ABSTRACT

Objective The role of the community in the research process in Ethiopia has not been documented. This study aims to explore the existing practices and challenges of community engagement in health research in Ethiopia.

Design A qualitative study with a narrative approach was conducted. Data were audio-recorded, transcribed, inductively coded and analysed thematically.

Setting Participants were recruited from members of institutional review boards, academic and research staff of Addis Ababa and Jimma universities, research institutions and key development partners. Thirty-six participants were involved in the study. They were purposively selected on the basis of their diverse research experiences and disciplinary profiles with clinical, biomedical and public health representation.

Data collection Twenty-two key informant interviews were conducted with members of the institutional review board, community representatives in the institutional review board, community engagement officers, and research focal persons of the universities, research institutions and key development partners. Fourteen interviewees were senior PhD students or senior researchers in academic and research institutions were involved in the in-depth interviews.

Results Despite differences of justification, all participants believed in the importance of the participating research community not only to own the research outcome but also contribute to the research planning, sharing of evidence, managing the research process and dissemination of findings. However, it was argued that lack of guidance, skills and experience on how to engage the community at different levels of the research process and limitation of resources affect community engagement in research.

Conclusion As an important component of the research process, community engagement facilitates the research process and ensures community ownership of the outcome. Nevertheless, lack of experience and limitation of resources affect operationalisation of community engagement in health research. This calls for building capacity and advocacy to consider community engagement as an integral component of the research process.

INTRODUCTION

Community engagement (CE) is a complex concept that is not amenable to easy and uniform definition and application.¹ Yet development partners consider CE as a useful tool for the successful implementation of development projects.²³ CE in research is a means through which research participants themselves can contribute to the study design, analysis and implementation of research findings.⁴⁵

The scope of CE in research ranges from shaping policies and approaches of service provisions to shaping the future of the community in the broader term.⁶ The concept of CE requires sectors and decision makers to understand the dominant aspirations, concerns and values of the community in an effort to align their aspirations, concerns and values as development partners of the community.²⁷ CE, through such alignment of aspirations and values, helps the community to have a stake in subsequent decision making and the intention of CE is to enable shared decision making.⁸⁻¹⁰

The details, however, are critical for how the alignment of value is brought about, and what happens if the development partner’s aspirations and values are refuted by the community, for this is contrary to the community’s
aspirations and values or what if the community doesn’t know about this aspiration which is very important for the future of the community in question. A successful CE in health research is the one that embraces and aligns research priorities and the needs of the local community or research participants. Despite these facts on the ground, there are immense gaps as for the conceptualisation and implementation of CE in health research. A major challenge in CE comprises lack of awareness, inadequate financial and human resources, lack of experience, low efficiency and low interest in participation. Nowadays, since research outcomes are focused to inform practices and implementation research they should consider the mainstay of research undertakings, and urgent exploration into experiences of CE in health research is critical. In view of this, the aim of this study is to explore practices and challenges of CE in academic and research institutions in Ethiopia. The outcome of this exploration will inform research practices of, at least those institutions involved and offer evidence to advocate for more resources on CE.

**METHODS**

**Study setting**

The study was conducted at Jimma University, Addis Ababa University College of Health Sciences, MERQ Research Consultancy, Ethiopian Public Health Institute, Ethiopian Public Health Association, National One Health Steering Group, National Research Ethics Review Committee at the Ministry of Science and Higher Education, Armauer Hansen Research Institute (AHRI), the Ethiopian Academy of Sciences and key development partners including John Snow Research & Training Institute, Last Ten Kilometers Project and Pathfinder International from January to March 2021. These institutions were selected for their rich experiences in health research undertaking and review of research ethics.

**Study design**

A qualitative study with a narrative approach was employed. Current practices and challenges of CE in research with particular focus on health were explored. The narrative approach was selected because it is often used to better understand the current practices and challenges of engaging communities in health research through open-ended questions leading to in-depth conceptualisation of the issues. Furthermore, following a narrative approach helps us in gathering thick data to accomplish easily as narratives that eventually provides reach description and experiences of participants, as they reveal themselves in their actual scenarios while conducting their research.

**Study participants**

Thirty-six senior researchers were purposely selected from universities, research institutions, development partners, research focal persons of universities and research institutions, senior Doctor of Philosophy (PhD) students, institutional review board members, community representatives in the institutional review boards and members of community advisory boards (CABs). They were interviewed on their experiences of CE in research, and challenges and suggested improvements in the clinical, biomedical and public health research domains.

**Data collection guide and procedures**

Interview guides were developed to gather detailed information on CE in health research tailored for the different participants (online supplemental file 1). The guides were prepared in English and translated to Amharic language for easy communication based on participants’ preference.

The interviews were prearranged, led by the researchers, and all interviews were conducted face-to-face at a venue of the participants’ choice. All interviews were audio-recorded and on average each interview took an hour long.

In-depth and key informant interviews were employed for data collection. Twenty-two study participants were involved in key informant interviews who represented members of the institutional review board, community representatives in the institutional review board, research focal persons of the universities and research institutions, CE officers in the universities, monitoring and evaluation advisors and research directors in non-academic institutions. They responded to what is believed to be shared information on opportunities, gaps and current practices of CE in research undertakings in their institutions. Additionally, 14 participants representing senior PhD students, and senior researchers in academic and research institutions were involved in the in-depth interviews to generate evidences on their individual experience, challenges encountered, lessons drawn from their experience and suggestions on CE in health research.
Data management and analysis

The audio-recorded interviews were transcribed into Amharic, translated into English, and aligned with field notes of the interviewers. Lines of text were numbered. Once the transcription was complete, the researchers read it while listening to the recording to ensure consistency. The transcripts were anonymised so that the participants could not be identified from anything that was said.

In order to make sense out of the data we used narrative thematic analysis so that the content within the text is the focus.18 Data collection occurred iteratively with data analysis. Rudimentary patterns or themes were noted while transcribing the audio from the interviews and researchers kept reading the extracted transcripts to understand the hidden meanings in the text. The initial coding was made by KS and MK while consistency was checked by NJ and AB. Intercoder differences have been clarified, and consensus was reached among the researchers on the codes. The codebook was developed inductively when reviewing the transcripts. The codes were reduced and placed into logical categories with descriptive segments of data to develop themes and the themes were developed in line with the objective of the study (table 1). The results were presented as themes with supportive verbatim quotes. In all degrees of interpretation, the researchers were not instrumental and did not bring their own perspectives.

ATLAS.ti V.9 software was used for both data reduction and analysis (online supplemental file 2) and the study was reported following the Standards for Reporting Qualitative Research guideline (online supplemental file 3).

Data quality assurance

All the researchers have extensive experience in designing and conducting qualitative studies, and are familiar with the health system and community engaged research. The interviews were led by the researchers themselves who were familiar with the research issues and areas. Interviews were conducted in settings preferred by the study participants to create a comfortable environment for discussion. At the end of every interview, member checking was done to ensure participants’ contributions were rightly captured.

Data were read and re-read and coded by two of the researchers (KS and MK) while two other research team members checked the consistency of codes (NJ and AB). Data were triangulated by method, place and the individual participant’s profile. Efforts were made to maintain the original meanings when interpreting the data.

Ethical clearance

During the data collection the study participants were informed about the objectives of the study, benefits and harms of their participation, the intention to audio-record the interview, and the right to decline to participate and to withdraw during the course of the interview. Informed consent was obtained from all study participants. After transcribing, the audio tapes were deleted and the transcriptions of the interview were stored at a secured place. Data were kept confidential and anonymous. During data collection all the COVID-19 prevention protocols were strictly followed.

Participant and public involvement

Since the senior researchers and institutional review board members from the study participants have extensive exposure in conducting community engaging research alone and in collaboration with other novel researchers, they have been involved in participant recruitment by referring the potential participants based on the eligibility criteria of this study. Proper interpretation and contextualisation of the themes arising from the data were ensured by presenting the findings and receiving feedback from senior researchers who were the study participants. We

| Themes | Codes |
|--------|-------|
| Expression of community engagement in health research | Study participant, Active participants, Host community, Fieldwork |
| Perceived purpose of community engagement in health research | Inform, Facilitate, Ownership |
| Levels of engagement | Intensive/rigours, Medium, Passive |
| Perceived values of community engagement in health research | Values for clinical research, Values for biomedical research, Values for public health research |
| Ethical clearance and community engagement | Missed element, Community representative in IRB, Member diversity, Implication of the research to community |
| Current experiences of community engagement | Strong/week enactment, Strategies, Models, Frameworks |
| Challenges to optimise community engagement | Lack/limitation of knowledge, Low awareness, No experience, Insufficient resource, Poor guidance |
| Area of improvement | Experience sharing, Working document, Independent budget, Institutionalising, Capacity building, Advocacy |

IRB, institutional review board.
also made finding validation with the study participants who agreed during the interviews and with additional stakeholders who have contribution to improve services during stakeholder engagement meeting conducted in Bishoftu, Ethiopia. The final result has been submitted and presented to the AHRI community. In this study there was no patient involvement.

RESULTS

Sociodemographic characteristics of study participants

A total of 36 study participants participated in this study and of them, 30 were male. Educational level of the study participants ranged from Bachelors to PhD degrees. Among them research directors, senior researchers, academicians, institutional review board members, monitoring and evaluation advisors, PhD candidates, community representatives at institutional review boards and members of CAB were enrolled as study participants (table 2).

Expression of CE in health research

Nearly two-thirds of the study participants perceived that the scope of the research community depends on the type of research, culture and settings. More than half of the participants perceived directly implicated groups as the community in the research. This includes whatever the research implicates and whoever is involved in the research are the research community. The community includes study participants at households or health facilities, caregivers, healthcare providers, researchers, donors, institutional review boards, policy makers, laboratory animals such as mice for laboratory-based studies, mosquitoes and many others as testified below:

Research community could be humans, animals or the climate. In either case, however, human beings are implicated since the outcome of the research ultimately is helpful for community level interventions. We conduct research on different themes: TB, Malaria, and Cancer both at community and in the labs. So, our research community are diverse including mosquitos, mice, individuals who gave sample… depending on research questions. (P4)

Institutions did not have the experience of including all those groups of partners or end users as their research community in many studies they conducted to date. Nearly all of them outlined research participants as their research communities that one mentioned as:

To my exposure to date when we say research community it merely focuses on study participants who directly engage in research… (P2)

Some study participants defined CE in research as participating in the whole process of research undertaking, and definitely contributing to the research work through providing the needed data in different stages of the research cycle. The stages encompass problem

| Participant code | Sex | Academic rank | Occupation                                      |
|------------------|-----|---------------|------------------------------------------------|
| P1               | M   | Associate professor | IRB member                                      |
| P2               | M   | PhD student     | Senior graduate student                        |
| P3               | M   | Professor       | Academic staff                                  |
| P4               | M   | Associate professor | Senior clinical researcher                    |
| P5               | M   | Associate professor | Director of community service and engagement,  |
| P6               | M   | Assistance professor | IRB member                                     |
| P8               | M   | Professor       | Director for research and grant                 |
| P9               | M   | PhD             | Research advisor at non-governmental organisation |
| P10              | M   | PhD             | M&E director at non-governmental organisation   |
| P11              | M   | Masters        | Head of research centre                        |
| P12              | M   | PhD student     | Senior graduate student                        |
| P13              | M   | Bachelors Degree | Community representative in IRB                |
| P14              | M   | PhD             | Clinical directorate                           |
| P15              | M   | PhD student     | Senior graduate student                        |
| P16              | M   | Professor       | Senior researcher                              |
| P17              | F   | PhD             | IRB member                                     |
| P18              | M   | PhD             | Director for research affairs                   |
| P19              | M   | PhD             | IRB chairperson                                |
| P20              | F   | PhD             | IRB member                                     |
| P21              | M   | Professor       | Senior researcher                              |
| P22              | F   | MPH             | Research administrator                         |
| P23              | M   | PhD student     | Senior graduate student                        |
| P24              | M   | PhD student     | Senior graduate student                        |
| P25              | M   | PhD student     | Senior graduate student                        |
| P26              | F   | PhD             | IRB member                                     |
| P27              | F   | Bachelors degree | IRB community representative                   |
| P28              | M   | PhD             | Community engagement office director           |
| P29              | M   | PhD student     | Health system research directorate             |
| P30              | M   | PhD             | Traditional medicine directorate               |
| P31              | M   | MPH             | IRB director                                   |
| P32              | M   | MSc             | Lead researcher                                |
| P33              | M   | PhD             | Research director                              |

Continued
identification, data collection, dissemination of research findings and subsequent interventions, so that the ultimate goal of the research could be achieved. The following are reflections from the study participants in this regard:

It is all about consulting the local community and other professionals starting from planning stage, implementation and dissemination. I don’t think the community can play a role during analysis stage despite the nature of the data we have. (P17)

Community engagement is a process that is expected throughout the research process starting with defining research problem, design of the research itself, evidence generation, interpretation, dissemination and use of research outcome. In fact, ideally who should be engaged in the research and with what role should be defined by the community itself. (P20)

Half of the study participants elucidated that CE in research is different from passive public participation. This is because CE is designed to ensure and establish structures for participation by communities affected by the issue being studied, representatives of organisations, and researchers in all aspects of the research process. This helps to improve health and well-being through taking action, including social change and aiming at creating shared decision-making power and mutual ownership of the processes. One of the senior researchers has reflected on this specific issue as follows:

Community engagement is a critical collaborative process between research institutions, researchers and target community, not merely insuring passive participation. The process is empowering not only to the community but also the researchers and the institutions involved in sponsoring the research. The main purpose is creating mutual interest. There are limitations in terms of while, when and how the community is engaged in research process. (P36)

**Perceived purpose of CE in health research**

This study revealed that the community has to engage in a given research project such that the project affects their interests and well-being, directly or indirectly. In doing so, it serves the purposes of ensuring community awareness, building trust in the study community, soliciting resources and partners, creating smooth communication, creating a sense of ownership, knowing reality and finally improving health outcomes. The evidence from this study revealed that CE in health research justifies as a felt-need based, trustable and acceptable research process by involving the target community through its representatives.

…. We can say community engagement in research targets on communication; firstly, we shall participate concerning respecting the community, by engaging the community by consent, benefit and creating awareness. We speak to community leader because they are our primary gates. We communicate the community leaders to create security, mutual interest and developing trust. (P9)

Besides, CE will ease the fieldwork in the process of data collection and create a means to access quality data and indigenous knowledge as per the following reflection from a study participant:

To mention some of the purposes for engaging the community in research it enables to facilitate data collection smoothly, effectively gather important indigenous plants with medicinal effects, to acquire valid data from the community on how they can preserve medicinal plants, and to closely work with various scientists from different sectors… (P30)

In this study, we explored that CE gets connected with the reality prevailing in the community provided that engaging the community has the purpose of bringing the researchers to actual meanings and scenarios. As the study participants have explained the way investigators see the findings and the way they interpret it basing literatures will be a little detached from the reality. But when communities are engaged it increases the chance of researchers connecting with actual circumstances and their relevance.

… engaging the community helps the researchers to bring them to reality… (P9)

CE helps health professionals and community leaders to improve communication, promote common understanding, and strengthen coordination, collaboration and partnership efforts among themselves, community members and institutions. Community consultation in planning CE strategies enables a research team to identify barriers and opportunities for the implementation of CE in advance. CE helps to clear pre-existing concerns and misconceptions, and increases familiarity.

We need community engagement in medical research to reduce mistrust between communities and researchers, and enhance relevance and uptake of the research findings… (P4)
Levels of engagement

Although participants explained a continuum of possibilities for research conducted with community ranged from passive participation to rigorous engagement, all mentioned that the degree of CE is almost null in actual scenario.

Perception of the study participants at levels of CE in research were positive. They suggested the levels of engagement to be inclusive of community in all aspects of research, including defining study questions, writing the proposal, designing the methods, implementing the research project, analysing the results, validating the findings, suggesting recommendations and disseminating the findings.

…levels of engagement should be the case to involve the community starting from the very beginning of the research, up to implementation and dissemination at the end of the day, because that is the product of the research in the real world… (P32)

Nearly, a third of the study participants agreed that engagement shall be contextual and considered the realities, thus the levels of CE have to provide the needed data or information, assist with participant recruitment, provide feedback on aspects of protocols and recommendations.

There are efforts at institution level where representative of the community seats in institutional review board (IRB), revision of the national guideline with a section on community engagement, and initiatives to establish community advisory board (CAB)… (P20)

Three of the study participants exceptionally argued that the levels of CE are determined by the availability of separate funds, and the nature and scope of research. They would rather suggest that the participating community is the evidence provider and source of feedback by mentioning the actual challenges in Ethiopia.

The stage for engagement depends on the project, most of the cases we engage communities as source of data identify on the start of the research, but it will be good to simply disseminate finding through local medias, or if there is as such thing that research findings are spoken over national media, people may hear it at some point and they may think that what they did has value but for me to go beyond this will not practical since we may have budget and trained man power issues… (P12)

In the review form, there is a requirement assessed for community engagement. However, the understanding of this concept is only for the participation at the data collection level. It is not for problem identification as well… (P27)

Perceived values of CE

Study participants have stated that the basic principles of research ethics can be aligned with the value of CE. It was elucidated that autonomy, voluntary participation, consenting to participate, equity, benefits and no harms shall be respected during the research process in clinical, public health or basic science research. It was also mentioned that the merits of CE in health research was the best way for the researcher and hosts get room to respect those universal values.

We are guided by global standards that are established and refined over the years within the framework of biomedical principles of research. Unfortunately, the principles here revolve around voluntary participation, consenting to participate, benefits and harms are equally shared. These are so mechanical with no follow up of its implementation itself. I said above, efforts are made to symbolically situate community in the research approval process although this is not that serious… (P21)

On the other hand, understandings and experiences of CE have been reported by researchers to be very rudimentary as shown below.

…I could generally understand the value of community engagement to facilitate the research process and eventually make use of the research outcome… (P17)

In terms of delineating the status of community priorities and interests, the study participants explained that ensuring the values, the main concerns and welfares of communities participating in research are crucial and this shall be promoted widely to intensify the role of community in research.

…Welfare of the community has to be given a priority. There has to be a paradigm shift in intensifying the role of the local community in researches. Community needs to be empowered. The concept of community engagement needs to be mainstreamed. Perceptions regarding community engagement needs to be promoted through different means including mass media outlets (P35)

Ethical clearance and CE

Institutional review board members participating in this research explained that there had been weak experiences in engaging communities actively in all stages of the research process. A commonly mentioned practice was having a community representative as an institutional review board member and the purpose was to review the information sheet, consent form and tool. However, they also indicated that only including a representative could not guarantee CE and more needs to be done on who is the actual representative of the community, how the representatives on the board can be the voice of the community and in what way can this be realistic on institutional review boards.

…IRB assesses if there are ethical concerns from the community. Sometimes rapid ethical assessment is...
planned and attempted. It is checked that autonomy and other principles are well respected. Community engagement is a best way which creates room for mitigating ethical principles and this is what IRBs entail. (P6)

The conventional research ethics are there, we have community representative as a member who review the consent and tool but the missing element is the community engagement is not well addressed. (P20)

Lack of a proper engagement plan as part of the protocol, how should that plan be monitored, who ensures the engagement process, and platforms for institutional review board members’ capacity building on CE were articulated as the gaps.

In the review form of the IRB, community consultation is there as one of the requirements. However, the IRB does not strictly assess if such pre-requisites are met. This is due to poor awareness among the IRB persons on the concept of community engagement in research. (P1)

Almost all institutional review board members explained that institutional review boards should encompass questions related to how the researcher intends to ensure the community’s role in the research process ideally. Unfortunately, due to lack of awareness among members of the institutional review boards and research policy makers, tools are lacking on how to measure CE at a review level.

Currently, IRB members are coming from veterinary medicine, social sciences… to diversify member’s competence. However, researchers often define research questions with mere assumptions that fail to appreciate the reality on ground. This is the source of contention between researcher and the community which IRB fails to bridge during the review process. (P17)

**Current experiences of CE**

Despite the fact that considerations of holistic CE open up to transparency and easing the implementation of culturally sensitive strategies that are best suited to the setting, the finding of this study showed that the practice of engaging the community in research activities is very limited, particularly in terms of its scope. Engagement of the community is usually at the data collection stage and rarely during the dissemination phase.

…In the developed world, community engagement in research has become a common practice. The experience here is at its infantile stage or almost doesn’t exist. (P3)

All study participants repeatedly articulated that there is no comprehensive strategy, manual, framework or model to support and direct community engagement at all levels.

…There is no as such a written document in this regard. However, what our institute does as part of its tradition is organizing forums where by various stakeholders including the community representatives to take part and reflect on research and the potential contributions expected from their end. (P18)

Although institutional review boards and only two research institutes stated that they have standard operating procedures (SOP), model, consent/assent forms to secure the engagement, all of them agreed these all documents need critical revisions in order to promote an active and holistic engagement concept.

As a research institution, we have community advisory board model in which the members serve as a liaison between the research teams and research participants is the most common strategy of indirect engagement. (P17)

… there is SOP at national level which articulate to have community representative as IRB member… (P19)

It is worth mentioning that both Addis Ababa and Jimma universities have offices for CE but participants from the area have explained that the office focuses on the university’s interventions in community development projects through their staff and students. Hence, CE in research in a strict meaning of the concept is not addressed. As it was stated, the establishment of strong multidisciplinary, problem solving, collaborative and thematic research traditions were the main focus of the office of CE in those universities but active engagement of the community in research activities is a missing element though the types of research the universities aspire to undertake inherently invites the practice.

Efforts made so far are engaging stakeholders from different sectors in identifying research thematic areas. Different documents have been produced, research centers have been identified. However, in terms of community engagement in research activities a lot have to be done to take the practice to the next level. (P28)

**Challenges to optimise CE in health research**

The study participants have reported their actual experiences, particularly the challenges faced while they conduct research. As the findings revealed, the research institutes and researchers in clinical, public health or basic health science areas have perceived CE in research as resource-intensive. In spite of differences in opinion and experience which were entertained across participants, commonly mentioned contests about CE in health research includes lack of awareness, shortage of resources, lack of trained human resources, lack of clear manuals, strategies and guidelines, time, societal norms
There is no much attention given to community engagement by research institutions, donors and researchers... poor awareness among researcher, lack of policy document for community engagement, luck of regulatory bodies and shortage of funding are the common gaps. (P36)

Although there have been discussions on community engagement in research, there was no clear provision about it in AHRI. Couple of years back we suffered setbacks when our researchers were attacked in Bahir Dar and number of vehicles were destroyed by the community in protest of the research underway. The problem was later discussed, realized and boldly underscored that when the public is not convinced about the research scientists conduct and maintain suspicion such incident is unavoidable.... (P6)

Despite of having commonalities among participants in terms of what was explained as challenges on the spectrum of CE efforts, the practical depth of encounters differs when we lucid it across research areas. Researchers who are working on biomedical research stated that the main challenge is to develop practical approaches to engage the community in the research process within a short period of time and with clear communication and agreement in trials. They also mentioned that engaging the community in trials and seeking inputs from actual study participants and the host community, such as working with adolescents, vulnerable groups and parents/representatives of paediatrics, is an important strategy but it is thought-provoking. According to the findings, planning, budgeting, absence of guidelines and lack of awareness on levels of engagement and how to practice it while conducting trials among researchers and communities were considered as challenges.

Safety (pharmacovigilance) and bioequivalence (regulation on property right) are important elements but researchers lack skill on how to engage community in this regard plus it is cumbersome process for researcher secondly, it is costly. No one could be brought on board without appropriate training and empowerment. This is often not understood by donors and research institutions to affect successes to engage the community. (P14)

It was reflected that, though backgrounds and languages of researchers are different from those of community members, public health researchers should be familiar with the sociocultural aspects of the community since showing up determine why, where, when and how to engage the community. Additionally, policy-level lack of guidance, institution-level lack of strategies and tools, and researcher-level lack of competence were mentioned as challenges for not experiencing effective CE in health research.

Researchers have to understand the culture and norms of the community. We need to also ensure that local languages have to be used to ease communication with local people. Findings have to be communicated to the community. Nonetheless, researchers’ poor competency in this regard, lack of budget and absences of clear strategy are the main bottlenecks. (P16)

Areas for improvement

Participants identified various areas for improvement that may contribute to address the current encounters in the area of CE in health research. As stated by the participants, CE has to be a priority agenda of universities, research institutions, policy makers, donars, institutional review boards and researchers to institutionalise the practice. Besides, having strategies on community entry, randomisation, sensitising, informing and consenting there should be a national guideline that encompasses holistic participation. It is also stated that an awareness-building forum is needed to build the capacity of the researchers, and empower the community through literacy training.

Regulatory bodies need to ensure that community engagement activities are carried out by all research institutions through developing the necessary roadmaps. Research institutions need train researchers to raise awareness on community engagement. IRBs need to critically evaluate and ensure community engagement in research are realized before approving protocols... (P5)

Another participant similarly indicates that:

Capacity building for researchers need to be done. Collaboration between partners needs to be intensified. Standardization of guidelines has to be done. Community mobilization on this agenda has to be worked out in a sustainable manner. (P9)

To improve researchers, and research institutes practice in CE process participants also expressed the significance of revision of the funding policy, having models for CE like CAB, monitoring and evaluation mechanism, IRBs check and balance ways and advocacy.

Establishment of community advisory board should be capitalized and further developed and made into use. Advocacy efforts are important step to consider. Home grown community engagement guideline and putting this in to effect is critical and needs to be taken up now. There are no reasons we should wait to learn from anywhere else. (P6)
DISCUSSION

It is striking to note that in this study CE is considered as an important component of health research. While students consider the research as part of their academic upheaval, the researchers consider research as part of their roles and their endurance depends on undertaking research; the institutions on the other hand reported that they are mandated to carry out research and this is their responsibility. Each of these in fact boils down to the same source of evidence often referred to as research community. Likewise, evidences have shown that the research institutions and researchers often share a common frame of reference where researchers often conduct research within the research domain of the institution financially and technically supported by the institution.\(^1\)\(^2\) This implies that the research community, however, is the source of the research itself although the community was not consulted. This could have called for verification and it is clear that the community is thus part of this equation.

As the findings from this study revealed, CE in health research depends on the objective of the engagement itself which may include mere provision of information, consultation on the research process, development of tools and procedures, guide the research process and its outcome. Similarly, evidences have shown that CE in research ranges from approaching the community with information to including them in planning and implementation.\(^20\)\(^21\) This implies that if the intention is to provide information about the research activity designed and planned by a researcher, the goal does not go any far than informing and consulting the community.

The inherent principle of CE in research is to facilitate and ease the research process and ownership. However, the findings showed that participation generally tend to inform the community about the intent of the research, as it prevails now, misses the entire principle of research as a partnership agenda set by the researcher, research institution and research community, the outcome of which is multifaceted. This is not any different from other studies elsewhere that shows researchers only inform participants about the research and seek participation.\(^22\)\(^23\) This was explained by the fact that researchers do not have training on CE, and there is no guidance on how to engage. Although interests to engage the community and value of the engagement in terms of successful implementation of the research and ownership of the result have been raised, CE remained to focus on informing participants.

Research focusing on health issues is expected to serve an important common purpose of solving problems and improving well-being at the community level.\(^2\)\(^9\) Yet, findings from this study have clearly underscored a lack of understanding by researchers on how to engage the community, extent of engagement, who should be engaged and at what level. The consequence is vivid where researchers do not go beyond informing participants and get their consent to participate in the research activity. This might indicate that if challenges may arise while engaging with the community, active communication and mutual relationships are key to successful collaboration.

Evidence from this study clearly depicts that while funding organisations provide resources for research activities, it is not clear if CE is given attention for funding. Likewise, as much as IRBs have community representatives as members of the institutional review board, there are inconsistencies in understanding CE and their purposes in the research activities.\(^24\)\(^25\) This implies that funding institutions and the institutional review boards believed to have interest in CE in research by far than the other organisations.

CONCLUSION

It is vivid that perception of researchers on CE is not consistent and well defined. However, broader recognition of the CE’s usefulness in facilitating the research process and in ensuring ownership of the research outcome is clear. The practice of CE in health research is at its infant stage; it still focuses on informing participants to secure consent. Evidently, lack of knowledge on what CE is, how to implement it and at what stage, are critical challenges. This is further complicated by the lack of resources to roll out CE in health research. From the view of the researchers, research that intends to use a research outcome, to solve practical problems and consequent investment in implementation research, CE should be a crucial component of any research activity. Hence, it is significant to introduce robust capacity-building for health researchers and institutionalisation of CE within academic and research institutions. Similarly, consistent advocacy will help to consider financial resources for CE as part of a research process.

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Data availability statement Data are available upon reasonable request. All relevant data are within the manuscript. We provided all supplementary files including the interview guides, the report outcome from the Atlas-ti, and Standards for Reporting Qualitative Research (SRQR) checklist. (supplemental files

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