

# Community Engagement in Social Innovation Research: A Global Sequential Mixed Methods Analysis

Emmanuel Ahumuza (✉ [eahumuza2@gmail.com](mailto:eahumuza2@gmail.com))

Department of Community Health and Behavioural Sciences, School of Public Health, Makerere University College of Health Sciences

Patricia Moscibrodzki

Department of Clinical Research, London School of Hygiene and Tropical Medicine

Joseph D Tucker

Institute of Global Health and Infectious Diseases, University of North Carolina

Phyllis Awor

Department of Community Health and Behavioural Sciences, School of Public Health, Makerere University College of Health Sciences

---

## Research Article

**Keywords:** Community Engagement, Social Innovation, Health, Mixed methods

**Posted Date:** November 21st, 2022

**DOI:** <https://doi.org/10.21203/rs.3.rs-2249384/v1>

**License:**  This work is licensed under a Creative Commons Attribution 4.0 International License.

[Read Full License](#)

---

# Abstract

## Background

Social innovation in health provides innovative solutions to address healthcare delivery gaps and it relies on engaging community. However, little is known about factors that influence community engagement in health research. The study sought an in-depth understanding of elements of community engagement in social innovations identified by the global social innovation in health initiative network.

## Methods

The study employed a sequential mixed methods study approach, which involved a series of semi-structured interviews with 27 social innovators followed by an online survey among social innovation researchers. Semi-structured interviews were recorded, transcribed and analyzed using NVivo 11. Themes identified from the qualitative study informed the development of a survey instrument on community engagement. The survey data were analyzed using STATA version-14 and descriptive statistics were presented.

## Results

Community engagement in social innovation was mostly utilized during during delivery of interventions (213; 79.2%), intervention identification and design (179; 66.5%), and problem identification (167; 62.1%). About half of the social innovations (135; 52.1%) had collaborate or shared leadership level of community engagement. We noted differential participation of community stakeholders at different stages of community engagement in social innovations. Social innovations built capacity of community stakeholders to offer health services to communities. Community engagement in social innovations resulted into intervention acceptance, and improved sustainability and community ownership of interventions.

## Conclusion

The study shows moderate community engagement in social innovations in health. Creating strong governance structures as well as co-creating interventions with communities are vital towards achieving high community engagement in social innovation in health.

## Background

Social innovation brings together social action and health improvement, drawing on unique community strengths and community engagement.<sup>1</sup> For purposes of this study, community engagement is defined as the process of working collaboratively with groups of people who share geographic proximity, special

interests, or similar situations related to their health or well-being.<sup>2</sup> Robust community engagement is a foundation of social innovation.<sup>3</sup> Community engagement can be used to tailor social innovations, accelerate implementation research, facilitate pragmatic clinical trials, inform local health policy related to social innovation, and help sustain social innovation over time.<sup>4</sup> The Social Innovation For Research Checklist (SIFR) recommends that all social innovation research describe the extent of community engagement.<sup>5</sup> In addition, the TDR/SESH/SIHI Monitoring and Evaluation Guide recommends that community engagement be a core component of assessing social innovation.<sup>6</sup>

Yet, there have been few studies examining community engagement in the context of social innovation.<sup>7</sup> Previous studies of community engagement related to social innovation have not examined important contextual issues.<sup>8</sup> Some social innovation studies have focused on high-income countries,<sup>1</sup> neglecting the many low and middle-income countries that lead and evaluate social innovation. Understanding community engagement in the context of social innovation is essential. The purpose of this study was to examine community engagement in social innovation research using mixed methods research.

## Methods

### Study design

A sequential mixed methods approach was used for this analysis.<sup>9</sup> This approach was selected based on initial qualitative data that provided further hypotheses to evaluate in subsequent quantitative survey component. The study had two sequential components – a series of semi-structured interviews with social innovators followed by a cross-sectional online survey among social innovation researchers.

### Semi-structured interviews

We arranged 1:1 semi-structured interviews with social innovators who had been identified through the Social Innovation in Health Initiative (SIHI) Network.<sup>8</sup> SIHI organized a global compendium of 44 social innovation case studies. Each of these cases met pre-specified criteria and were vetted by two independent external individuals.<sup>6</sup> A brief descriptions of each of these social innovation case studies is available on the SIHI website. We contacted each of the social innovators identified in the 2022 version of the case compendium. We contacted each email address a total of three times. For individuals who did not respond, we found contacts at the host institution. When making an initial inquiry, we asked to interview people with knowledge about the origins and development of that specific social innovation over time. All interviews were conducted online via Zoom, Teams, or similar videoconferencing software. Each interview lasted approximately 30–45 minutes and was conducted by a social innovation researcher with training in qualitative research. The semi-structured interview guide (supplement XX) was iteratively developed with feedback from social innovators in addition to personnel at the SIHI research hubs in Uganda and China.

All interviews were recorded and transcribed. We extracted key elements of community engagement from the interviews using inductive coding informed by community-based participatory research principles.<sup>10,11</sup> Two authors developed a coding framework and used content analysis to generate themes focused on facilitators and barriers of community engagement. We used NVivo 11 for thematic analysis.

### Online survey

Building on themes identified from the semi-structured interviews, we developed an online survey instrument. This was developed based on best practices for online surveys during COVID-19.<sup>12</sup> We used a convenience sampling approach. The survey focused on researchers who have experience with social innovation. Recruitment was entirely online and facilitated by SIHI research hubs. Each SIHI research hub shared the survey link with social innovators, researchers, government officials, and others interested in social innovation. The survey included domains on socio-demographic characteristics, community engagement breadth and depth, facilitators and barriers of community engagement, and related topics (Supplemental XX). Using the Community engagement framework developed by the US Centers for Disease Control and Prevention, participants categorized their social innovations as inform, consult, involve, collaborate or shared leadership level of community engagement. The survey was field tested among seven individuals at the SIHI China and Uganda Hubs prior to launch.

Survey data were entered into MS Excel and analyzed using STATA version 14. We computed frequencies and percentages pertaining to levels, stages, functions, and risks and benefits of community engagement in social innovations.

The mixed methods study was approved by Makerere University School of Public Health Higher Degrees, Research and Ethics Committee (HDREC) (reference: SPH-2020-9). Written informed consent was sought from the study participants before participating in the study. Participation was voluntary and data of the participants remained anonymous through data collection, analysis and dissemination.

## Results

A total of 274 individuals participated in the survey. More than half of the respondents were from Africa, a quarter of them from Asia, and 16% were from Latin America and the Caribbean. The mean age was 38.6 (SD  $\pm$  11.5) (Table 1). Of the 27 key informants involved in the study, 16 were males and 18 were from Africa (supplementary material).

Table 1

Socio-demographic characteristics of respondents involved with social innovation, 2022 (N = 274)

<b>Variable</b>	<b>Frequency, n = 274 (%)</b>
<b>Continent</b>	
Africa	155 (56.6)
Asia	71 (25.9)
LAC <sup>1</sup>	44 (16.0)
North America	2 (0.7)
South America	1 (0.4)
Europe	1 (0.4)
<b>Sex at Birth</b>	
Male	141 (51.5)
Female	133 (48.5)
<b>Age [Mean (SD)]</b>	38.6 (SD ± 11.5)
<b>Level of education</b>	
Secondary school	3 (1.1)
Certificate (tertiary)	2 (0.7)
Diploma	3 (1.1)
Bachelor's degree	82 (29.9)
Master's degree	138 (50.4)
PhD	46 (16.8)
<b>Type of organization</b>	
Government	59 (21.5)
University	97 (35.4)
NGO <sup>2</sup>	63 (23.0)

Type of organization: Others – Freelance, Research centre, Health College, Charitable organization, Currently not working

<sup>1</sup> Latin America and the Caribbean

<sup>2</sup>Non-governmental organization

Variable	Frequency, n = 274 (%)
Private sector	34 (12.4)
Others	21 (7.7)
Type of organization: Others – Freelance, Research centre, Health College, Charitable organization, Currently not working	
<sup>1</sup> Latin America and the Caribbean	
<sup>2</sup> Non-governmental organization	

## Stages and activities of community engagement in social innovations

Survey findings (Table 2) found that most of the social innovations utilized communities during delivery of interventions (213; 79.2%), intervention identification and decision making (design) (179; 66.5%), and problem identification (167; 62.1%). A total of (167; 62.1%) innovations used qualitative research studies, (149; 55.4%) advocacy of health need in community and (146; 54.3%) stakeholder consultations to engage communities. Two-thirds of respondents assessed community engagement through getting feedback from community members on the activities (184; 68.4%).

When discussed with key informants, qualitative findings revealed that more than three-quarters of social innovations (23/27) engaged communities during delivery of interventions. Local community stakeholders were involved in community mobilization, creating awareness and promoting utilization of health services and products. Social innovations also increased the capacity of the community stakeholders (e.g., health care workers, community health workers, teachers and community groups) to provide health services to the community.

*"We were working with county health teams and the Ministry of Health to implement a community health worker program and so basically recruiting and training community members to provide a diagnostic preventative and curative services to the communities". (KI 13, Liberia)*

A third of social innovations (12/27) involved communities to determine their health needs. Community members engaged in focus group discussions, community dialogues, and feedback surveys to understand the needs of the public. In some instances, the local leaders, district health officials and community health workers were also involved.

*"to understand the challenges the population was facing with accessing their health care was the first stage of community engagement, this was mainly through focus group discussions and feedback surveys". (KI, 02, Uganda)*

We noted that during the design stage, two-thirds of social innovations (17/27) worked with trusted existing community stakeholders such as churches, community groups, community health workers, local leaders or employers to set shared goals and responsibilities. Feedback surveys, interviews and crowdsourcing were utilized to design services appropriate to the focus population and to design and pre-test education materials and programs. More than half of the social innovations (15/27) involved communities in evaluation of the interventions through community dialogues, surveys, qualitative research, and randomized clinical trials.

Table 2  
Stages and activities of community engagement in social innovations

Variable	Frequency, n (%)
<b>Stage at which community engagement was utilized? (n = 269)</b>	
During implementation/delivery of the intervention	213 (79.2)
During intervention identification and decision making	179 (66.5)
During problem identification	167 (62.1)
During evaluation of the solution	155 (57.6)
During scaling the intervention/Solution	121 (45.0)
In managing the resources	83 (30.9)
<b>Community engagement activities utilized in social innovation (n = 269)</b>	
Qualitative research study	167 (62.1)
Advocacy of health need in community	149 (55.4)
Stakeholder consultation	146 (54.3)
Quantitative research study	126 (46.8)
Co-creation workshop or similar participatory event	118 (43.9)
Community advisory board	92 (34.2)
Crowdsourcing open call	52 (19.4)
Crowdsourcing designathon	25 (9.3)
Monitoring and Evaluation	131 (48.7)
<b>Assessed community engagement in social innovations (n = 369)</b>	
Feedback from community members on the activity	184 (68.4)
Number of participants at community engagement meetings	156 (58.0)
Qualitative research interviews	137 (50.9)
An evaluation of the community engagement activity	122 (45.4)
Number of workshops/community engagement meetings	120 (44.6)
Social media analytics of shares, likes and re-tweets	46 (17.1)

Levels of community engagement in social innovations

Most of the survey participants categorized their social innovation projects under collaborate (88; 34.0%), followed by shared leadership (47; 18.1%), involve (63; 24.3%), consult (32; 12.4%) and inform (29; 11.2%) levels of community engagement (Table 3).

In qualitative interviews, almost half of the social innovations (12/27) that described having “shared leadership” was due to strong governance structures created within the community. Social innovations co-created the interventions with community stakeholders and set shared goals, roles or responsibilities.

*“So in each of the programs in the communities we went to, we created a long term governance structure where we agreed together on sort of what outcomes we wanted to achieve and so who [is] responsible for doing what”. (KI, 01, South Africa)*

A quarter of the social innovations (7/27) had “collaborate” as the level of community engagement. Community stakeholders and members were involved at different stages of the innovation and this built trust with the community. Whereas another quarter of the innovations (8/27) exhibited “involve” as the manner of community engagement. Communities were involved in different activities including health promotion and outreach programs as well as providing feedback on services received.

Table 3  
Levels and functions of community engagement in social innovations

Variable	Frequency, n (%)
<b>Level of community engagement (n = 259)</b>	
Shared leadership	47 (18.1)
Collaborate	88 (34.0)
Involve	63 (24.3)
Consult	32 (12.4)
Inform	29 (11.2)
<b>Function of community engagement (n = 269)</b>	
Empowerment (Planning and managing health activities by the community using professionals as resources and facilitators)	186 (68.0)
Mobilization (So that people will eventually do what the professional advises)	171 (63.6)
Design Interventions that solve community challenges	177 (65.8)
Advocate and gain support/uptake for intervention/project	169 (62.8)
Collaboration (Communities contribute time, materials and/or money, but with the professional defining needs)	167 (62.1)
Increase diverse voices and be inclusive	125 (46.5)

## Functions of community engagement in social innovations

About two-thirds of the participants reported that they utilized community engagement for empowerment (186; 68.0%), designing interventions (177; 65.8%), mobilization (171; 63.6%), advocacy and uptake of projects (169; 62.8%) as well as for collaboration (169; 62.8%) (Table 3). Two-thirds of key informants (18/27) said that social innovations empowered community representatives such as community health workers, teachers, and community groups to offer healthcare services to communities. On the other hand, beneficiaries/patients were also equipped with knowledge and skills to take responsibility and control of their health.

*"We had to train VHTs on [how] to do a breast self-examination so this knowledge was passed out to the women in the villages to do self-breast examinations on themselves". (KI 22, Uganda).*

We also noted that more than half of the social innovations engaged community members and/or community representatives such local leaders, churches, community groups, employers and district local government officials to advocate for support or uptake the interventions. During community mobilizations, community representatives provided health education and promotion services to communities through door-to-door and community dialogue meetings. We however noted that community representatives referred high risk cases identified in the communities to the health facilities.

*"Community health workers do home visits to mothers three weeks during pregnancy and three weeks after delivery, providing messages on health promotion and disease prevention". (KI 25, Peru)*

## Benefits and risks for community engagement in social innovations

Respondents acknowledged that community engagement was beneficial for community empowerment 191 (71.0%), improving utilization of services 184 (68.4%), improving interventions 183 (68.0%), sustainability 175 (65.1%) and community ownership 173 (64.1%). More than half of the key informants reported that engaging communities in social innovations improved community ownership through co-creation, intervention acceptance and participation in social accountability. Key informants reported that working with governments enabled patients to be absorbed into the public health system, and community health workers ensured continuity of service delivery even after end of project activities. Other key informants noted that involving the communities in social innovations improved health service utilization, sustainability of interventions, addressed myths and mistrusts, as well as empowered communities to take charge of their health needs.

*"It's a cornerstone for sustaining health innovations in our communities because it also creates ownership of the program, it triggers innovation or feedback from key stakeholders that is critical for improving a program. Our programs have largely been formed by feedback that has come [from] engaging communities". (KI 08, Burundi)*

The common risks of community engagement in social innovations included the process being time consuming (112; 41.6%), illiterate communities not understanding the intervention or their roles (125;

46.5%), people derailing or changing initial ideas (114; 42.4%), being expensive and communities rejecting ideas (103; 38.3%) (Table 4).

Similarly, qualitative findings revealed that the process of engaging the community in social innovations is time consuming and expensive. One key informant highlighted the risk of prolonged polishing and approval of interventions: *“It prolongs the process because every other time you have to go to the community, it makes the process of approval and feedback longer”* (KI 02, Uganda). We noted that social innovations could be rejected if the communities have a poor understanding of the intervention and fail to involve cultural, political/local and religious leaders.

Table 4  
Benefits, risks and useful resources for community engagement

Variable	Frequency, n (%)
<b>Benefits of robust community engagement in social innovations (n = 169)</b>	
Improved community ownership	173 (64.1)
Community empowerment	191 (71.0)
To improve the intervention	183 (68.0)
For sustainability	175 (65.1)
To solicit beneficiary/end-user perspectives	117 (43.5)
To reduce mistrust in activities	133 (49.4)
Enhance sharing responsibilities and resources	115 (42.8)
Improves utilization of health services	184 (68.4)
<b>Risks of community engagement in social innovations (n = 269)</b>	
Expensive	112 (41.6)
Takes too much time	153 (56.9)
People can derail or change initial ideas	114 (42.4)
Lack of expertise in the team to conduct community engagement	87 (32.3)
Community can reject your ideas	103 (38.3)
Could contribute to confusion or misunderstanding the intervention	77 (28.6)
Low literacy of community members that they may not or do not understand the interventions or may not have a role to contribute	125 (46.5)

## Discussion

This sequential mixed-methods study examined community engagement in social innovations identified by the SIHI network. Our findings show that about half of the social innovations were categorized under shared leadership or collaborate level of community engagement. Communities were mostly utilized to identify community health needs/problems, design interventions, as well as implement or deliver interventions. There was differential participation of communities at different stages of community engagement in social innovations. The study also highlights activities of community engagement at different project/intervention stages, and functions of community engagement in social innovations such as empowerment, mobilization and advocacy for uptake of interventions.

Similar to previous studies<sup>13,14</sup>, we found that the level of community engagement in social innovations was moderate. In contrast, qualitative findings and a previous study conducted by Moscibrodzki and colleagues<sup>8</sup> reported high levels of community engagement. The contradiction could be explained by the approach or selection criteria used by the SIHI network to identify and recognize social innovations. Under this criteria, social innovations have to demonstrate that they are sustainable, and show evidence of co-creation approaches in the development, implementation or evaluation of the social innovations<sup>15</sup>. As indicated by key informants, to achieve high community engagement, strong governance structures should be created within communities as well as co-creating interventions with communities.

Social innovations engaged communities at several stages, including identifying community health needs and evaluation of interventions. Community engagement was more common during problem identification, design and delivery of interventions. This finding is consistent with studies supporting the involvement of communities at several stages of developing a social innovation<sup>16-18</sup>. Similar to Pratt and colleagues<sup>19</sup>, we also noted differential participation of community members or stakeholders at different stages of social innovations. During problem identification, social innovations mostly engaged district local government officials, local leaders as well as health workers. At the design stage, social innovations mostly engaged community groups, religious groups, community health workers, local leaders and employers who knew communities well and were trusted by community. This implies that in order to effectively engage communities in social innovations, it is important to consider who to involve at each stage.

This study highlights the functions of community in social innovations. To begin with, community empowerment is instrumental in utilization of health services. Key informants noted that social innovations through training built the capacity of community health workers and teachers to offer health promotion and healthcare services to communities and learners in schools. This is similar to previous studies which suggested that building capacity among community health workers improved health service utilization in communities<sup>20,21</sup>. In addition, community stakeholders are influential in creating awareness on availability of health services/products, mobilizing communities as well as advocating for community uptake of interventions. The explanation for this finding is that community stakeholders are trusted by the communities and therefore help to build public trust and commitment to health

interventions. A study conducted in Kenya reported that use of community health workers improved awareness of health services in communities<sup>22,23</sup> and improved interventions<sup>20</sup>.

Similar to previous studies<sup>4,14,24</sup>, the present study found that community engagement in social innovations was beneficial for improving community empowerment. Key informants noted that social innovations provided communities with skills and knowledge to gain more control over their decisions concerning their health and health needs.

It is evident that community engagement is beneficial for sustainability<sup>24</sup>, as well as enhancing community ownership<sup>25,26</sup>. In this study, participants reported that engaging communities in social innovations improved sustainability and community ownership. Key informants further noted that co-creation and sharing roles and responsibilities with communities enhances acceptance, sustainability, as well as community ownership of interventions.

In conclusion, the study demonstrates moderate community engagement in social innovations in health. Creating strong governance structures, co-creating interventions with communities, and having shared responsibilities with the communities are important towards attaining high level of community engagement in social innovation and health projects.

## Declarations

**Ethics approval and consent to participate:** The study was approved by Makerere University School of Public Health Higher Degrees, Research and Ethics Committee (HDREC) (reference number: SPH-2020-9). All study participants involved in the study provided written informed consent and all methods were carried out in accordance with relevant guidelines and regulations.

**Consent for publication:** Not applicable

**Data Availability Statement:** Due to ethical restrictions related to protecting participants' privacy, data cannot be made publicly available. Data are available upon request from the corresponding author.

**Funding:** The work received support from the TDR, the Special Programme for Research and Training in Tropical Diseases co-sponsored by UNICEF, UNDP, the World Bank and WHO. TDR is able to conduct its work thanks to the commitment and support from a variety of funders. These include our long-term core contributors from national governments and international institutions, as well as designated funding for specific projects within our current priorities. For the full list of TDR donors, please visit TDR's website at <https://www.who.int/tdr/about/funding/en/>. TDR receives additional funding from Sida, the Swedish International Development Cooperation Agency, to support SIHI.

**Author contribution:** EA, PM, JDT, and PA conceived and designed the study. EA and PM implemented the study, validated findings and analysed the data. All authors read and approved the final manuscript.

**Competing interest:** The authors declare that they have no competing interests.

**Acknowledgments:** The authors would like to thank innovators/project leads of the following social innovations: Broadreach GP Down-Referral model; The Medical Concierge Group Limited; Health Child Uganda; Noora Health; Safe Water And Aids Project; Seal of Health Governance; Kyaninga Child development Centre; SESH China; Riders for Health; Learner Treatment Kit; Lifenet Burundi; Kaundu Community based Insurance Malawi; Last Mile Health; Living Good Uganda; Eco-Health Health Approach to Chagas Disease, Guatemala; Kheth'impilo Pharmacist Assistant Training Programme; Schistosomiasis Control Initiative; SMS-Hub Leprosy Case Management System; Action for women and Awakening in Rural Environment (AWARE) Uganda; Bwindi Mother's waiting Hostel; Drug Shop Integrated Management of Childhood Illness; Imaging the World Africa; Everyday Family Health Plan; National Telehealth System; Mothers of the river; Centre for the Development of Scientific Research; and Comprehensive Health Approach to Fight Chagas Disease. The authors wish to thank the SIHI secretariat and all SIHI hubs for their assistance and support in contacting and scheduling interviews with social innovators in their respective countries. The authors would also like to thank the SIHI hub members and social innovation researchers for participating in the online survey on community engagement.

### Authors' information

<sup>1</sup>Department of Community Health and Behavioural Sciences, School of Public Health, Makerere University College of Health Sciences, Kampala, Uganda.

<sup>2</sup>Department of Clinical Research, London School of Hygiene and Tropical Medicine, London, UK

<sup>3</sup>Institute of Global Health and Infectious Diseases, University of North Carolina, Chapel Hill, North Carolina, USA

## References

1. Halpaap BM, Tucker JD, Mathanga D, et al. Social innovation in global health: sparking location action. *The Lancet Global Health*. 2020;8(5):e633–4.
2. Centers for Disease Control and Prevention, National Institutes of Health, Health Resources and Services Administration, U.S. Department of Veterans Affairs. *Principles of Community Engagement. Second Edition.*; 2011.  
[https://www.atsdr.cdc.gov/communityengagement/pdf/PCE\\_Report\\_508\\_FINAL.pdf](https://www.atsdr.cdc.gov/communityengagement/pdf/PCE_Report_508_FINAL.pdf).
3. Bayugo YV, Labarda M, Cruz JRB, et al. Description of global innovative methods in developing the WHO Community Engagement Package. *BMJ open*. 2022;12(6):e063144.
4. World Health Organization. Community engagement: a health promotion guide for universal health coverage in the hands of the people. Published online 2020.
5. Kpokiri EE, Chen E, Li J, et al. Social Innovation for Health Research: Development of the SIFHR Checklist. *PLoS Med*. 2021;18(9):e1003788.

6. WHO/TDR/SESH/SIHI. Social innovation in health: monitoring and evaluation framework. 2021. <https://apo.who.int/publications/i/item/social-innovation-in-health-monitoring-and-evaluation-framework>.
7. Tucker JD, Manderson L, Amazigo U, et al. Social innovation in health: concepts and practice. *BMJ Innovations*. Published online 2022:bmjinnov-2022.
8. Moscibrodzki P, Ahumuza E, Li J, et al. Social innovation in health, community engagement, financing and outcomes: qualitative analysis from the social innovation in health Initiative. *BMJ Innovations*. Published online 2022:bmjinnov-2021.
9. Cameron R. A sequential mixed model research design: Design, analytical and display issues. *Int J multiple Res approaches*. 2009;3(2):140–52.
10. Wallerstein N, Duran B. Community-based participatory research contributions to intervention research: the intersection of science and practice to improve health equity. *Am J Public Health*. 2010;100(S1):40–6.
11. Wallerstein NB, Duran B. Using community-based participatory research to address health disparities. *Health Promot Pract*. 2006;7(3):312–23.
12. Hlatshwako TG, Shah SJ, Kosana P, et al. Online health survey research during COVID-19. *Lancet Digit Health*. 2021;3(2):e76–7.
13. King KM, Tchouankam T, Keeler H, et al. Conceptualization and utilization of community engagement approaches in translational research: A scoping review.
14. Cyril S, Smith BJ, Possamai-Inesedy A, Renzaho AM. Exploring the role of community engagement in improving the health of disadvantaged populations: a systematic review. *Global health action*. 2015;8(1):29842.
15. Social Innovation in Health Initiative. *Social Innovation in Health Case Compendium 2021*; 2021:13. Accessed August 4, 2022. <https://socialinnovationinhealth.org/wp-content/uploads/2021/06/Case-Compendium-MAY-2021-e-version.pdf>.
16. Ortiz K, Nash J, Shea L, et al. Partnerships, processes, and outcomes: A health equity–focused scoping meta-review of community-engaged scholarship. *Annu Rev Public Health*. 2020;41:177.
17. Pratt B, de Vries J. Community engagement in global health research that advances health equity. *Bioethics*. 2018;32(7):454–63.
18. Brunton G, Thomas J, O'Mara-Eves A, Jamal F, Oliver S, Kavanagh J. Narratives of community engagement: a systematic review-derived conceptual framework for public health interventions. *BMC Public Health*. 2017;17(1):1–15.
19. Pratt B, Cheah PY, Marsh V. Solidarity and community engagement in global health research. *Am J Bioeth*. 2020;20(5):43–56.
20. O'Mara-Eves A, Brunton G, McDaid G, et al. Community engagement to reduce inequalities in health: a systematic review, meta-analysis and economic analysis. *Public Health Research*. 2013;1(4).

21. Harvey I, Schulz A, Israel B, et al. The Healthy Connections project: a community-based participatory research project involving women at risk for diabetes and hypertension. *Progress in community health partnerships: research education and action*. 2009;3(4):287–300.
22. Foreit JR, Raifman S. Increasing access to family planning (FP) and reproductive health (RH) services through task-sharing between community health workers (CHWs) and community mid-level professionals in large-scale public-sector programs: a literature review to help guide case studies. Published online 2011.
23. Undie CC, Van Lith LM, Wahome M, Obare F, Oloo E, Curtis C. Community mobilization and service strengthening to increase awareness and use of postabortion care and family planning in Kenya. *Int J Gynecol Obstet*. 2014;126(1):8–13.
24. Milton B, Attree P, French B, Povall S, Whitehead M, Popay J. The impact of community engagement on health and social outcomes: a systematic review. *Commun Dev J*. 2012;47(3):316–34.
25. Adhikari B, Vincent R, Wong G, et al. A realist review of community engagement with health research. *Wellcome open research*. 2019;4.
26. Press Z, Richards D. The power of patient ownership: The path from engagement to equity. *Patient Experience Journal*. 2015;2(1):15–7.

## Supplementary Files

This is a list of supplementary files associated with this preprint. Click to download.

- [SupplementXXSemistructuredinterviewguide.docx](#)
- [SupplementXXSurveyquestionnaire.docx](#)
- [Supplementarymaterial.docx](#)