The contribution of social science research to malaria prevention and control

Greenwood, Brian; Bloland, Peter B; Diop, Samba; Meek, Sylvia; Sommerfeld, Johannes; Nyamongo, Isaac; Azevedo, Inez; Zimicki, Susan; Alilio, Martin; Jones, Caroline; Williams, Holly Ann

Abstract:

In recent years, malaria has received a dramatic increase in attention worldwide, as witnessed by the growing number of articles in scientific journals, the forging of international partnerships such as the Multilateral Initiative on Malaria and Roll Back Malaria, and a global call to action. These initiatives have recognized the role that human behaviour plays in malaria control and have affirmed that social science has an integral role in defining strategies against malaria. In spite of this, we believe that social science’s potential contributions to the field of malaria have not been fully realized. Numerous factors impede the integration of social science knowledge and practice into malaria research and programmes: many health personnel overlook the different, complementary disciplines of social science and their prospective interaction with their own fields of activity and they may, in addition, have only a superficial knowledge of the workings of social science research. First of all, many malaria control personnel, physicians and epidemiologists do not fully appreciate that social science comprises many disciplines including, but not limited to, anthropology, sociology, economics, political science, demography, and communications. The disciplines share an emphasis on understanding how human behaviour is shaped and modified in the global context by a vast array of influences. Each discipline is, however, guided by its own theoretical orientation, which influences the essential questions it asks and the methodologies it employs to answer them. For example, medical anthropology offers a particular approach to the investigation of human experience and behaviour, including health and sickness. The essence of a medical anthropological perspective is an appreciation of the complexity of culture and the realization that specific aspects such as health beliefs and behaviours cannot be understood in isolation but need to be looked at in relation to their larger historical, economic, social, political and geographical contexts. Applied medical anthropological research strives to understand the often competing dynamics that shape the various contexts important to diseases such as malaria. This type of applied research can help foster an understanding between what a biomedical professional and a member of the local community might consider as appropriate interventions in the local situation. An understanding of the differences among the various social science disciplines is essential to an appreciation of the relative contribution that each can make. For example, while anthropologists may be aware of culturally specific local knowledge that would be useful in identifying community needs, health communicators may be far better at producing effective messages to respond to them. The failure to recognize these differences can lead to the employment of social scientists with skills that are inappropriate for the required task. A second factor contributing to the less than optimal contribution of social science research to malaria control is that, in many cases, those who carry out behavioural research for control programmes may have had some training in rapid assessment techniques, but limited or no training in social science theory and methodology. This
situation has led to research insufficiently grounded in social theory, the use of incorrect methodologies resulting in flawed or inaccurate conclusions; such poor-quality science can reinforce a perception that social science has little of value to offer. By contrast, experience has shown that commissioning a well-trained social scientist with field experience (i.e., with both an understanding of the theoretical and critical perspectives of the discipline and a practical appreciation of what can realistically be accomplished) can be extremely beneficial for informing malaria control programmatic decisions and the development of effective intervention programmes. However, simply employing well-trained social scientists may not provide programme planners with the assistance they need: it is essential that effective communication is established between them and the clinical and control programme personnel, using a common language. Situations can arise where the social science methods employed and the interpretation of the results are rigorous and interesting from a theoretical perspective, but are of little practical use to the programme. Social scientists brought into malaria research and intervention projects need to understand the requirements of the project, so it is critical that they are made part of the research team from the outset of the project. They must also ensure that, while rigorous social science is not compromised, the findings are presented in such a way that they can be understood and used by the project. It is important not to inhibit health professionals with responsibility for disease control from developing an interest in social science. Work is needed to understand and define more clearly what generalists can do by themselves versus situations when specialists are needed. A final factor affecting the potential contribution of social science to malaria research and control is the expectation that employing a social scientist for a rapid assessment will be sufficient to ensure greater acceptance of whatever intervention is being provided. Social scientists and, in particular, medical anthropologists, can provide information on how to maximize acceptability of already identified malaria control interventions, but this is not enough. They could and should be playing a far greater role in defining the research and control agenda. In recent years, social science research has started to contribute to refocusing both the research questions and public health interventions in the fields of HIV/AIDS and tuberculosis. Now is the time for social scientists to make similar contributions to malaria control. They need to be more proactive in challenging current orthodoxies and in identifying new intervention methods. However, to do so requires longer periods of ethnographic fieldwork than has been customary within the context of malaria research and practices. Sharing the experiences of social scientists working on different diseases of poverty may also provide valuable insights into broader health-related behaviour.