

# INCLUSIVE SOCIETIES AND MALARIA

## INTRODUCTION

The explicit call of the Sustainable Development Goals (SDGs) to defeat malaria needs to be understood in the context of the drive to end poverty and reduce global inequities.<sup>1</sup> Malaria is both a major cause and a consequence of global poverty and inequity: its burden is greatest in the least developed areas and among the poorest members of society – particularly children, pregnant women and other vulnerable populations such as migrants, refugees and the displaced.<sup>2</sup> Poverty forces people to live and work in sub-standard conditions, with a high level of exposure to malaria vectors, while lacking access to malaria prevention, health care and other basic services. Even within a single locality, children of lower socioeconomic status are twice as likely to contract malaria as those of higher status.<sup>3</sup>

Poverty, conflict and persecution all cause people to move. Today's globalized world is witnessing unprecedented human mobility and migration. One out of every seven people is on the move. When people move, they often have to trade familiar habitats for ones that are largely unknown, and are often inherently unhealthy and precarious. This may be due to general poverty, sleeping outdoors, working at night, proximity to vector-breeding areas, poor-quality housing, and limited use of prevention measures.<sup>4</sup> Refugees, internally displaced people and mobile migrant populations often face obstacles of stigma, language and legal status when they try to access health care. These obstacles affect all stages in the migration process – at origin, in transit, at

the destination or on eventual return to their home country.<sup>5</sup>

Reducing malaria in countries affected by political upheaval and humanitarian crises will be crucial for progress towards the SDGs.<sup>6</sup> UNICEF has highlighted how 17 of the 20 countries with the world's highest under-5 mortality rates are those that are affected by violence or are in fragile situations; in all 17 of these countries, malaria is a leading cause of mortality.<sup>7,8</sup> Emergencies in elimination settings that result in population displacement can lead to the re-introduction of malaria and trigger the devastating epidemics that are the hallmarks of resurgence.

Development is contingent upon a healthy workforce and thereby healthy migrant and mobile populations. Migrant labour has become crucial to many countries' economies, in particular in the mining, transportation and construction industries. Malaria poses a global threat to this progress and growth. It is the fifth leading cause of death from infectious disease worldwide, and the second leading cause of death in Africa.<sup>9</sup> Mobile and migrant populations (MMPs) who frequently move in and out of endemic areas may have lost or not possess naturally acquired malaria immunity, and thus be at increased risk of malaria.<sup>10</sup> In addition, mobility may lead to poor adherence to treatment, which in

1 Roll Back Malaria Partnership: Action and Investment to defeat Malaria 2016-2030 (AIM) – for a malaria-free world (2015) <http://www.rollbackmalaria.org/about/about-rbm/aim-2016-2030>

2 Roll Back Malaria Partnership & UNDP Multisectoral Action Framework for Malaria (2013). <http://www.rollbackmalaria.org/files/files/about/MultisectoralApproach/Multisectoral-Action-Framework-for-Malaria.pdf>

3 Tusting, L. S. et al. Socioeconomic development as an intervention against malaria: a systematic review and meta-analysis. *Lancet* 382, 963-972 (2013).

4 Smith, C. & Whittaker, M. Beyond mobile populations: a critical review of the literature on malaria and population mobility and suggestions for future directions. *Malar. J.* 13, 307 (2014).

5 IOM (International Organization for Migration). Malaria and mobility: addressing malaria control and elimination in migration and human movements (2014).

6 Bloland, P. B. & Williams, H. A. Malaria control during mass population movements and natural disasters. National Academies Press (US) (2002). <http://www.ncbi.nlm.nih.gov/books/NBK221163/>

7 Piffaretti, N., Ralston, L. & Shaikh, K. The World Bank's harmonized list of fragile situations (2014). <http://documents.worldbank.org/curated/en/2014/01/19794539/information-note-world-banks-harmonized-list-fragile-situations>

8 These countries are Angola, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Democratic Republic of Congo, Guinea, Guinea-Bissau, Mali, Mauritania, Niger, Nigeria, Sierra Leone, Somalia, South Sudan and Togo.

9 Albuja, S. et al. Global overview 2014. People internally displaced by conflict and violence (iDMC/ NRC). <http://www.internal-displacement.org/publications/2014/global-overview-2014-people-internally-displaced-by-conflict-and-violence/>

10 Lubell, Y. et al. Artemisinin resistance-modelling the potential human and economic costs. *Malar. J.* 13, 452 (2014).

turn may accelerate the development of resistance to anti-malaria drugs.

*Action and Investment to Defeat Malaria 2016–2030*<sup>11</sup> describes how driving down the burden of malaria enables the poorest to break free from the vicious cycle of poverty and disease. In so doing, inequalities are reduced and peaceful more cohesive and inclusive societies created. Such societies are more likely to be stable and can help to attract international investment and overseas development aid as well as direct foreign investment. Everyone is potentially at risk, as shown by thousands of imported malaria cases every year and recent resurgences, in countries such as Greece.

Systemic change is required to reduce inequity and make sure that people receive malaria services regardless of their ability to pay, the remoteness of their location or their nationality. Malaria requires us to ‘go the extra mile’ to provide services to those that health systems often fail to reach: the poor and marginalized, slum-dwellers and undocumented migrants, so that everyone in need can access malaria diagnostics upon the onset of fever. Countries need to work together to implement the 2008 World Health Assembly (WHA61.17) resolution on the health of migrants. Introducing occupational health regulations, as promoted by the International Labour Organization’s ‘decent work’ agenda will help protect workers from injury and sickness, including malaria, during employment.<sup>12</sup> To be successful non-health actors such as immigration authorities, employment and social services, companies recruiting migrant workers, transporters, traders, brokers, humanitarian workers and armies must be engaged in meaningful ways. Cooperation with and participation of civil society organizations must also be strengthened. They are often the main source of malaria services in crisis situations and in border areas between countries.

To be confident that no-one is being left behind we must also strengthen our ability to monitor outbreaks, interruptions in services and supply-chain failures in real time, and to ensure that quality data triggers a

rapid response, and leads to resources being invested where they are needed most. Paul Hunt, former UN Special Rapporteur on the Right to Health asserted that “all malaria initiatives must be subject to effective, accessible and transparent monitoring and accountability, to ensure not just financial propriety but also that the initiatives are conforming to human rights standards and delivering to all without discrimination.”

## CASE STUDIES

### Taming malaria: A new health model for the indigenous populations<sup>13</sup>

This resource assesses the health behaviours and knowledge of the Macuxi people of **Brazil**, and how preventive malaria approaches have adapted to accommodate their belief systems while instilling practical models of care.

### The burden of malaria in post-emergency refugee sites<sup>14</sup>

Almost two thirds of refugees, internally displaced people, returnees and other persons affected by humanitarian emergencies live in malaria endemic regions. 2006–2009 data on malaria incidence and mortality from the United Nations High Commissioner for Refugees Health information system database in **Burundi, Chad, Cameroon, Ethiopia, Kenya, Sudan, Tanzania, Thailand, and Uganda** was analysed. The results showed that despite declines in incidence, malaria remained a significant cause of mortality among children younger than five years of age.

### Malaria and mobile and migrant populations<sup>15</sup>

Mobile and migrant populations, particularly those involved in forest-based activities are at high risk of

11 Action and Investment to defeat Malaria 2016–2030. Geneva: Roll Back Malaria Partnership; 2015. <http://www.rollbackmalaria.org/about/about-rbm/aim-2016-2030>

12 International Labour Organization (ILO). International labour standards on occupational safety and health (2015). <http://www.ilo.org/global/standards/subjects-covered-by-international-labour-standards/occupational-safety-and-health/lang-en/index.htm>

13 Taming malaria: A new health model for the indigenous populations in Brazil. (<http://www.iaf.gov/index.aspx?page=982>)

14 The burden of malaria in post-emergency refugee sites: A retrospective study. *Conflict and Health*, 2011, Vol. 5, 17. (<http://www.conflictandhealth.com/content/5/1/17>)

15 Malaria and mobile and migrant population in Cambodia. *Malaria Journal*. 2015; Vol. 14: 252. (<http://www.malariajournal.com/content/14/1/252>)

being infected with malaria and of receiving late and sub-standard treatment due to poor access to health services. In **Cambodia**, in 2012, the National Malaria Programme developed a population movement framework to help ensure these groups are better reached with health and malaria services.

### **Social determinants of malaria and health care-seeking patterns among rice farming and pastoral communities<sup>16</sup>**

This study was carried out to understand social determinants and health-seeking behaviour among rice farming and pastoral communities in central **Tanzania**. In each village, heads of households or their spouses were interviewed to seek information on livelihoods activities, knowledge and practices on malaria and its preventions. The results showed that education, sex, availability of health care and livelihood practices were the major social determinants that influence malaria acquisition and care-seeking patterns. Recommendations included that public health promotion needs to better address the links of livelihoods and malaria transmission among rural farming communities in an eco-health approach.

## **SOURCES FOR BETTER POLICY PRACTICES**

### **A global report on population mobility and malaria: Moving towards elimination with migration in mind<sup>17</sup>**

This advocacy document was motivated by the need for dialogue to enhance understanding of migrants' right to health and the concept that health and social costs are reduced when healthy migrants are fully integrated into their host communities. It shares best

practices for delivering health and malaria services to MMPs and calls upon us all to be mindful of their specific health and access risks and the need for intercountry agreements of reciprocal health care.

### **Malaria elimination without stigmatization: a note of caution about the use of terminology in elimination setting<sup>18</sup>**

This commentary offers a note of caution about the negative social impact that may be inadvertently generated through malaria elimination activities. In particular, it advises against the description of people who remain at risk of malaria in low transmission settings as 'hotpops' or 'reservoirs of infection.' The authors argue that since those at risk of malaria in elimination settings are often already socially marginalized – such as indigenous groups, ethnic minorities and poor rural communities – care should be taken to avoid implementing programmes in ways that may inadvertently add to the social stigmatization of those most at risk of malaria in low transmission settings.

16 Social determinants of malaria and health care seeking patterns among rice farming and pastoral communities in Kilosa District in central Tanzania. *Acta Tropica*, 2015, Vol. 144, 41-49 ([http://www.malariainexus.com/\\_common/updateable/files/articles/635593351368190376.pdf](http://www.malariainexus.com/_common/updateable/files/articles/635593351368190376.pdf))

17 (<http://www.iom.int/files/live/sites/iom/files/What-We-Do/docs/REPORT-14Aug2013-v3-FINAL-IOM-Global-Report-Population-Mobility-and-Malaria.pdf>)

18 Malaria elimination without stigmatization: a note of caution about the use of terminology in elimination settings. *Malaria Journal*, 2014, Vol. 13, 377. (<http://www.malariajournal.com/content/13/1/377>)

