

Social innovation in global health: sparking location action



Health innovation is often developed in response to local challenges, fueled from frontline health workers by unique needs and opportunities. Yet the power to scale up innovation is often vested in high-level authorities that have limited understanding of local contexts. How can innovation in global health be sparked? A growing social innovation in health movement shows that innovation is more effective when it emerges bottom-up from low-income and middle-income countries. Social innovation in health is a community-engaged process that links social change and health improvement, drawing on the diverse strengths of local individuals and institutions. Social innovation argues that having local beneficiaries drive the development of a health programme results in more sustainable and accountable services. This commentary considers social innovation in health, including its history, tools for identifying social innovation, examples of social innovation, unanswered questions, and the next steps.

Although social innovation in health is a new term, the basic concept has a longstanding history.¹ The UNICEF/UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases (TDR) has championed community-based health interventions for decades. In collaboration with several partners, TDR launched the Social Innovation in Health Initiative (SIHI) to advance research, advocacy, and capacity building for social innovation in health in low-income and middle-income countries. SIHI used several social innovation tools, such as crowdsourcing calls.

Open crowdsourcing calls have been used at the national, regional, and global levels to solicit social innovation projects. Crowdsourcing uses an open call to identify ideas, then shares exceptional ideas with the public.² This allows a broader community of local voices to be heard, increasing the capacity for local actors and ideas to influence health services. Crowdsourcing has informed the development of WHO guidelines³ and changed the delivery of a TDR research fellowship.⁴ Crowdsourcing calls have been used to identify social innovations;² for example, Chipatala Cha Pa Foni (CCPF, also termed Health Center by Phone) and drug store integrated care.

CCPF is a toll-free service created by local Malawians to provide lay-health services for rural pregnant women.⁵

Birth facilities in Malawi are scarce, contributing to high maternal mortality. Women call the service and receive advice from a trained layperson about what to expect during pregnancy and whether they should seek formal health services. The CCPF idea was identified by a SIHI Malawi crowdsourcing call and has been scaled up to include other areas of health and geographic regions.

Drug store integrated care is another social innovation identified through a SIHI open call. Private sector pharmacy-based health services in Uganda can expand point-of-care diagnostics and basic health services.⁶ Private pharmacies are the most common source of health care for children in Uganda, providing a strong foundation for comprehensive paediatric training and malaria point-of-care tests. Implementation research suggests this approach is effective.⁷

Although a growing evidence base supports social innovation in health,^{8,9} there are many unanswered questions. What are the optimal ways of balancing the public health and economic benefits of health interventions? How can social forces fuel behavioral change and drive improved health outcomes? How can the collective strengths of laypeople and non-experts inform the development of health programmes? Social innovation is built for local communities and in some ways opposes conventional ideas that suggest that scaled up, large programmes are the logical outcome of global health. Although the process of social innovation can engage many people, the resulting outcomes can be tailored for a specific local setting.

Social innovation taps into the creativity and power of local supporters, disrupting established systems of health services delivery and helping to achieve several sustainable development goals. However, in order to reap the full benefits of social innovation in health, researchers, governments, and health professionals need to adapt. Researchers need to remember that many people in low-income and middle-income countries have already developed frugal health innovations designed for the last-mile context. Rigorous research engaging all actors is needed to test, optimise, and scale these innovations. Governments need to guide reassessments on how beneficiaries fit into health systems. Finally, health professionals must recognise that health problems are often embedded in

social issues that require attention and multidisciplinary research. As a global community, we need to recognise the spark of social innovation and support trailblazing innovators.

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- 1 Amazigo U, Okeibunor J, Matovu V, Zoure H, Bump J, Seketeli A. Performance of predictors: evaluating sustainability in community-directed treatment projects of the African programme for onchocerciasis control. *Soc Sci Med* 2007; **64**: 2070–82.
- 2 WHO, TDR, SESH, SIHI. Crowdsourcing in health and health research: a practical guide. Geneva: World Health Organization and The UNICEF/ UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases, 2018.
- 3 Tucker JD, Meyers K, Best J, et al. The HepTestContest: a global innovation contest to identify approaches to hepatitis B and C testing. *BMC Infect Dis* 2017; **17**(suppl 1): 701.
- 4 Liu E, Iwelunmor J, Gabagaya G, et al. Women's global health leadership in LMICs. *Lancet Glob Health* 2019; **7**: e1172–e73.
- 5 Blauvelt C, West M, Maxim L, et al. Scaling up a health and nutrition hotline in Malawi: the benefits of multisectoral collaboration. *BMJ* 2018; **363**: k4590.
- 6 Awor P, Wamani H, Bwire G, Jagoe G, Peterson S. Private sector drug shops in integrated community case management of malaria, pneumonia, and diarrhea in children in Uganda. *Am J Trop Med Hyg* 2012; **87**(suppl 5): 92–96.
- 7 Awor P, Wamani H, Tylleskar T, Jagoe G, Peterson S. Increased access to care and appropriateness of treatment at private sector drug shops with integrated management of malaria, pneumonia and diarrhoea: a quasi-experimental study in Uganda. *PLoS One* 2014; **9**: e115440.
- 8 Wang C, Han L, Stein G, et al. Crowdsourcing in health and medical research: a systematic review. *Infect Dis Poverty* 2020; **9**: 8.
- 9 Lopez J, Monroy M, Dorn P, et al. Effect of community education in an integrate control for *Triatoma dimidiata*. *Rev Med Trop* 2019; **71**: e380.