

Risk factors for chronic disease in Asia: room for improvement

This week (29 September 2009), *Global Health Action* announced the publication of a series of articles (click [here >>](#)) on non-communicable diseases (NCDs) in Asia. NCDs are now the leading cause of death in Asia, with more than half of all deaths attributable to heart disease, stroke, diabetes, cancer and chronic respiratory disease. Reliable population-based epidemiological data on the major causal risk factors for NCDs, which are important in developing and evaluating chronic disease intervention, are largely lacking. The Action Plan for the Global Strategy for the Prevention and Control of Non-Communicable Diseases approved by the World Health Assembly in 2008 points out the need for data on key NCDs risk factors as the backbone for NCD prevention and control.

The INDEPTH Network (click [here >>](#)) has, since 1998, worked to fill the gaps in health information and population data, mainly in low- and middle income countries in Africa and Asia. The Network facilitates an international research collaboration platform of health and demographic surveillance systems (HDSS) sites to support the production of high quality health and demographic data upon which health priorities and health policies development can be based. Adult health and chronic disease are amongst the research priorities within the network, along with research agendas related to infectious diseases.

The Asian HDSS sites adapted the WHO STEPwise approach to Surveillance (WHO STEPS – click [here >>](#)) to measure population levels of the key NCD risk factors within nine well-established ongoing surveillance sites in the INDEPTH Network. Data on core indicators for key NCD risk factors were collected using a questionnaire (Step 1) and physical measurements (Step 2). The study identified a high burden of major modifiable NCD risk factors in these settings ([Ng et al. >>](#)). Tobacco was commonly consumed across all sites; men in all age-groups smoked heavily and women, particularly older women, chewed tobacco ([Ashraf et al. >>](#)). Alcohol was widely consumed by men at the Vietnam and Thailand sites, but not in other countries due to religious and cultural practices ([Bich et al. >>](#)). Intake of fruits and vegetables was surprisingly low in these Asian countries, despite their availability ([Kanungsukkasem et al. >>](#)). Over 1/4 of men and 1/3 of women in these rural settings were physically inactive ([Ng et al. >>](#)). Overall, 10% of men and women were overweight, particularly in women in the HDSS in Indonesia and Thailand ([Razzaque et al. >>](#)). Being overweight was identified as a significant predictor of raised blood pressure, which was recorded in over 15% of the population surveyed ([Minh et al. >>](#)). Over 20% of men and women had three or more risk factors, which points to the huge potential for prevention and control even in these largely rural sites. It also suggests the need for comprehensive approaches to intervention and the use of cost-effective strategies suitable for these resource-constrained settings ([Ahmed et al. >>](#)).

Results from this multi-site study offer further opportunities for exploring different contextual factors between the different sites. Being able to assess the burden of the problem and to provide recommendations is a first step in translating research into action ([Krishnan et al. >>](#)). To function effectively, surveillance of NCD risk factors should be integrated in a national chronic disease programme. INDEPTH sites have a huge potential to strengthen their link to health systems, and to engage with different stakeholders in promoting population health, particularly in addressing the neglected burden of chronic disease epidemics.

Global Health Action is a peer-reviewed, open-access journal aiming to fuel a more concrete approach to global health challenges. The journal publishes papers addressing a global agenda that include a strong implementation or policy component. Authors from this series of papers, all from low- and middle-income countries, were supported through the novel mentorship programme offered by *Global Health Action*. Dr Ruth Bonita, mentored the scientists and supported them in completing the papers. All papers followed the same external peer-review process applied to regularly published articles in *Global Health Action*.

