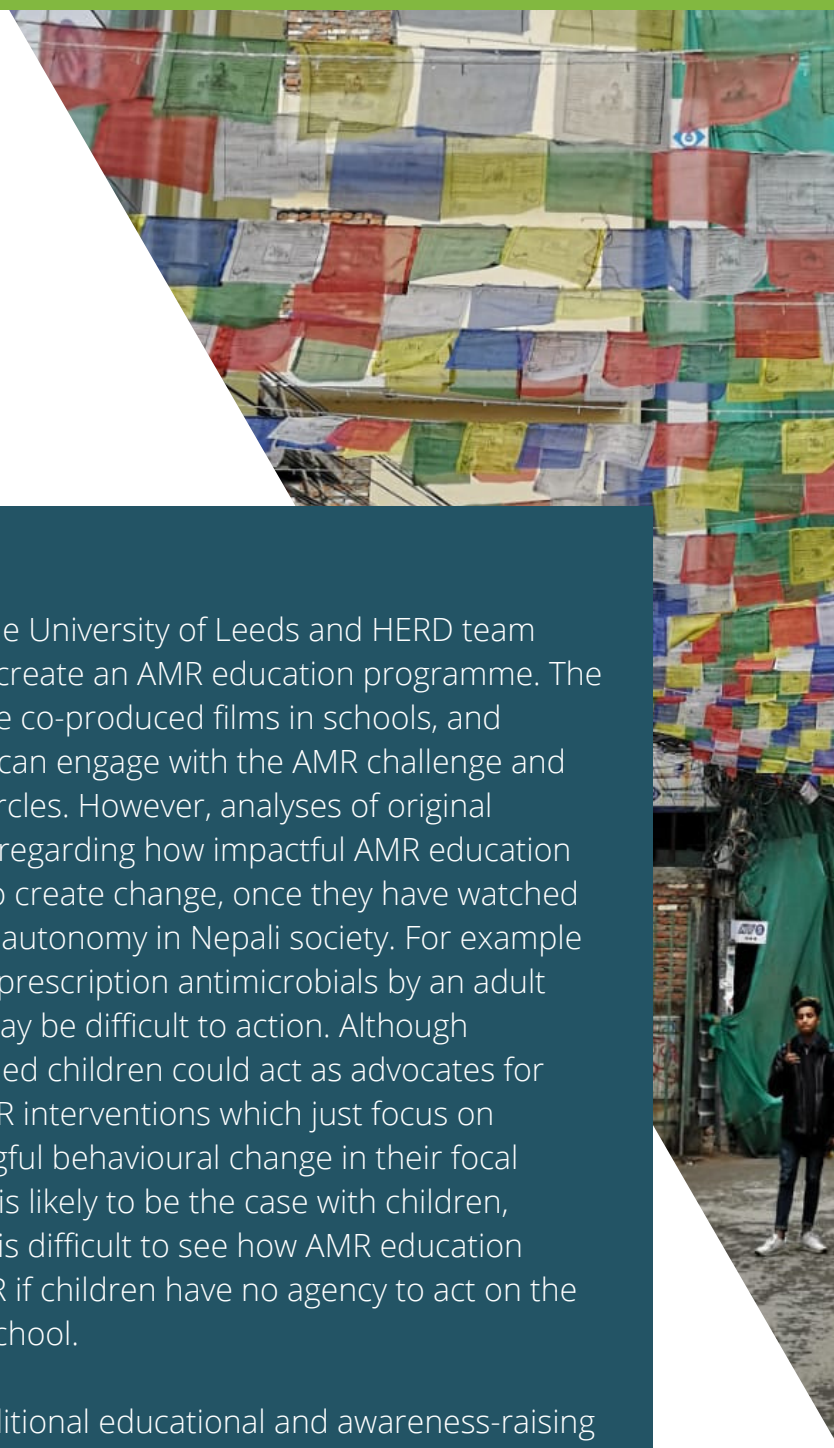
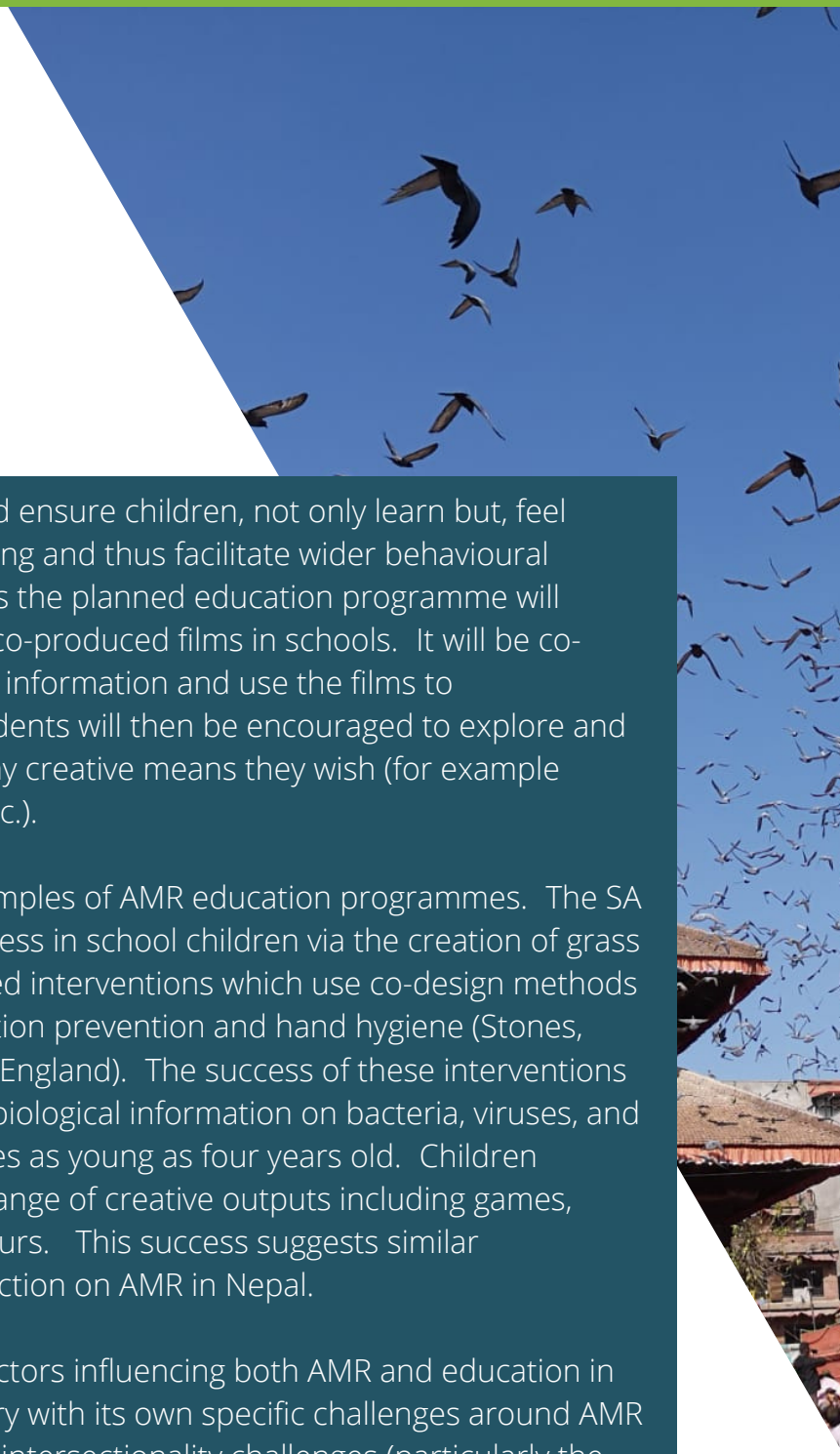


FOLLOW-ON FUNDING

After reflecting on the community feedback, The University of Leeds and HERD team successfully bid for GCRF follow-on funding to create an AMR education programme. The origional communities are enthusiastic to share co-produced films in schools, and believe that, with support, school age children can engage with the AMR challenge and advocate behavioural changes in their social circles. However, analyses of original transcripts do reveal some potential concerns regarding how impactful AMR education could be. Namely, that the ability of children to create change, once they have watched the films, could be confounded by their lack of autonomy in Nepali society. For example children are often instructed to purchase non-prescription antimicrobials by an adult family member, disregarding this instruction may be difficult to action. Although transcript evidence suggesting that well-informed children could act as advocates for AMR behaviour change are logical, several AMR interventions which just focus on awareness raising have failed to enact meaningful behavioural change in their focal communities (Charoenboon et al., 2019). This is likely to be the case with children, particularly if they lack autonomy in society. It is difficult to see how AMR education could create wider behavioural change on AMR if children have no agency to act on the information they have learned and shared in school.

A potential solution to this is to go beyond traditional educational and awareness-raising approaches and utilise community engagement (CE) methods as part of the children's AMR education. This was the rationale behind the original project (Cooke, 2020) which allowed communities to explore their own relationships and knowledge on AMR through participatory video, alongside learning new information (namely the WHO behavioural guidance on antibiotic use). The team utilised the following definition of Community Engagement to guide their original research "A participatory process through which equitable partnerships are developed with community stakeholders, who are enabled to identify, develop and implement community-led sustainable solutions using existing or available resources to issues that are of concern to them and to the wider global community." (King, under review).

COMMUNITY KNOWLEDGE



Taking this approach to AMR education should ensure children, not only learn but, feel empowered and confident to share this learning and thus facilitate wider behavioural change in their community. For these reasons the planned education programme will involve more than a showcase of the original co-produced films in schools. It will be co-designed by educators in Nepal to share AMR information and use the films to contextualise the local challenge of AMR. Students will then be encouraged to explore and share their relationships with AMR through any creative means they wish (for example making a poster, poem, drama, story board etc.).

As far as we are aware there are very few examples of AMR education programmes. The SA Superbugs initiative, India, raises AMR awareness in school children via the creation of grass roots comics, whilst there are several UK-based interventions which use co-design methods to tackle AMR-associated issues such as infection prevention and hand hygiene (Stones, Stark and Rutter 2019, Ebug via Public Health England). The success of these interventions is promising; all communicate complex microbiological information on bacteria, viruses, and methods of infection spreading, with audiences as young as four years old. Children engage and interpret this information into a range of creative outputs including games, posters and stories which depict safe behaviours. This success suggests similar interventions could also create learning and action on AMR in Nepal.

One major challenge is the local contextual factors influencing both AMR and education in Nepal. Nepal is a lower middle-income country with its own specific challenges around AMR (Pokharel and Adhikari, 2020). There are also intersectionality challenges (particularly the state schools) where female students face barriers to education including poor access to hygiene facilities, responsibilities in the home, early marriage and pregnancy (Stash 2001). For this reason, it is highly likely that (un)conscious gender bias will exist in both pupils and teaching staff. This may include the likelihood of one gender to speak out more frequently, for young people to disregard the comments of others based upon gender, or for teachers to praise/punish behaviours differently dependant on gender. Such factors would impact the feasibility of extending the original project to a school-based setting but could be mitigated by the involvement of highly trained facilitation staff from HERD International to either lead project delivery, or to train-the-trainer whereby school staff would learn to recognise their own biases and judgments.

OUR PLANS

Designing and delivering an AMR education programme in Nepal will be a collaborative, co-designed and participatory process making use of varied sources of local knowledge. For example, co-designing AMR information in collaboration with local health care professionals and teachers to ensure the language used is meaningful and appropriate.

Utilising the existing films will contextualise the challenge of AMR for students. Whilst the original participants will receive training on working with children so that they may act as co-facilitators and share their learnings as a part of the programme. Finally, buy-in a local government is strong, the Mayors of each original locality suggested that AMR be taught in schools and their support has now been harnessed to securing follow-on funding for the education programme.

This intricate collaboration between multi-sector stakeholders has been invaluable to the planning of the AMR educational intervention and it mirrors the climate change and sustainability offerings across the global educational landscape. AMR is a similarly complex, locally specific but globally important challenge that requires immediate action this decade. Harnessing the interest of children and young people represents a major opportunity to create lasting behavioural change on key drivers such as antibiotic purchasing and misuse.

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