

Institutionalisation of social innovation in health research: the Philippine Gelia Castillo Award

Jose Rene Bagani Cruz , ¹ Jana Deborah Mier-Alpaño , ¹ Abigail Ruth Mier, ¹ Jean Francis Barcena , ¹ Arturo Jr Ongkeko, ² Gloria Nenita Velasco, ³ Jaime Montoya, ⁴ Meredith Labarda, ⁵ Noel Juban ⁶

For numbered affiliations see end of article.

Correspondence to

Dr Jose Rene Bagani Cruz, University of the Philippines Manila, Manila 8000, Philippines; jose_cruz1990@ yahoo.com

NJ since deceased.

JRBC, JDM-A and ARM contributed equally.

ML and NJ are joint senior authors.

Received 5 November 2021 Accepted 9 April 2022

Check for updates

© Author(s) (or their employer(s)) 2022. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.

To cite: Cruz JRB, Mier-Alpaño JD, Mier AR, et al. BMJ Innov Epub ahead of print: [please include Day Month Year]. doi:10.1136/ bmjinnov-2021-000888

INTRODUCTION

As low to middle-income countries (LMICs) continue to face persistent health problems, lack of resources and barriers to accessing health services, social innovations in health have emerged as a means to address complex problems in novel, responsive and transformative ways. These innovative solutions—products, services, models, markets or processes—created by multisectoral actors have potential for wider impact if social innovation is institutionalised and integrated into national policies or frameworks. However, the move towards institutionalisation of social innovation requires a paradigm shift where identification and recognition of social innovations are viewed as appropriate and effective mechanisms to meet the health needs of people, particularly the vulnerable or marginalised.

While there is substantial literature on social innovations from highincome countries, there is a scarcity of documented examples in LMICs.2 This prompted the Special Programme for Research and Training in Tropical Diseases (TDR) to launch a global crowdsourcing call to identify social innovations in the global South in 2015 through the first Social Innovation in Health Initiative (SIHI) hub hosted in the University of Cape Town in South Africa. Partners in Leprosy Action from the Philippines was one of the 23 social innovations selected for further study and promotion through that global call.

In 2017, SIHI hubs were established in Malawi, Uganda, the Philippines and Latin America and the Caribbean. National and regional innovation calls were made in

Summary box

What are the new findings?

- ⇒ The Department of Science and Technology—Philippine Council for Health Research and Development, Department of Health, and Social Innovation in Health Initiative Philippines codeveloped the Gelia Castillo Award for Research on Social Innovations in Health (GCARSIH). GCARSIH is a national award that aims to recognise social innovations that address persistent and systemic health challenges in the Philippines and support these innovations for further development through research.
- ⇒ In its inaugural run in 2020, GCARSIH received 53 eligible entries from across the country. The top three innovations presented unique solutions to the specific health needs and challenges they aimed to address. As part of the incentives for GCARSIH, winners were given a training package for research proposal writing and eligibility for an implementation research and development grant.
- ⇒ This presents an example of how the identification of and research on social innovations in health can be institutionalised into national systems and sustained through strategic engagement.

cooperation with these hubs. These innovation calls aimed not only to document and recognise social innovations in health but also to advocate for institutionalisation of social innovation into national health research and policy agenda. The innovation calls also enabled the creation of informal networks of innovators, partners and advocates at the country level



Summary box

How might it impact on healthcare in the future?

- ⇒ The GCARSIH mobilises national, regional, and local actors to identify social innovations in health. Its capacity building components promote the concept and practice of social innovation among national and regional health system actors and researchers, and democratise social innovation research among innovators and implementers.
- ⇒ This national award supports discussion and learning about diverse forms of innovations that address complex health systems challenges. It also presents an avenue for providing multisectoral support for social innovations in health to increase capacity and resilience.

that could be mobilised for collaborations and support through capacity-building activities.^{2 4}

The University of the Philippines Manila hosts the SIHI Philippines Hub, which conducted the first open crowdsourcing call for social innovations in health in the Philippines. The crowdsourcing call identified novel solutions that addressed health service delivery, financing and community mobilisation issues in their local systems to improve primary healthcare and maternal and child health. These innovations used existing resources in the community and were found to be effective in supporting health systems by improving access to healthcare, improving intercentre referrals, sustaining engagement of community members and promotion of health programmes and interventions. ⁵⁻⁸

This early-stage innovation report traces how SIHI Philippines was able to gain support from the public sector to institutionalise a national award for the identification of and research on social innovations in health.

METHODS

Identifying key national health system actors for collaboration and partnership

The institutionalisation of a national award for social innovations in health was a culmination of different strategic engagements with key national health system actors. On its establishment, SIHI Philippines recognised the need to engage with the Department of Science and Technology-Philippine Council for Health Research and Development (DOST-PCHRD) and the Department of Health (DOH). DOH and DOST-PCHRD were two of four institutions tasked with promulgating the Implementing Rules and Regulations of The Philippine National Health Research System (PNHRS) Act of 2013, through which the PNHRS was institutionalised.9 The PNHRS is mandated to improve the quality of life of Filipinos by ensuring that health research is linked to health system needs and that health research is supported sustainably through resources, partnerships and good governance.

Regional Health Research and Development Consortia (RHRDCs) were organised as part of the PNHRS Act. RHRDCs were established as a strategy to develop and enhance health research capabilities in the regions. They serve as a vital structure that links regional institutions to health research activities that impact regional and national health needs with recognition of the diverse culture and resources between the regions.⁹

SIHI Philippines embarked on several collaborative engagements with these national health system actors that culminated in a partnership and an aligned agenda to promote social innovation in health.

Engagements with national agencies to promote social innovation in health

As SIHI Philippines implemented the 2017 crowdsourcing call in the country, 'Search for PHL Social Innovation in Health Initiative (SIHI) Solutions', DOST-PCHRD and DOH were invited to the steering committee and panel of judges. DOST-PCHRD and DOH supported the promotion for this crowdsourcing call by sending letters of invitation to RHRDCs and promoting the call through their official social media channels. The crowdsourcing call resulted in the identification of four outstanding social innovations in health that improved health delivery, access and/or financing. These innovations were showcased during the DOST-PCHRD's 36th Anniversary in 2018, wherein DOST Secretary Fortunato Dela Peña recognised the role of social innovations towards making the healthcare system more affordable and accessible and in promoting community participation in health research. 10-12 It was through this collaboration for the crowdsourcing call that the idea of a national award that would regularly identify and recognise excellent social innovations in health began to surface.

In order to further strengthen partnerships and buy-in, key officials from the DOST-PCHRD and DOH were invited to a TDR Global Talk event organised by SIHI Philippines, which showcased global and local examples of social innovations in health. DOST-PCHRD also commissioned SIHI Philippines to conduct a desk review of research projects funded in 2010–2017 to identify projects that were socially innovative. These engagements set the stage for the launch of a national award recognising novel solutions for health.

Codesigning a national award for social innovations in

Building on the momentum of initial collaborative engagements and acknowledging potential roles of social innovation to improve health service delivery in the country, the Gelia Castillo Award for Research on Social Innovations in Health (GCARSIH) was announced in August 2018. This award was codeveloped by DOST-PCHRD, DOH and SIHI Philippines, incorporating principles from crowdsourcing calls of the SIHI network¹⁴ and embedding research in the

award's objectives, promotion and incentives. Consultative meetings with the RHRDCs were conducted to gather locally grounded inputs for the award's guidelines. This also helped ensure that strategies for the award were feasible and acceptable to particular cultural contexts of the country's diverse regions.

GCARSIH aims to recognise social innovations that address persistent and systemic health challenges in the Philippines and support promising innovations for further development to amplify results and jumpstart sustainability and upscaling. The award was named after Dr Gelia Castillo, a National Scientist whose work spanned the fields of health, gender, environment, poverty, inequality and participatory approaches to research. Her work in social sciences and community development always had special emphasis on championing change for the neglected in society.

SIHI Philippines would operationalise the GCARSIH guidelines in 2020. The partnership for GCARSIH was formalised through a Memorandum of Agreement with DOST-PCHRD. The award is currently supervised and funded jointly by DOST-PCHRD and DOH and will run every 2 years.

RESULTS

The first iteration of GCARSIH was officially announced by PCHRD during the 2019 PNHRS week celebration. SIHI Philippines developed award guidelines in partnership with the DOST-PCHRD and DOH. The guidelines were then implemented by SIHI Philippines for the first iteration of GCARSIH from 2020 to 2021. A general overview of the award process is provided in the succeeding paragraphs.

In preparation for opening the call for innovations, SIHI Philippines held online orientation sessions for three batches of RHRDCs and potential innovators. The aim of the orientation was to promote the call and strengthen the capacity of regional government actors to identify social innovations. Key concepts of social innovation in health and information about the award

were discussed during these sessions. The sessions were also an opportunity to help craft localised promotional materials for the regions.

The main promotional channels for the call were social media platforms, considering the high usage of social media in the Philippines and travel restrictions due to the COVID-19 pandemic. Digital posters and an audiovisual presentation were posted on DOST-PCHRD and SIHI websites and social media accounts. Additional support for promotion was provided by RHRDCs and partner organisations. Communication via email was also essential to reach the existing social innovator network of SIHI Philippines.

The call for submissions opened on 20 June 2020 and ran until 21 September 2020. A total of 67 submissions were received from 12 of the 17 regions in the Philippines. Fifty-three entries passed eligibility screening performed by RHRDCs and were forwarded to SIHI Philippines for distribution to judges.

Technical experts in the fields of health social sciences, health systems, public health, culture and anthropology, social entrepreneurship and research methodology composed the pool of judges. Judges also came from diverse backgrounds such as academia, public health practitioners, national and global organisations for health, science and technology and patient advocacy groups. Each entry was scored by two judges. Table 1 enumerates the scoring criteria used. The average score was computed for each entry. Innovations with the 10 highest scores were declared finalists of the award and forwarded to a panel of judges. A meeting was held with the panel to deliberate and select three winners.

Each of the winning innovations showcases unique solutions to specific health needs and challenges: (1) Holistic Water Systems for Pumping Water Uphill—Recognising that thousands of villages in the Philippines do not have access to potable water because they are topographically situated above existing water sources, this innovation is a hydraulic ram pump

| Selection criteria | Description | Weight |
|--|---|--------|
| Degree of innovativeness | The innovation provides a novel approach to address a systemic health challenge within its local context. It provides an alternative to the status quo. | 25% |
| Significance—based on priority health need | The innovation addresses a health priority of the Philippines (as defined by the National and/or Regional Unified Health Research Agenda), or a priority identified at the local level (eg, prevalent yet neglected health problem specific to a village or a marginalised group/ethnic group). | 15% |
| Participatory and co-owned | Participatory approaches are evident in the development, implementation and evaluation of the innovation (ie, contributions from various stakeholders: the patients/families, local health personnel, local leaders, other sectors). | 15% |
| Potential for further research/ integration/scale | There are clear plans for further research and development of the innovation. The innovation shows the feasibility to be applied, replicated and scaled up to other communities with similar problems, or integrated into the broader health system. | 15% |
| Inclusiveness | The innovation has the potential to be used by a large number of people, enhancing equity and access. | 10% |
| Effectiveness | The innovation has a demonstrated positive outcome on the health challenge it is addressing. | 10% |
| Affordability | The innovation is affordable to the poor who are otherwise excluded in the local context or the solution is more cost-effective than the status quo. | 10% |

Early-stage innovation report

Table 2 GCARSIH winners and finalists Name of innovation Innovator/s Webpage/links to materials Winners Holistic Water Systems for AIDFI www.aidfi.org Pumping Water Uphill University of the Philippines University of the Philippines https://www.facebook.com/updpsycserv https://www.twitter.com/updpsycserv Diliman Psychosocial Services Kalinga Health: A Hub-and-Innovations for Community Health https://innovationsch.org/kalinga-health/ https://www.youtube.com/watch?v=s7kE9SPW80U Spoke Social Enterprise Model Baby Bonding Philippines Joy P. Malinit https://www.facebook.com/babybondingphilippines/ BHW Academy BHW Academy https://www.voutube.com/watch?v=fTzwI7kBAs4 Falls prevention through Donald S. Lipardo https://clinicaltrials.gov/ct2/show/NCT03167840 physical and cognitive training (falls PACT) in older adults with mild cognitive impairment Health Change Model Zuellig Family Foundation https://zuelligfoundation.org/our-approach-health-change-model/ Romulo de Castro PPE needs Dashboard app https://www.usacfi.net/ppe-needs-dashboard.html Raphael Nelo Aquila Rodelio Subade Gisela Concepcion Tirso Ronguillo Asuncion Raymundo Telepsychiatry Southern Philippines Medical https://drive.google.com/file/d/1PVREfdjU2t3jX-rckdVMgEUo7wrxIGxD/view?usp=sharing YHHI Positive Youth Development https://ideaspositive.org/pydn/ Network, Inc.

Reference: https://www.pchrd.dost.gov.ph/news/6651-congratulations-to-the-winners-and-finalists-of-the-gelia-castillo-award-for-research-on-social-innovations-in-health?fbclid=IwAR2BQpiPK2DZzBp6dLyulil-wCPqD-5yHK1QQvNufa2NIRtoB9bEGDRkTpc

AIDFI, Alternative Indigenous Development Foundation; BHW, Barangay Health Worker; GCARSIH, Gelia Castillo Award for Research on Social Innovations in Health; PPE, personal protective equipment; YHHI, Young House Heroes Initiative .

model that provides clean and safe water to remote upland communities. Initiated by the Alternative Indigenous Development Foundation, this innovation has improved the health, nutrition and sanitation of upland villages, (2) University of the Philippines Diliman Psychosocial Services (UPD PsycServ)—an innovation in mental healthcare that addresses increasingly pressing mental health and well-being concerns of students, faculty and staff in a systematic, holistic and caring manner. At the onset of the COVID-19 pandemic, UPD PsycServ responded to mental health issues brought about by the pandemic, expanding services through free telepsychotherapy, workplace psychological processing, culturally sensitive talks and social messaging on mental health promotion. (3) Kalinga Health: A Hub-and-Spoke Social Enterprise Model—initiated by Innovations for Community Health in partnership with ACCESS Health International, is a comprehensive programme for tuberculosis care that addresses major gaps in case detection, reporting, quality care, case holding and affordability. At the core of the model is its sustainability component through health insurance coverage, particularly for those of lower socioeconomic status. Table 2 provides links to online materials with more information about the winners and finalists of the award.

The winners and finalists were publicly recognised and awarded on 17 March 2021, during the 39th

anniversary celebration of DOST-PCHRD. Their incentives include a plaque, cash prize and eligibility to receive a research and development grant from DOST-PCHRD to serve as an innovation acceleration fund.

GCARSIH also provided a training package for grants and proposal writing to support winners and finalists in the process of submitting grants. The package aimed to (a) cultivate an entrepreneurial mindset, (b) instil the value of research and data in innovation and (c) familiarise with commercialisation and intellectual property. A total of eight training sessions were held. Sixteen participants completed the course requirements of the training, and eight teams presented their pitches for research proposals in the final session, which incorporated learnings from the previous sessions. Feedback was given for both content and manner of delivery of the pitches. As of this writing, two of the winners are in the process of their grant applications with PCHRD for acceleration and scale-up of their innovations.

Overall, the training and mentoring sessions were well received by participants who found the sessions helpful, interesting and relevant to their activities. Sessions about entrepreneurship and pitching proposals were found to be the most helpful, while only half of the participants found the research writing session as helpful. Practical considerations highlighted the availability of the participants who

only had time for the sessions during weekends. All these responses were collected through an online feedback form.

DISCUSSION

With social innovations often distinguished from public sector innovations or policy reforms, ¹⁷ the launch of GCARSIH illustrates the potential of embedding social innovations into larger institutional structures. This institutionalisation emerges from multisectoral collaboration between government and non-government actors, availability of resources, and an aligned agenda that is beneficial for all stakeholders involved.

In line with the strategy of SIHI Philippines to bring together key national health system actors, the culmination of the national award involved tapping into SIHI's existing network of social innovators and mobilising government actors at the regional level through the RHRDCs. Through mobilising actors who are closer to communities and providing them with information about the GCARSIH and basic concepts on social innovation in health, the innovation call was able to gather a wider range of entries, from both urban and rural settings. This also empowered government actors to be able to identify social innovations on their own. This localised approach in the institutionalisation of social innovation research is particularly important in the Philippines, as the archipelagic geography of the country gave rise to diverse cultural and social contexts that shape innovative and adaptable health solutions. The profile of entries and innovators shows the diversity from where innovation can arise and is not an exclusive domain of academia and research. Innovations have also adapted to changing contexts particularly in addressing the COVID-19 pandemic. However, further research is needed to evaluate impact, test potential for adaptation and scale and elicit lessons on empowering and transformative processes. 18 19

Providing incentives to the winners of GCARSIH, particularly the research and development grant and capacity-building training, furthers democratisation of social innovation research among its practitioners. Research may be regarded as an exclusive activity for academic or subject area experts. Social innovators may not be familiar with research or the process to access grants that may further develop innovations. The grant and training package is expected to empower the innovators in accessing funding opportunities critical to upscaling and sustaining social innovations. This was found to be generally helpful, relevant and accessible by the trainees. The grant and training package furthers the aim to demystify research and makes it more accessible to innovators. Skills learnt from the training package would also enable the innovators to further create and submit proposals that suit their innovation's needs.

CONCLUSION

The launch and initial success of GCARSIH is a result of convening various groups and individuals through multistakeholder collaboration and participatory processes. This national award has allowed more discussion, interaction and learning from diverse forms of innovations that address complex health system challenges. Moving forward, strategies to provide multisectoral support for social innovations in health must be explored in order to increase capacity and resilience.

Government support for social innovations in health that focus on research and development is an important start for broader institutional change. The institutionalisation of GCARSIH signifies transformative seeds are growing and can be further strengthened by social innovations becoming embedded in and supported by policies and regulations. These future policies must enable social innovations and the innovators to access resources (technical, social and financial) and minimise or remove barriers that are critical in scaling-up and sustain social innovations.

Author affiliations

¹University of the Philippines Manila, Manila, Philippines

²National Institutes of Health, National Telehealth Center, University of the Philippines Manila, Manila, Philippines

³Department of Health—Republic of the Philippines, Manila, Philippines ⁴Philippines Council for Health Research and Development, Taguig, Metro Manila, Philippines

⁵Medicine, University of the Philippines Manila School of Health Sciences, Palo, Leyte, Philippines

⁶Department of Clinical Epidemiology, University of the Philippines Manila, Manila, Philippines

Twitter Jana Deborah Mier-Alpaño @janadeborahmd

Acknowledgements The authors would like to thank Beverly Ho, Anicia Catameo, Ian Hannah Gozun, Angeline Ramos, Joanna Ophelia Real, Ma. Pamela Tagle and staff members of the various RHRDCs for their expertise and roles in making the award possible. The authors would like to thank social innovators from Alternative Indigenous Development Foundation Inc, Innovations in Community Health Inc, University of the Philippines Diliman Psychological Services, finalists of the award and other innovators who submitted entries who continue to seek ways to help their communities.

Contributors JRBC, JDM-A and ARM contributed equally to this work JRBC, JDM-A, ARM, JFB, AMO, ML and NJ contributed to the conception and design of this work. GNV and JM critically reviewed the study proposal and provided revisions to the protocol. JRBC, JDM-A, ARM, JFB, AMO collected data and coordinated with project partners including innovators. GNV, JM, ML and NJ provided oversight and overall direction. All authors have read and approved the submission of this version of the manuscript. ML and NJ are co-senior authors of this work.

Funding The Gelia Castillo Award for Research on Social Innovations in Health is funded by the Department of Science and Technology—Philippine Council for Health Research and Development and the Department of Health. Social Innovation in Health Initiative (SIHI) Philippines is mainly funded by TDR, the Special Programme for Research and Training in Tropical Diseases co-sponsored by UNICEF, UNDP, the World Bank and WHO.

Disclaimer The authors alone are responsible for the views expressed in this article, and they do not necessarily represent the decisions or policies of PAHO or TDR. In any reproduction of this article there should not be any suggestion that PAHO or TDR endorse any specific organisation services or products.

Early-stage innovation report

Competing interests None declared.

Patient consent for publication Not applicable.

Ethics approval Not applicable.

Provenance and peer review Not commissioned; externally peer reviewed.

Open access This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: http://creativecommons.org/licenses/by-nc/4.0/.

ORCID iDs

Jose Rene Bagani Cruz http://orcid.org/0000-0001-7539-0144 Jana Deborah Mier-Alpaño http://orcid.org/0000-0003-4119-8300 Jean Francis Barcena http://orcid.org/0000-0003-1709-2338

REFERENCES

- 1 Dawson P, Daniel L. Understanding social innovation: a provisional framework. *Int J Technol Manag* 2010;51:9–21.
- 2 van Niekerk L, Ongkeko A, Hounsell RA, et al. Crowdsourcing to identify social innovation initiatives in health in low- and middle-income countries. *Infect Dis Poverty* 2020;9:138.
- 3 TDR news, 2017. Available: https://www.who.int/tdr/news/2017/partners-leprosy-action/en/
- 4 van Niekerk L, Mathanga DP, Juban N, *et al*. Universities as catalysts of social innovation in health systems in low-and middle-income countries: a multi-country case study. *Infect Dis Poverty* 2020;9:90.
- 5 Juban N, Reyes J, Ongkeko A. Inter-Island Health Service Boat Project. Social Innovation in Health Initiative Case Collection. [Online] WHO, Geneva: Social Innovation in Health Initiative, 2018. Available: www.socialinnovationinhealth.org/casestudies/inter-island-health-service-boat-project/
- 6 Juban N, Reyes J, Ongkeko A. PhP6.60 Everyday Family Health Plan. Social Innovation in Health Initiative Case Collection. [Online] WHO, Geneva: Social Innovation in Health Initiative, 2018. Available: www.socialinnovation inhealth.org/case-studies/p6-60-everyday-family-health-plan/
- 7 Juban N, Salisi J, Mier A. Seal of Health Governance, Philippines. [Online]. World Health Organization & UNICEF/ UNDP/World Bank/ WHO Special Programme for Research and Training in Tropical Diseases, Geneva: Social Innovation

- in Health Initiative, 2020. Available: www.socialinnovation inhealth.org
- 8 Juban N, Salisi J, Mier A. National Telehealth System, Philippines. [Online]. World Health Organization & UNICEF/ UNDP/World Bank/ WHO Special Programme for Research and Training in Tropical Diseases, Geneva: Social Innovation in Health Initiative, 2020. Available: www.socialinnovation inhealth.org
- 9 An act Institutionalizing the Philippine National health research system 2012 (phi).
- 10 TDR News. Health research leaders in the Philippines recognize the impact of social innovation in health. TDR. Available: https://www.who.int/tdr/news/2018/philippinesimpact-of-social-innovation-in-health/en/
- Business Mirror. WHO scientist to speak at PCHRD 36th yr celebration. Available: https://businessmirror.com.ph/2018/03/04/who-scientist-to-speak-at-pchrd-36th-yr-celebration/
- 12 Arayata MC. R&D council highlights value of social innovations in health. Philippine News Agency. Available: https://www.pna.gov.ph/articles/1029011
- 13 TDR News. 9 February 2018). first TDR global talks showcasing impact of social health innovations. TDR. Available: https://www.who.int/tdr/news/2018/first-tdr-global-talks/en/
- 14 TDR/SESH/SIHI. Crowdsourcing in health and health research: a practical guide. World Health organization, 2018. Available: https://www.who.int/tdr/publications/year/2018/ crowdsourcing-practical-guide/en/
- 15 National Academy of Science and Technology. Gelia T Castilo Distinguished Rural Sociologist. Available: https://www.nast.ph/index.php/13-news-press-releases/319-gelia-t-castillo-distinguished-rural-sociologist-89
- 16 Philippine human development network. (nd). Gelia T. Castillo. Available: https://www.hdn.org.ph/gelia-t-castillo/
- 17 Pel B, Bauler T. The institutionalization of social innovation: between transformation and capture, transit working paper NR. 2014. Available: transitsocialinnovation.eu
- 18 Halpaap BM, Tucker JD, Mathanga D, et al. Social innovation in global health: sparking location action. Lancet Glob Health 2020;8:e633-4.
- 19 van Niekerk L, Manderson L, Balabanova D. The application of social innovation in healthcare: a scoping review. *Infect Dis Poverty* 2021;10:26.