



SMARThealth Extend: Indonesia

- August 2019



The George Institute
for Global Health India

Facts:

- In 2010, stroke, heart disease, diabetes and chronic kidney disease were ranked 1st, 7th, 5th, and 11th, respectively, as the causes of premature mortality in Indonesia.
- About one-in-five Indonesians aged 41-50 are at high risk of cardiovascular disease. This proportion increases sharply to 70% for those aged 51-60.

Project cycle:

2017 - 2019

Partners:

The George Institute, Australia

The George Institute, India

University of Brawijaya, Indonesia

University of Manchester, UK

Supporters:

A grant from Give2Asia
on the recommendation
of the Pfizer Foundation

Background:

- The SMARThealth program involves developing a mobile device-based clinical decision support system (CDSS) to help primary healthcare workers improve optimal preventive treatment in primary health care.
- SMARThealth was originally developed for primary care in Australia, after which it was substantially re-developed for primary care systems in more resource-constrained countries.

Aims:

- SMARThealth Extend – Indonesia was a demonstration project that aimed to determine whether SMARThealth can be appropriately and rapidly customised, and then successfully implemented in a rural community in the Indonesian province of East Java.

Methods:

- The program was implemented in Kabupaten Malang in East Java, Indonesia, with trained primary care doctors and non-physician healthcare workers (Kaders) serving a population of approximately 48,000. It focused on increasing the use of effective preventive medicines in people at high risk of cardiovascular disease (CVD).
- The impact of the program was determined by comparing outcomes in four intervention villages compared with four control villages.

Impact:

- SMARThealth resulted in a significant increase in the use of optimal combinations of preventive medications (a blood pressure lowering drug together with a statin and aspirin in those with previous CVD) among high-risk people - 15.5% in SMARThealth villages compared with 1.0% in control villages.
- In particular, SMARThealth resulted in large increases in the use of blood pressure lowering drugs in the intervention villages compared to the control villages - 57% compared to 16% - resulting in large reductions in blood pressure.
- The Malang district government will now embark on a three-year program to scale-up SMARThealth to all ~400 villages in the district. Technical assistance for, and evaluation of this scale-up, will be provided by the research consortium, with funding from the National Health & Medical Research Council (NHMRC)/Global Alliance for Chronic Diseases.

Contact:

To find out more about the SMARThealth Extend trial and its principal investigators Dr D. Praveen and Professor Anushka Patel or The George Institute for Global Health, please contact: Kannan Krishnaswamy +91 11 4158 8091 or email kkrishnaswamy@georgeinstitute.org.in

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