Location of the Bandim HDSS centre, Guinea-Bissau

The Bandim Health Project (http://www.bandim.org) was initiated in 1978 with the aim of improving child survival in Guinea Bissau. The Bandim Health Project is part of the National Institute of Health (INASA) in Guinea-Bissau and supported by a research group at the Statens Serum Institut, Copenhagen. The research station in Guinea-Bissau currently employs several Guinean physicians and epidemiologists involved in research training and a few expatriates, medical doctors, statistician, immunologist, medical and public health students. The field station registers the basic demographic and health-related data for approximately 102,000 inhabitants in the capital Bissau and 182 randomly selected clusters of villages are followed in the interior of Guinea-Bissau. More than 180 Guineans are employed for the continuous collection of surveillance data and for data collection linked to specific trials. Part of the research training, data analyses and writing of papers takes place at Statens Serum Institut, Copenhagen, and the potential implications of findings in Guinea-Bissau for Danish children are explored. Seven Guineans have obtained a PhD at University of Copenhagen.

Objectives
- To follow long-term consequences of various infections, health conditions and interventions.
- To conduct research on determinants of measles mortality and evaluation of various measles vaccination schemes.
- To study the non-specific immune training effects of vaccinations, vitamin A supplementation and other interventions.
- To examine systematically the possibility that interventions have sex-differential effects.
• To investigate management and health system problems in relation to diseases with a major impact on child mortality in low-income countries
• To conduct clinical trials to assess both specific and non-specific effects of health interventions and interactions between interventions.
• To facilitate research training

Priority Research Areas
The Bandim Health Project’s main focal areas are vaccinations and vitamin A supplementation in childhood and their impact on public health, in particular their non-specific effects. We are emphasising that these interventions often have sex-differential effects. We have shown in several randomised trials that the non-specific beneficial effects of BCG and measles vaccine are more important for child survival than the specific effects of these vaccines. To strengthen this area Bandim has received funding from DANIDA to organise a PhD training network focusing on the real-life assessment of major interventions. Though our research question many assumptions underlying current immunization policies, WHO is currently evaluating the potential non-specific effects of vaccines.

Other focal areas include studies of the epidemiology, treatment or prevention of measles, varicella, acute respiratory infections (including RSV), diarrhoea (including rotavirus, cryptosporidium, enterotoxigenic Escherichia coli, and cholera), malaria, tuberculosis, retrovirus infections (HIV-1, HIV-2, HTLV), and maternal mortality as well as studies of quality of care, humanitarian aid and the consequences of war, child nutrition, vitamin A and micronutrient supplementation, and management of TB and HIV treatment.

Funders
• DANIDA
• Danish National Research Foundation
• Novo Nordisk Foundation
• Danish Research Councils
• EU

Collaborators
The Bandim Health project collaborates with
• Many INDEPTH Centres including Navrongo, Nouna, Niakhar, Nairobi, Kintampo, Chakaria, Matlab and Vadu Health and Demographic Surveillance System.
• Medical Research Council Laboratories in the Gambia
• Aarhus University, Denmark,
• Southern Danish University, Denmark
• Nijmegen University and Leiden University, Holland

Key Publications


11. Aaby P, Whittle HC, Benn CS. Vaccine programmes must consider their effect on general resistance. BMJ 2012;344:e3769
