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Community engagement for COVID-19 prevention and control: a rapid evidence synthesis

Brynne Gilmore ,[1] Rawlance Ndejjo,[2] Adalbert Tchetchia,[3] Vergil de Claro,[4] Elizabeth Mago,[5] Alpha A Diallo,[6] Claudia Lopes,[7] Sanghita Bhattacharyya[8,9]

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For numbered affiliations see end of article.

Correspondence to
Dr Brynne Gilmore;
brynne.gilmore@ucd.ie

ABSTRACT

Introduction Community engagement has been considered a fundamental component of past outbreaks, such as Ebola. However, there is concern over the lack of involvement of communities and 'bottom-up' approaches used within COVID-19 responses thus far. Identifying how community engagement approaches have been used in past epidemics may support more robust implementation within the COVID-19 response.

Methodology A rapid evidence review was conducted to identify how community engagement is used for infectious disease prevention and control during epidemics. Three databases were searched in addition to extensive snowballing for grey literature. Previous epidemics were limited to Ebola, Zika, SARS, Middle East respiratory syndromeand H1N1 since 2000. No restrictions were applied to study design or language.

Results From 1112 references identified, 32 articles met our inclusion criteria, which detail 37 initiatives. Six main community engagement actors were identified: local leaders, community and faith-based organisations, community groups, health facility committees, individuals and key stakeholders. These worked on different functions: designing and planning, community entry and trust building, social and behaviour change communication, risk communication, surveillance and tracing, and logistics and administration.

Conclusion COVID-19's global presence and social transmission pathways require social and community responses. This may be particularly important to reach marginalised populations and to support equity-informed responses. Aligning previous community engagement experience with current COVID-19 community-based strategy recommendations highlights how communities can play important and active roles in prevention and control. Countries worldwide are encouraged to assess existing community engagement structures and use community engagement approaches to support contextually specific, acceptable and appropriate COVID-19 prevention and control measures.

Key questions

What is already known?

► Community engagement is considered a fundamental component during outbreaks and is important to ensure contextually appropriate interventions.

What are the new findings?

► How community engagement can be used for COVID-19 has yet to be thoroughly explored. Findings from this rapid review highlight the main community engagement actors and approaches and the interventions that they conduct within prevention and control of infectious disease. This review also notes the lack of documented community engagement activities from high-income countries.

What do the new findings imply?

► These findings highlight that well-implemented community engagement strategies can be used to support designing of interventions, building trust and community entry, social and behaviour chance communication, risk communication, surveillance and contract tracing, and logistical and administrative support during COVID-19 prevention and control responses.

INTRODUCTION

Community engagement within health is crucial to achieve primary healthcare and promote people-centred services.[1–3] It can support buy-in and sustainability of health interventions,[4] health advocacy,[5] improved quality and satisfaction of services,[6] and contribute to health systems responsiveness[7] and strengthening.[8] Community engagement refers to involvement and participation of individuals, groups and structures within a parameter of a social boundary or catchment area of a community for decision-making, planning, design, governance and delivery of services.[9] It is used as a parent notion with terms like communication, social mobilisation, community participation, community action and empowerment[10] with emphasis on the agency of community members or groups, considering them as active rather than passive participants.[11 12] Community engagement is seen as critical in many health initiatives,

such as for communicable disease[10] and maternal and child health initiatives,[13] and more recently has been considered a fundamental component during outbreaks, largely arising during the 2014–2015 Ebola epidemic in West Africa.

The way people interact and live with each other through their structures, as well as their historical pathways require considerations on how to effectively adapt and respond to any disease outbreak. For example, differences in political–cultural and social structures, systems and processes among communities and social norms and beliefs affect health behaviours and outcomes during outbreaks.[14] Experience with public health emergencies of international concern highlight the need for contextually appropriate community engagement strategies.[15–21] Moreover, a recent rapid review noted key lessons in risk communication for control of outbreaks to include communities taking a central role in the response, involving local leaders and groups, tailoring interventions to communities and ensuring a two-way communication.[17]

Early implementation of prevention and control activities during the 2014–2015 Ebola epidemic had several barriers, including suspicions regarding the existence of the disease and motives of the government and international organisations.[15 19] To address these barriers, community engagement became a key pillar to the response. Several measures to engage communities were undertaken, including building partnerships with local and religious leaders and working with the community to develop and adjust key messages for behavioural change,[15 22] and initiation of coordinated response mechanisms, such as Sierra Leone's Social Mobilisation Action Consortium (SMAC), which supported community engagement activities during the Ebola outbreak from 2014 to 2016.[23] These measures significantly contributed to the success achieved in controlling the outbreak and ensuring the resilience of the health system.[9 15 22]

In relation to COVID-19, community engagement can be critical for creating local and context-specific solutions to prevention and control responses.[24] Through this 'bottom-up approach', communities participate in 'decision-making processes of planning, design, governance and delivery of services aimed at improving population health and reducing health inequalities'.[9] The COVID-19 pandemic as a total social phenomenon should include actively engaging and adapting local views, voices and concerns in health crisis response efforts.[24] Moreover, the WHO's recommended measures to prevent and control COVID-19, such as physical–social distancing, case identification and contact tracing require understanding of the different social dynamics in communities and how these can better be leveraged to minimise the impact of the epidemic.[25 26] The measures have a huge reliance on communities reigniting the importance of community engagement to build trust and delay disease spread as drug and vaccine development efforts continue.

However, there is concern over the lack of involvement of communities within COVID-19. Rajan and colleagues note the limited number of WHO member states reporting to have a COVID-19 community engagement plan.[27] The scientific community—mainly drawn by social scientists—has called for the attention of funders and implementers on the relevance of community engagement for COVID-19,[24 28–30] with other international stakeholders, including WHO, UNICEF and the International Federation of Red Cross and Red Crescent Societies (IFRC) echoing its importance.[25] This concern must be understood considering that, at the beginning of the pandemic, there was a tendency to prioritise biomedical and epidemiological interventions even if international stakeholders have early and progressively defined some guidelines on risk communication and community engagement.

Recent reviews on global evidence for COVID-19 have focused on community health workers (CHWs)[31] providing important evidence and insights to guide response. However, there is no evidence synthesis that addresses how community engagement can be used for COVID-19 prevention and control. Thus, we conducted a rapid evidence review on community engagement for infectious disease prevention and control to learn lessons for COVID-19 and future pandemic response.

Review focus

This review wanted to understand 'how community engagement is used for infectious disease prevention and control during epidemics'. In doing so, we reviewed evidence from previous epidemics and aimed to identify what approaches and community actors are involved, what interventions are conducted, who the target groups of community engagement are and how equity considerations are incorporated, what the linkages and relationship to other health system stakeholders are, and what the main implementation considerations for successful community engagement for infectious disease prevention and control are. To address these questions, we draw on findings from five previous epidemics: Ebola, SARS, Middle East respiratory syndrome (MERS), Zika and H1N1.

METHODS

Given the emergency nature of the recent COVID-19 global pandemic, we conducted a rapid evidence review to support timely findings. Rapid reviews are a form of evidence synthesis that tailor the methodology of a systematic review to produce contextually relevant evidence on an arising topic in a timely and efficient manner.[32] To support the expedited nature of rapid reviews, they can deviate from traditional reviews in several areas, including narrowing the scope, limiting the number of searches or electronic databases, using one reviewer for study screening and selection, and parallelisation of review tasks.[32] This rapid review followed the methodology

Table 1 Inclusion and exclusion criteria

Topic	Inclusion criteria	Exclusion criteria
Intervention/population	Describes a specific community engagement approach or activity	Exclusively community health worker programmes Structures without community members serving the same community
Focus	Prevention and/or control of infectious diseases: Ebola, SARS, Middle East respiratory syndrome, Zika and H1N1	Not focused on prevention and/or control of infectious disease
Scope of intervention	Community level—defined by 'the social boundaries that define the individuals and households whose health outcomes matter as a health system goal, and also the social context for the relationships that underpin the success of many health systems interventions'.[77]	Not community focused
Time	Published on or after 2000	Published before 2000
Article type	Primary, empirical studies, of any design, programme reports and descriptions that provide learning on specific CE approaches	Commentaries, abstracts; no specific community engagement approach detailed
Language	All languages included, searching done in English and some French terms	No exclusion criteria

suggested by the Alliance for Health Policy and Systems Research.[33] A co-production team comprising all authors of this paper was established through the collaborative platform 'Community Health–Community of Practice', supported by UNICEF.

A protocol was developed and agreed on by the research team, which comprises academics, implementers and policy makers from multiple disciplines and backgrounds. The team then conducted a rapid evidence review of academic and grey literature in May 2020. The main focus of the review was to identify what types of community engagement approaches are used within infectious disease prevention and control, which required articles to describe a minimum of one specific initiative. As such, no criteria for effectiveness or outcomes were applied. Full inclusion and exclusion criteria can be found in table 1.

In line with community agency and taking into account a framework developed by UNICEF and revised by Community Health–Community of Practice, the definition of community engagement adopted in this study covers the range of collaborative processes with community actors that transcend beyond CHWs and includes community groups, informal providers, faith organisations or social networks.[34] We excluded CHW approaches and interventions as reviews of this nature have already been conducted,[31] though we included articles if they described community engagement approaches alongside CHW programmes and narrowed the scope to include five recent infectious disease outbreaks: Ebola, SARS, MERS, Zika and H1N1.

Databases and snowballing

In line with rapid review recommendations, we limited our searches to three databases: PubMed, CINAHL and Scopus. We conducted an extensive grey literature and snowball search by reviewing websites of numerous public health organisations and repositories, as well as emailing the authors' respective networks. Online supplemental file 1 provides a list of snowballing sources and completed database searches. Search terms were in both French and English. In addition, all included articles' references were checked. To expedite the review process, two authors conducted the database search; three conducted grey literature and snowballing searches; and two conducted reference searching.

Article screening and extraction

All returned results were entered into Covidence, a systematic review information management system, where duplicates were removed. The remaining articles were screened at title and abstract stage, and full-text stage independently by two reviewers, with a third resolving any discrepancies. Two team members independently screened all returned snowballing resources at full-text stage, with a third reviewer resolving any discrepancies. All authors participated in the screening.

Predefined and piloted data extraction tables were developed. Two authors initially extracted data from the included articles, with other authors reviewing all extractions for reliability and consistency. Content on community engagement actors/approaches and intervention focus was extracted directly as the articles reported if applicable; however, this often did not occur, leaving the review team to extrapolate and categorise. Given that the research question seeks to identify what has been used, no quality ratings were applied to the included articles.

Public and patient involvement (PPI)

There were no funds or time allocated for PPI, so we were unable to involve patients. We encourage throughout the findings for programme and policy makers to involve communities within the design and implementation of their respective programmes.

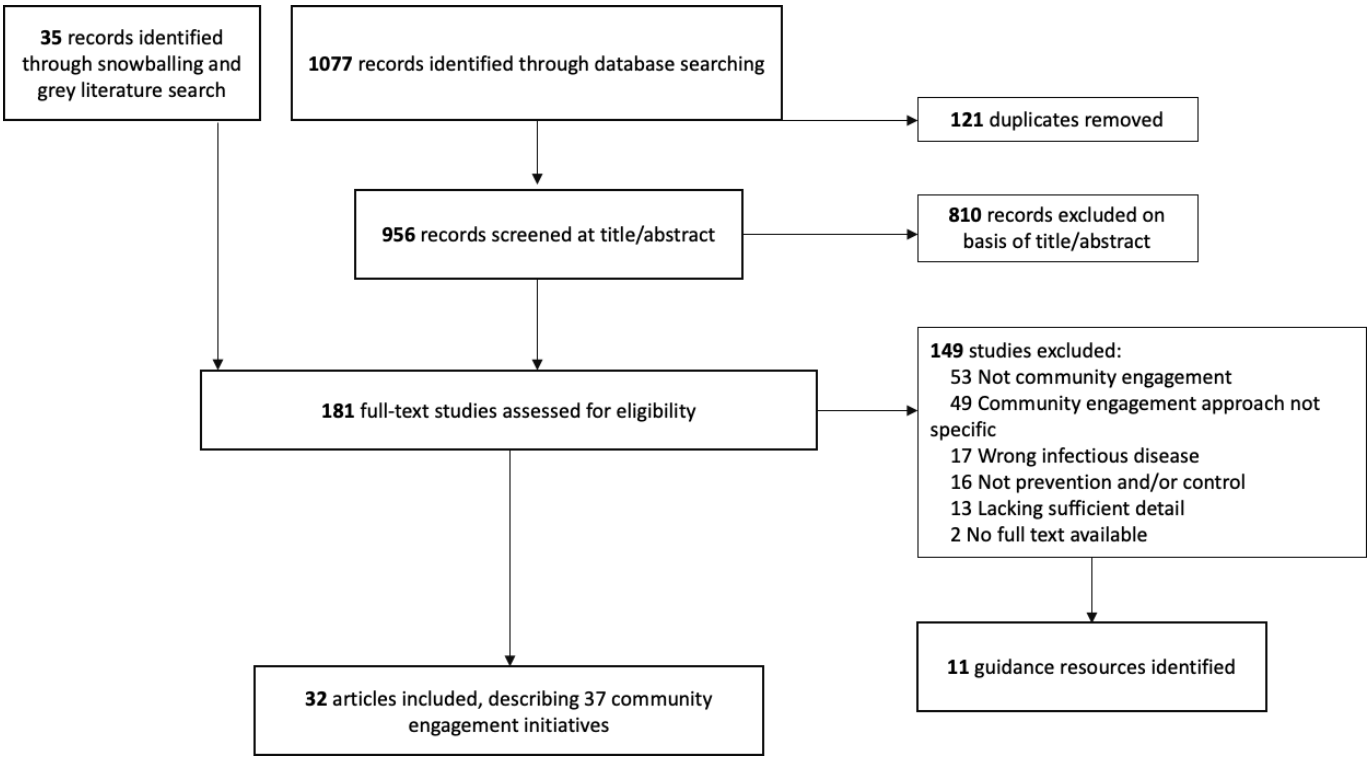

Figure 1 Preferred Reporting Items for Systematic Reviews and Meta-Analyses diagram.

RESULTS

Database and snowballing searches occurred between 27 April and 2 May 2020. A total of 1112 articles were returned, and after duplicate removal, 956 abstracts were reviewed. In total, 32 articles were identified for inclusion, 5 of which were identified through snowballing (4 from initial grey literature/snowball search and 1 from reviewing included articles' references) and the remainder through database searches. Figure 1 presents the screening process and results.

In addition to the 32 documents included and reported within, 11 documents that did not address or describe a specific community engagement initiative but did provide overarching guidance to community engagement or aspects of community engagement were identified. These documents were retained to support our interpretation and implementation considerations for community engagement. Online supplemental file 3 includes these details.

Article characteristics

Of the 32 included articles, all but 3 were published on or after 2015, with 1 article published in 2009,[35] 1 in 2010[36] and 1 in 2012.[37] The remaining were published in 2015 (n=2), 2016 (n=6), 2017 (n=9), 2018 (n=3), 2019 (n=3) and 2020 (n=6). All articles were in English except for one, which was in French.[38] Thirty-two articles were included, but two articles report three[39] and four[40] distinct community engagement initiatives. As such, the remainder of the review will focus on 37 initiatives.

Context and outbreak

Of these 37 initiatives, 28 were for Ebola, with 25 relating to the 2014–2015 West Africa outbreak from Sierra Leone (n=11), Liberia (n=9), Guinea (n=2), Nigeria (n=1), Ghana (n=1) and one mixed-country study. The remaining three Ebola examples[41–43] were related to the 2018–2020 outbreak in the Democratic Republic of Congo, two of which focused on efforts in Uganda. Five community engagement initiatives were used for Zika within the USA and Puerto Rico (n=3), and one each in Singapore and Uruguay.[44–47] Four articles were specific to H1N1, with three from Australia and one from Canada.[35–37 48] No articles were found that detailed community engagement for SARS or MERS. Figure 2 highlights the examples found per country and topic.

Broad contextual concerns preceding the outbreak refer to poverty, unemployment or economic crisis,[38 49] health system failure, lack of development infrastructure,[49 50] colonial/postcolonial factors, ethnic and political conflicts,[38 39] lack of trust in government and international agencies,[42] traditional practices and rituals that are resistant to change,[15 51] geographical challenges[52] and mobile populations.[53]

Community engagement approaches and interventions

The review identified six broad types of community engagement actors or approaches, which addressed infection prevention and control through six main channels. As highlighted in table 2, the main actors included community leaders (traditional, religious and/or governing); community and faith-based organisations

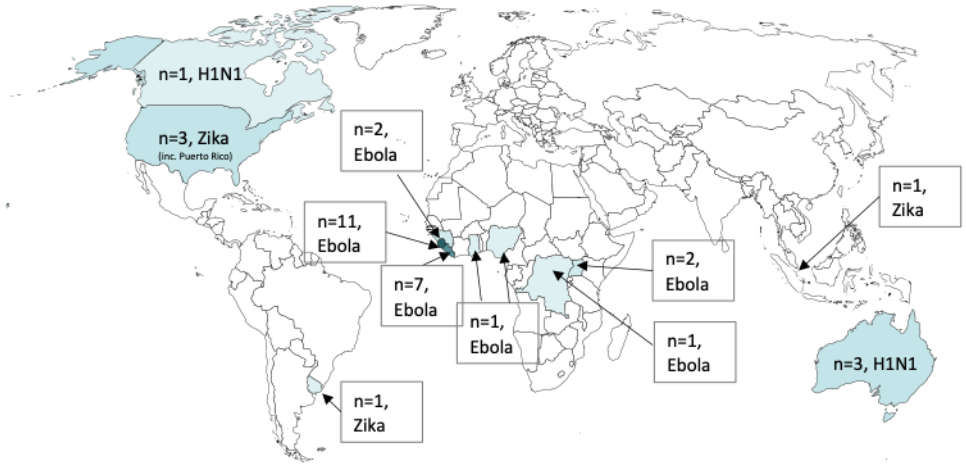

Figure 2 Number of articles per country and topic.

(CFBO); community groups or networks or committees; health management committees; individuals (no further clarification provided); and key stakeholders, which included students, survivors, women representatives, elderly and the youth. These community engagement interventions addressed infection prevention and control through six main channels: designing and planning interventions (including messaging), community entry and trust building, social and behavioural change communication (SBCC), risk communication, surveillance and contract tracing, and broader logistics and administration activities, such as procuring and setting up hand washing stations, constructing facility or record keeping.

From table 2, it can be seen that community engagement was mostly used for social and behavioural change communication and risk communication, followed by surveillance and contract tracing. Many of the reported community engagement activities involved multiple actors and took multifaceted approaches for prevention and control, as can be observed from table 2. For example, Skrip *et al* detail the Community-Led Ebola Action efforts implemented by the SMAC, which involved local radio stations to provide a platform for engagement with trusted community leaders, survivors and responders; community champions and mobilisers recruited from an existing cohort of CHWs, youth volunteers and people nominated by their communities; and religious leaders to promote key messages and role model behaviours to support community surveillance through standardised monitoring forms and a structured participatory dialogue to identify and address community needs targeting areas of trust building, risk communication and SBCC[54]; McMahon *et al* detail health management committees, made up of leaders and key stakeholders, and their efforts in SBCC and risk communication, and also supporting health facilities by conducting screening and administrative duties in relation to Ebola[55]; Ho and colleagues highlight how resident committees, grassroot leaders and volunteers conducted risk communication and source reduction for Zika[45]; and Mbaye and colleagues highlight how community groups, faith organisations and key stakeholders (youth, women and elderly) conducted trust building, surveillance and SBCC.[38]

The majority of the community engagement activities were not reported as a component of a larger programme, with the exception of surveillance systems which included community engagement for monitoring at the community level linked to a structured contract tracing system. Online supplemental file 2 includes the extraction data for each article.

Target groups and equity considerations

The majority of community engagement activities had community-wide focus, with no specific equity considerations reported. One article from Kirk Sell *et al*[47] discusses CFBOs targeting marginalised populations, including non-English speakers and undocumented persons, in the USA for risk communication in relation to Zika. On the contrary, all articles in relation to H1N1 had an equity focus; remote and isolated First Nations communities in Canada[37] and Aboriginal or Torres Strait Islanders communities in Australia.[35 36 48] Important to note, however, is that community engagement for these communities was limited to design and planning, with no reported inclusion in implementation of activities.

Specific make-up of community engagement approaches was often not detailed or did not include diversity and representation, though several reported community engagement structures, including representation from Ebola survivors,[56] women within reproductive age and students,[46] women representatives[39] and youth.[38 54 56]

Health system linkages and support

Of those that provided details on linkages, very few were explicitly linked to other health system components (with the exception of tracing). Community health committees[53] and health management committees that were supporting health facility activities[55] were linked

Table 2 Community engagement actors and their involvement in epidemic prevention and control activities

Community engagement actors	Design and planning	Community entry/ trust building	Social and behavioural change communication	Risk communication	Surveillance, tracing	Logistics, provision, administration
Leaders (traditional, religious and governing)	Charania and Tsuji[37] 2012; Juarbe-Rey *et al*[46] 2018; Miller *et al*[48] 2015; Kinsman *et al* 2017[78]	Mbaye *et al*[38] 2017; Le Marcis *et al*[39] 2019*; HC3,[40] 2017a*; Munodawafa *et al*[50] 2018; Skrip *et al*[54] 2020	Gillespie *et al*[15] 2016; Barker *et al*[9] 2020; Mbaye *et al*[38] 2017; HC3,[40] 2017a; HC3,[40] 2017b; HC3,[40] 2017c; HC3,[40] 2017d; Aceng *et al*[41] 2020; Ho *et al*[45] 2017; Skrip *et al*[54] 2020; Gray *et al*[56] 2018; Jiang *et al*[79] 2016; Li *et al*[80] 2016	Gillespie *et al*[15] 2016; Barker *et al*[9] 2020; Mbaye *et al*[38] 2017; Le Marcis *et al*[39] 2019a; Le Marcis *et al*[39] 2019c; HC3,[40] 2017a; Aceng *et al*[41] 2020; Ho *et al*[45] 2017; Juarbe-Rey *et al*[46] 2018; Sepers *et al*[49] 2019; Skrip *et al*[54] 2020; Jiang *et al*[79] 2016; Li *et al*[80] 2016	Barker *et al*[9] 2020; Mbaye *et al*[38] 2017; Le Marcis *et al*[39] 2019a; HC3,[40] 2017a; HC3,[40] 2017b; Aceng *et al*[41] 2020; Nakiire *et al*[42] 2020; Sepers *et al*[49] 2019; Gray *et al*[56] 2018; Li *et al*. 2017	Barket *et al*[9] 2020; Gray *et al*[56] 2018; Le Marcis *et al*[39] 2019c
	H1N1 (n=2), Zika (n=1), Ebola (n=1)	Ebola (n=5)	Ebola (n=12), Zika (n=1)	Ebola (n= 12), Zika (n=2)	Ebola (n=10)	Ebola (n=3)
Community-based organisations and faith organisations		Mbaye *et al*[38] 2017	Mbaye *et al*[38] 2017; Santibañez *et al*[51] 2017	Mbaye *et al*[38] 2017; Kirk-Sell *et al*. 2020; Adongo *et al*[81] 2016	Mbaye *et al*[38] 2017	Santibañez *et al*[51] 2017
		Ebola (n=1)	Ebola (n=1), Zika (n=1)	Ebola (n=2), Zika (n=1)	Ebola (n=1)	Zika (n=1)
Community groups		Skrip *et al*[54] 2020	HC3,[40] 2017c; Basso *et al*[44] 2017; Ho *et al*[45] 2017; Skrip *et al*[54] 2020; Gray *et al*[56] 2018; Abramowitz *et al*[52] 2017	Le Marcis *et al*[39] 2019a; Ho *et al*[45] 2017; Skrip *et al*[54] 2020	Le Marcis *et al*[39] 2019; Gray *et al*[56] 2018	Gray *et al*[56] 2018
		Ebola (n=1)	Ebola (n=4), Zika (n=2)	Ebola (n= 2), Zika (n=1)	Ebola (n=2)	Ebola (n=1)
Health management committees/community health committees			McMahon *et al*[55] 2017; Meredith,[53] 2015	McMahon *et al*[55] 2017; Meredith,[53] 2015	McMahon *et al*[55] 2017; Meredith,[53] 2015	McMahon *et al*[55] 2017; Meredith,[53] 2015
			Ebola (n= 2)	Ebola (n= 2)	Ebola (n= 2)	Ebola (n= 2)
Individuals (volunteers)	HC3,[40] 2017c	Dada *et al*[76] 2019	Barker *et al*[9] 2020; Aceng *et al*[41] 2020; Skrip *et al*[54] 2020; Jiang *et al*[79] 2016; Maduka *et al*[82] 2017	Barker *et al*[9] 2020; Aceng *et al*[41] 2020; Skrip *et al*[54] 2020; Jiang *et al*[79] 2016;	Barker *et al*[9] 2020; Aceng *et al*[41] 2020; Nakiire *et al*[42] 2020; Ratnayake *et al*[83] 2016; Stone *et al*. 2016[84]	Barker *et al*[9] 2020
	Ebola (n= 1)	Ebola (n= 1)	Ebola (n= 5)	Ebola (n= 4)	Ebola (n= 5)	Ebola (n= 1)
Key stakeholders	Massey *et al*[35] 2009; Rudge and Massey,[36] 2010; Charania and Tsuji,[37] 2012; Le Marcis *et al*[39] 2019b; Juarbe-Rey *et al*[46] 2018; Miller *et al*[48] 2015; Kinsman *et al*[78] 2017	Massey *et al*[35] 2009	Masumbuko *et al*[43] 2020; Ho *et al*[45] 2017; Gray *et al*[56] 2018	Masumbuko *et al*[43] 2020; Ho *et al*[45] 2017; Juarbe-Rey *et al*[46] 2018; Li *et al*[80] 2016	Li *et al*[80] 2016	
	H1N1 (n=4), Zika (n=1), Ebola (n= 2)	H1N1 (n=1)	Ebola (n= 3), Zika (n=1)	Ebola (n= 2), Zika (n=2)	Ebola (n= 1)	
Totals	12	9	32	29	20	8

*HC3 and Le Marcis have four and three examples of community engagement, respectively. For the purpose of this table, to demonstrate frequency of approaches, each example is cited as either a,b,c or d. However, as these come from the same included article, references do not appear this way within the reference list.

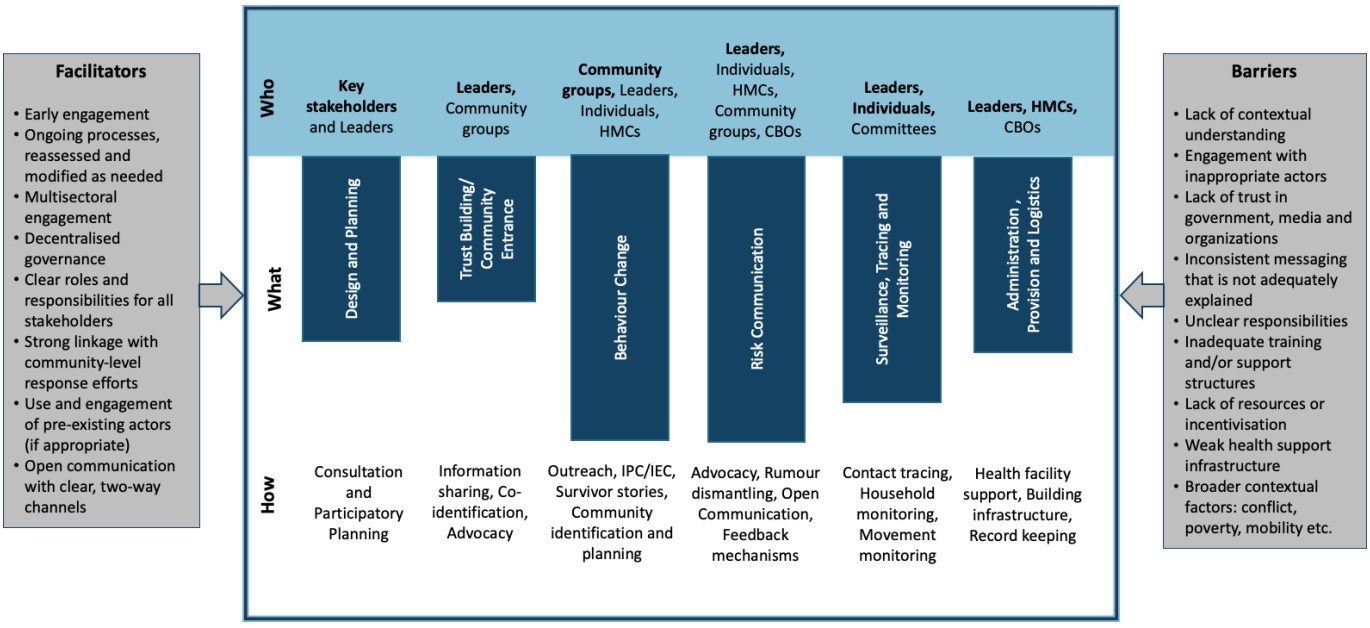

Figure 3 Components and implementation considerations of community engagement for infectious disease prevention and control. The main CE actors (who) most common for that specific process are in bold. The length of the bars varies based on the most common way (what) of community engagement as per the reviewed literature. 'How' represents key activities that were undertaken within each broader intervention classification. HMCs include community health committees. CFBO, community and faith-based organisation; HMC, health management committees; IEC, information, education and communication; IPC, interpersonal communication.

to community care centres, and Ebola survivors, leaders and youth groups were used for behavioural change and surveillance, and linked with existing CHWs.[56]

Best practices for community engagement during epidemic response

Key barriers and facilitators for community engagement for COVID-19 prevention and control that were extracted from the included studies are presented in figure 3. More broad implementation considerations synthesised from guidance documents are provided in online supplemental file 3, which emphasise the need for community engagement, which has to be context specific as per the cultures, traditions and customs, social norms and collective beliefs. Understanding local realities may require social research, including anthropological studies, if possible, and research to uncover knowledge gaps and existing sociocultural barriers. Community engagement should be an ongoing, collaborative process that starts early with community members who are seen as legitimate actors able to represent and influence the community. Communities should be involved in issue identification and codesign of interventions and response. A two-way dialogue with communities and other stakeholders, essential for trust building, should be established through multiple channels with transparent, accurate and consistent information to help address rumours and misconceptions. Messages should be imparted which are focused, not fear inducing, respectful, tailored to local contexts, with relatable examples. Regular feedback mechanism for monitoring and course correction that reveal how knowledge, beliefs and practices are changing are also needed for inclusive and meaningful engagement. These considerations are also discussed in a policy brief on this research targeted towards implementers.[57]

Reviewing the aforementioned findings and materials, in addition to considering the unique attributes of the COVID-19 pandemic and important guidance put forth by WHO, UNICEF and IFRC on 'Community-based healthcare, including outreach and campaigns, in the context of the COVID-19 pandemic',[58] had led to development of key programme and policy recommendations for using community engagement in prevention and control approaches. Box 1 summarises these considerations, which aim to guide best practice.

DISCUSSION

Engagement lies on a spectrum, from more passive to active involvement. It can consist of providing *information* and conducting *consultation*; having *involvement* via regular interactions throughout the project cycle; and *collaboration*, which entails working in partnership with shared decision-making[59 60] that involves communities carrying out critical health systems functions and innovating with localised solutions.[9] Within this review, most included articles could be classified as having involvement, where communities were thoroughly brought in but often did not share decision-making powers. Notably, however, almost all examples of community engagement from high-income contexts consisted of consultation, demonstrating passive involvement with target ethnic and minority population. In addition, very few examples were identified that had an equity focus or strong equity considerations within target groups and engagement actors.

Box 1 Key programme and policy recommendations for COVID-19 prevention and control though community engagement approaches

- Early discussions and negotiation with communities to understand sociocultural contexts and developing culturally appropriate prevention and control strategies, what types of engagement interventions are safe, feasible and acceptable, and what existing platforms and initiatives can be leveraged to support COVID-19 activities. Best practice, key actors and approaches for this have been outlined previously and in figure 3.
- Communities should codesign and support delivery of prevention and control interventions and messaging (interpersonal communication/information, education and communication), including the development of appropriate, evidence-based messaging. Best practice, key actors and approaches for this have been outlined earlier and in figure 3.
- COVID-19 pandemic management teams incorporate community members into planning, response and monitoring of standard operating procedures. These plans should be disseminated within communities to ensure support. This should include topics of
  - Population movement monitoring, surveillance and contact tracing systems discussed.
  - Community remote monitoring and alert systems.
  - Community response mechanisms if cases occur, including social isolation procedures, enacting contract tracing, quarantine procedures and community quarantine options.
  - Lockdown, isolation or quarantine support, especially for vulnerable populations, including distribution of essential supplies.
  - Referral pathways and medical supply procurement for serious cases.
  - Planning and community sensitisation on safe burials.
- Health and safety considerations should be collaboratively identified and addressed in planning stages. These include the safe structuring of engagement activities, such as delivery mode of engagement; appropriate distancing measures for face-to-face interactions; quarantine or isolation procedures of community; availability of water and sanitation supplies; resource procurement for engagement actors, such as personal protective equipment; and protocols for suspected/confirmed contact with COVID-19-positive persons.

While leadership buy-in is imperative for many community activities, so too is ensuring a balance between power and representation of diverse voices.

Findings from this review highlight a need for more documentation of community engagement activities especially from more diverse geographical settings and across different populations. While some activities are under way, for instance, GOAL Global, based on experience gained from their Ebola response, is implementing community-led action for COVID-19 in numerous countries[61] or community action networks in Cape Town working together to identify and address the needs of community members,[62] implementers, policy makers and researchers, and encouraged to share learnings from past community engagement initiatives and document ongoing activities for COVID-19.

Interpretation of these findings should be done based on existing context, as the majority of articles were from Ebola response. Ebola had many unique considerations, including lack of trust, fear, rumours and cultural practices around burials and stigma.[15] Engagement of local leaders, those with high levels of respect, were critical to support dismantling some of these notions and working towards prevention and control activities. However, the COVID-19 response may parallel Ebola in many ways, given the social spreading and potential stigma around contracting COVID-19. Additionally, most examples were implemented in low-income countries or in high-income countries where community engagement was used to target minority populations for H1N1 and Zika. There is a need for more documentation on community engagement from more diverse geographical settings and with different populations. Implementers, policy makers and researchers are encouraged to share learnings from past engagement initiatives and to document ongoing engagement for COVID-19 activities.

Countries with pre-existing community engagement structures with strong ties between health teams and communities can thoroughly and meaningfully embed such actions into national response plans. Recent modelling in Africa, where the large majority of articles including this review are based, has noted that, if not controlled, COVID-19 could result in up to 190 000 deaths and 44 million infections in 1 year alone.[63] Many South Asian countries, which have recently seen exponential increases in COVID-19 cases, have a long history of community health and engagement activities and were some of the first to document the mobilisation of CHWs like India's accredited social health activists (ASHAs), for COVID-19. Countries without a strong history of community engagement need to identify where this may be most beneficial, for instance, to support ethnic minorities in the global North who in many countries, because of inequitable systems, are being infected and killed at a disproportionate rate.[64]

Community engagement may be specifically appropriate and needed for complex contexts, such as for migrants in humanitarian settings[65] or in urban informal settlements.[66] It is also needed to address more complex situations, such as settings dealing with both COVID-19 and risk of hunger[67] or supporting already overburdened health systems.

Worthy of note are the limitations of community engagement within the COVID-19 context due to restrictions related to large gatherings and traditional face-to-face approaches. Innovative approaches to adapt traditional community engagement approaches may be required, and how governments and organisations overcome these barriers should be well documented, evaluated and shared. If done physically, COVID-19 prevention and control guidelines around physical distancing, wearing of masks and practising good respiratory and hand hygiene should be ensured. Alternatively, new innovations within community engagement may be more suitable, which may relate to technology and digital tools. Emerging examples of community engagement via digital methods in the COVID-19 context have included the involvement of community governance systems and CHWs in garnering acceptance for quarantine measures in China,[68] mobilising local resources and volunteers

and using social media tools such as WhatsApp to collect health information and communicating COVID-19 messages in Syria,[69] and working with community local and religious leaders to deliberate on facilitators and barriers in the USA and to disseminate COVID-19 information using conference calls.[70]

Key lessons identified (box 1) in additional to early insights from COVID-19 also highlight the need to seriously consider how and what, information is being presented to all stakeholders and especially communities. An overabundance of information, accurate or not, also called 'infodemic', may have serious consequences for community stakeholders, not limited to lack of trustworthiness, confusion and resistance. Key to combatting infodemics and supporting proper communication will be identifying and dispelling rumours through the use of community leaders, open channels for two-way communication between organisations/government officials and community actors who have been prepared to identify misinformation and to support accurate messaging, and transparent and honest messaging with communities that also addresses and explains any changes to information.

Of further importance is that community engagement does not occur in a vacuum. It should be part of wider systems approaches and initiatives to address COVID-19. Ensuring appropriate health systems supports and buy-in will be fundamental to its success. Additionally, contextual community and implementation factors can largely influence the success of community engagement,[71] with approaches being considered within the wider system of implementation. This may involve improving community capacity[72] and supportive environments for engagement, supporting linkages and supportive policy and funding environments[73 74] and establishing environments of respect, trust and shared values and goals.[73] Using existing frameworks or standards for community engagement, such as UNICEF's 16 Minimum Standards for Community Engagement[75] to support planning, implementation and monitoring, is encouraged to support high-quality implementation.

Community engagement supports shaping social dynamics based on power and control that perpetuate the marginalisation of certain groups. The actors involved in mobilisation efforts and decision-making need to be seen as legitimate by the other members of the community. Recognising that power and legitimacy are contested resources that may be changed over the course of the outbreak is crucial for effective community engagement.[39] It needs to start early and continue after the critical stages of the health crisis to contribute to empowerment and building resilient communities. Addressing COVID-19 will require multisectoral responses and a variety of approaches from biomedical and social sciences. Community engagement should be a fundamental component within all of these responses. Whether it be related to prevention and control, vaccine testing and ethics[76] or resilience and recovery,[9] community engagement can support successful efforts. It can also have fundamental roles in rebuilding a stronger health system after the more acute phase of COVID-19 and supporting an equity-focused public health response. However, for all of these to work, community engagement needs to be meaningful, to follow best practice recommendations and guidelines, and to be specific to the context.

Limitations

As this was a rapid review, our database searching and snowballing were limited in scope and time, which may have resulted in missing articles. In addition, while our search terms attempted to include all relevant topics related to community engagement, and we did include search terms for specific community-based interventions (ie, SBCC and risk communication), this was not exhaustive, which may have resulted in missing articles. Excluding articles with a predominantly CHW focus may have resulted in missing some interventions that detail CHWs and other community engagement actors, though this review did attempt to include such studies. Several articles were limited in detail, and extracting and labelling content were at the review team's discretion, which may have resulted in incorrect coding on the type of actors and interventions. This may have been particularly relevant in situations where the engagement approaches and interventions conducted were of similar nature, for instance, the distinction between CFBOs and community groups, and SBCC and risk communication. Nevertheless, this review shares important lessons regarding community engagement approaches from past epidemics that should guide COVID-19 response.

CONCLUSION

COVID-19's global presence and social transmission pathways require social and community responses. This may be particularly important to reach marginalised populations and support equity-informed responses. Previous experience from outbreaks shows that community engagement can take many forms and include different actors and approaches who support various prevention and control activities, including design and planning, community entry and trust building, social and behaviour change communication, risk communication, surveillance and tracing, and logistics and administration. Countries worldwide are encouraged to assess existing community engagement structures and to use community engagement approaches to support contextually specific, acceptable and appropriate COVID-19 prevention and control measures.

Author affiliations
[1]UCD Centre for Interdisciplinary Research, Education and Innovation in Health Systems (UCD IRIS), School of Nursing, Midwifery and Health Systems, University College Dublin, Dublin, Ireland
[2]Department of Disease Control and Environmental Health, School of Public Health, College of Health Sciences, Makerere University, Kampala, Uganda
[3]Expanded Programme on Immunization, Ministry of Health, Yaoundé, Cameroon
[4]RTI International, Pasig City, Philippines
[5]Heller School for Social Policy and Management, Brandeis University, Waltham, Massachusetts, USA
[6]République de Guinée Ministère de Santé, Conakry, Guinea
[7]United Nations University International Institute for Global Health, Kuala Lumpur, Kuala Lumpur, Malaysia
[8]Public Health Foundation of India, Haryana, India

[9]Community Health–Community of Practice Collectivity, United Nations Children's Fund (UNICEF) Headquarters, New York City, New York, USA

Twitter Brynne Gilmore @brynne.gilmore and Claudia Lopes @cabreulopes

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ORCID iD

Brynne Gilmore http://orcid.org/0000-0003-4496-9254

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Supplementary File 1: Searching Supplements (snowballing sources, completed database searches, data base results)

Table 1: Snowballing source and number of returns

Email list		
Contact	**Team member**	**No. of resources**
CH-CoP	SB/AT	5
CORE Group	SB	2
Collectivity / FARAFRA	AT	0
CHW-TWG	SB	0
UNICEF	SB	1
USAID	SB	0
Websites		
Websites	**Team Member**	**No. of resources**
World Health Organization Covid-19 database	VdC	18
Centre for Disease Control (Atlanta)	AT	10
Centre for Disease Control (Africa)	AT	0
https://www.nccmt.ca/knowledge-repositories/covid-19-evidence-reviews	AT	5
https://www.evidenceaid.org/coronavirus-covid-19-evidence-collection/	AT	0
https://www.cochrane.org/coronavirus-covid-19-cochrane-resources-and-news	VdC	0
http://blogs.lshtm.ac.uk/hppdebated/2020/04/08/evidence-to-inform-the-covid-19-response-collection-of-hpp-papers/	SB	6
https://www.ids.ac.uk/publications/covid-19-health-evidence-summaries/?utm_campaign=News%20at%20IDS%208%20April%202020&utm_source=emailCampaign&utm_content=&utm_medium=email	SB	0
Mesh Community Engagement Network	SB	0
British Red Cross Community Engagement Hub	VdC	2
Covid-19 Research Knowledge Hub	VdC	
ReliefWeb	AT	3
WHO Website	VdC	6
Google Search - first 10 pages of "community engagement + (Zika, Sars, etc)	SB	12
John Hopkins University (https://www.mcsprogram.org/resource-search-results/?_sf_s=Zika)		2
	Total:	64
	Duplicates:	29
	Taken to Full text screen:	35

Table 2: Database Search Terms for PubMed

Full search:	Cluster 1 AND Cluster 2 AND (#SARS OR #Ebola OR #Swine Flu OR #MERS OR #Zika)
Cluster 1:	audience [Title/Abstract] OR care group [Title/Abstract] OR caretaker [Title/Abstract] OR change agent [Title/Abstract] OR citizen [Title/Abstract] OR civic [Title/Abstract] OR community [Title/Abstract] OR champion [Title/Abstract] OR collaborator [Title/Abstract] OR leader [Title/Abstract] OR marginalised [Title/Abstract] OR member [Title/Abstract] OR minority [Title/Abstract] OR peer [Title/Abstract] OR representative [Title/Abstract] OR resident [Title/Abstract] OR service user [Title/Abstract] OR stakeholder [Title/Abstract] OR target group [Title/Abstract] OR volunteer [Title/Abstract] OR vulnerable group [Title/Abstract]
Cluster 2	consultation[Title/Abstract] OR communication C4D[Title/Abstract] OR engagement[Title/Abstract] OR empowerment[Title/Abstract] OR participation[Title/Abstract] OR behavioural change[Title/Abstract] OR social change[Title/Abstract] OR social norms[Title/Abstract] OR SBCC[Title/Abstract] OR risk communication[Title/Abstract] OR RCCE[Title/Abstract] OR PLA[Title/Abstract]
Ebola	Ebola[Title/Abstract] OR Ebola virus disease[Title/Abstract] OR EVD[Title/Abstract] OR EBOV[Title/Abstract] OR Zaire ebolavirus[Title/Abstract] OR hemorrhagic fever[Title/Abstract] OR EHF[Title/Abstract] OR maladie virus Ebola[Title/Abstract] OR fievre hemorragique[Title/Abstract]
SARS	SARS[Title/Abstract] OR Coronavirus disease[Title/Abstract] OR severe acute respiratory syndrome[Title/Abstract] OR SARS Virus[Title/Abstract] OR SARS-CoV[Title/Abstract] OR SARS-related coronavirus[Title/Abstract] OR sudden acute respiratory syndrome[Title/Abstract]
H1N1	swine flu[Title/Abstract] OR swine influenza[Title/Abstract] OR H1N1[Title/Abstract] OR grippe A[Title/Abstract] OR grippe porcine[Title/Abstract]
MERS	MERS [Title/Abstract] OR Middle East respiratory syndrome[Title/Abstract] OR MERS-CoV[Title/Abstract] OR syndrome respiratoire du Moyen-Orient[Title/Abstract]
Zika	Zika[Title/Abstract] OR Zika virus[Title/Abstract] OR Zika fever[Title/Abstract] OR maladie a virus Zika[Title/Abstract]

Table 3: Database Search Terms for CINAHL

Full Search	Cluster 1 AND Cluster 2 AND (Zika OR Zika virus OR Zika fever OR maladie a virus Zika) OR (MERS OR Middle East respiratory syndrome OR MERS-CoV) OR (swine flu OR swine influenza OR H1N1) OR (Ebola OR Ebola virus disease OR EVD OR EBOV OR Zaire ebolavirus OR hemorrhagic fever OR EHF OR maladie virus Ebola OR fievre hemorragique) OR (SARS OR Coronavirus disease OR severe acute respiratory syndrome OR SARS Virus OR SARS-CoV OR SARS-related coronavirus OR sudden acute respiratory syndrome)
Cluster 1	audience OR care group OR caretaker OR change agent OR citizen OR civic OR community OR champion OR collaborator OR leader OR marginalised OR member OR minority OR peer OR representative OR resident OR service user OR stakeholder OR target group OR volunteer OR vulnerable group (AB: Abstract)
Cluster 2	consultation OR communication OR C4D OR engagement OR empowerment OR participation OR behavioural change OR social change OR social norms OR SBCC OR risk communication OR RCCE OR PLA (AB: Abstract)

Table 4: Database Search Terms for Scopus

Full Search	Cluster 1 AND Cluster 2 AND (#SARS OR #Ebola OR #Swine Flu OR #MERS OR #Zika)
Cluster 1	audience OR care AND group OR caretaker OR change AND agent OR citizen OR civic OR community OR champion OR collaborator OR leader OR marginalised OR member O R minority OR peer OR representative OR resident OR service AND user OR stakeholder OR target AND group OR volunteer OR vulnerable AND group) AND (LIMIT-TO (LANGUAGE , "English") OR LIMIT-TO (LANGUAGE , "French"))
Cluster 2	ALL (consultation OR communication AND c4d OR engagement OR empowerment OR participation OR behavioural AND change OR social AND change OR social AND norms OR sbcc OR risk AND communication OR rcce OR pla) AND (LIMIT-TO (LANGUAGE , "English") OR LIMIT-TO (LANGUAGE , "French"))
SARS	ALL (sars OR coronavirus AND disease OR severe AND acute AND respiratory AND syndrome OR sars AND virus OR sars-cov OR sars-related AND coronavirus OR sudden AND acute AND respiratory AND syndrome) AND (LIMIT-TO (LANGUAGE , "English") OR LIMIT-TO (LANGUAGE , "French"))
EBOLA	ALL (ebola AND (virus OR disease OR maladie) OR evd OR ebov OR zaire AND ebolavirus OR hemorrhagic AND fever OR ehf OR fievre AND hemorragique) AND (LIMIT-TO (LANGUAGE , "English") OR LIMIT-TO (LANGUAGE , "French"))
H1N1	ALL (swine AND (flu OR influenza) OR h1n1 OR grippe AND (a OR porcine)) AND (LIMIT-TO (LANGUAGE , "English") OR LIMIT-TO (LANGUAGE , "French"))
MERS	ALL (mers OR middle AND east AND respiratory AND syndrome OR mers-cov OR syndrome AND respiratoire AND du AND moyen-orient) AND (LIMIT-TO (LANGUAGE , "English") OR LIMIT-TO (LANGUAGE , "French"))
ZIKA	ALL (zika AND (virus OR fever OR maladie)) AND (LIMIT-TO (LANGUAGE , "English") OR LIMIT-TO (LANGUAGE , "French"))

Table 5: Database Returns and Search Date

				Community Engagement (C1+C2) +					
Database	C1	C2	C1+C2	COVID SARS	Ebola	Zika	H1N1	MERS	Full search
PubMed Date: May 01, 2020	1,019,990	293,217	57,498	34	163	57	68	8	306
CINAHL Date: May 01, 2020	549,771	235,416	76,852	55	128	34	79	29	316
Scopus May 01, 2020	407,092	338,211	36,201	98	4	108	227	0	451

Table 1: Description of Community Engagement During Epidemic

Author/Reference	Year of Publication	Country	World Bank Classification	Epidemic Type and Date	Description of Community engagement/structure engaged	**Typology classification** (Community groups, social networks, informal networks, local governance/community leadership, education, faith organisations, justice, other)	**Prevention and Control Measure** (Risk-communication, Behavior Change Communication, Surveillance, Tracing, Trust-building, Provision, Source Reduction activities, other)	Target Group(s)	Gender/Equity considerations for target groups	Implementing Agency	Pre-existing initiative of new for epidemic only	Duration of programme	Notes
Abramowitz, et al.	2017	Liberia	Low Income	Ebola Virus Disease, 2014-2016	CE for dissemination and assimilation of information accessed through mass media	Community groups	Behavior change communication	Community wide	Not reported	Jointly implemented by Government of Liberia (GOL) and UNICEF social mobilization teams.	New	Not reported	
Aceng, et al.	2020	Uganda	Low Income	Ebola Virus Disease, 2014-2016	CE for community-based surveillance systems, develop and disseminate risk communication messages.	Community volunteers and leadership	Risk Communication, Behavior Change Communication and Surveillance	Community wide	Not reported	Uganda Ministry of Health (MoH) with technical assistance from WHO, other non-health ministries and partner organisations	New	August 2018- May 2019	
Adongo, et al.	2016	Ghana	Lower Middle Income	Ebola Virus Disease, 2014-2016	Social mobilization and risk communication a for safe burial practices	Faith organisations	Risk Communication	Community wide	Not reported	Ministry of health and partner organisations	New	2014	
Baker, et al.	2020	Liberia	Low Income	Ebola Virus Disease, 2014-2016	Community-based surveillance teams	Community leadership Community volunteers	Behavior Change Communication, Risk Communication, Surveillance, Tracing, Trust building, Infrastructural support to health system	Community wide	Not reported	Ministry of Health and NGOs	New	2014-15	
Basson, et al.	2017	Uruguay	Upper Income	Zika	Social mobilisation	Social groups like community organisations, Schools	Behavior Change Communication	Community wide (whole urban area of the city of Salto)	Not reported	University of Republic, partnering with Ministry of Health, Ministry of Social Development (MIDES) and the Municipality of Salto	New	2011-2013	
Charania and Tsuji.	2012	Canada	Upper Income	H1N1, 2009	Community pandemic committee	Local leadership, faith group representative and educational representative	Planning	Community wide	Not reported	Implementing agency along with existing Band Council federally funded	No	2010	
Dada, et al.	2019	Sierra Leone	Low Income	Ebola Virus Disease, 2014-2016	Community liaison team and Social science team	Locally recruited members	CE for vaccine trials	Trial site- Community wide	Not reported	The vaccine trail team led by EBOVAC1 and supported by EBODAC	Yes	2014-16	
Gillespie, et al.	2016	Guinea, Liberia, and Sierra Leone	Low Income	Ebola Virus Disease, 2013-2016	Communication for development - social mobilization and community engagement	Multiple community partners including religious leaders, journalists, radio stations, and partner organizations	Risk Communication, BCC	Community wide	Not reported	United Nations Children's Fund (UNICEF) implemented with government and civil society counterparts	New	2014-2015	
Gary, et al.	2018	Sierra Leone	Low Income	Ebola Virus Disease, 2014-2015	Community led prevention and control measures	Community members, particularly the Ebola survivor and local leaders supported by youth groups	Surveillance, tracking, Provision, quarantine, BCC	Community wide	Not reported	Not reported	New	2014-15	
Health Communication Capacity Collaboration (HC3)	2017	Liberia	Low Income	Ebola: 2014-2015	Community Leaders: traditional and religious	Local Governance/ community leadership (chief and religious)	Risk Communication, BCC, Trust Building, Case detection	Community wide	Not reported	NGOs, MoH, UN	New engagement	Not reported	This document reports on multiple Social Mobilization and Community Engagement SM/CE activities that occurred across Liberia during the Ebola outbreak in 2014-2015. We have extracted key CE activities that had sufficient detail reported within the document. There are other examples, also other considerations (such as Monitoring and Evaluation for SM/CE) and lists of partners and organisations and types of activities they were involved in (Appendix 1 and 2).
				Ebola: 2014-2016	Community leaders and CHWs	Local Governance/Community leadership (chief and religious)	BCC, Surveillance	Community wide	Not reported	Carter Centre, UNICEF, World Bank, technical assistance from African Union, HC3/CCP, CDC, Tony Blair African Governance Initiative, UNICEF, and WHO.	New engagement	Not reported	
				Ebola: 2014-2017	Care Groups	Community Groups, Community Leaders	BCC	Community Wide	Not reported	Concern Worldwide	New engagement	Not reported	
				Ebola: 2014-2018	Community volunteers	Individuals	BCC, Design	Community Wide	Not reported	PSI and Mercy Corps	New engagement	Not reported	
Ho et al. for Singapore Zika Study Group,	2017	Singapore	Upper Income	Zika: 2016	Grassroots leaders, resident committees, volunteers	Community groups, community leaders, volunteers	Risk Communication, Source Reduction	Community wide	Not reported	Not reported	not reported	Not reported	Supplementary File 1 contains some information on Community engagement activities, not contained in manuscript body.

Jiang, et al.	2016	Sierra Leone	Low Income	Ebola Virus Disease, 2014-2015	Social mobilization for awareness generation	Village leaders, community leaders, religious leaders, and community volunteers	Risk Communication, BCC	Community wide	Not reported	District health management team of the Western Area Rural District and the public health team from China	New	2015	
Juarbe-Rey, et al.	2018	Puerto Rico	Upper Income	Zika	Community based participatory research	Women in reproductive age,mothers, sport leaders, students, and community leaders	Planning, developing, and implementing a risk communication initiative	N/A	N/A	N/A	N/A	January and March 2015	
Kinsman, et. al.	2017	Sierra Leone	Low Income	Ebola Virus Disease, 2013-2016	Community participation in development of messages	Community members including traditional leaders, imams, pastors, women's leaders, youth leaders, health personnel, and teachers	Inputs in development of BCC messages	Community wide	Women in reproductive age groups and pregnant are included	Consortium - Enhancing Learning and Research for Humanitarian Assistance (ELRHA)	New	2014-2015	
Kirk-Sell, et al.	2020	United States	Upper Income	Zika 2016-2017	Faith Based Organisations and Community Based Groups	Faith Organisations, Community Groups	Risk Communication	Community wide	Equity - marginalised populations, non-English speakers, undocumented persons	Government	Engaged pre-existing community groups	Unknown	This article describes many risk communication strategies that were taken in the US during Zika. We have only documented the CE aspects.
Le Marcis, et al.	2019	Guinea	Low Income	Ebola: 2014-2015	Comités de veille villageois (CVV), or village-watch communities AND Cadets Sociaux	Community Groups, Local leaders	Trust-building, Surveillance, Risk-communication	Community wide	Not reported	CVV established by UNICEF in 2014. Cadets Sociaux were active during early 2000 war.	CVV new, cadets pre-existing	Not reported	This article describes the CE intervention of CVV, however it more so describes the issues it faced.
		Liberia	Low Income	Ebola: 2014-2015	Community Liaison	Community leader	Design	Community wide	Not reported	IRC implementing Ebola Treatment Centre, and supported discussions	New	Not reported	
		Sierra Leone	Low Income	Ebola: 2014-2015	Chief	Community leader	Risk-Communication, Shut-downs	Community wider	Not reported	Government	New	Not reported	This case study briefly notes how chiefs were used to support community-level Ebola activities, and then describes a situation where after 2 months of Ebola-free, a new case emerged and the government shutdown a local market in the area. This was met by rioting and violence between communities and police sent in to shut-down and monitor community. Apparently, the Chief (who was supposed to be link to communities for Ebola related activities) was not consulted about the closure and thus could not communicate with community on this.
Li, et. al.	2016	Sierra Leone	Low Income	Ebola Virus Disease, 2014-2016	Community based response strategy in contact tracing and social mobilisation	Community social mobilizer including including community and religious leaders, community activists, primary health-care workers, and volunteers	Risk Communication, tracing, BCC	Community wide	Not reported	Chinese Center for Disease Control and Prevention	New	2014-16	
Maduka, et.al	2017	Nigeria	Low Income	Ebola Virus Disease, 2014-2016	Community mobiliser	Community members trained as mobiliser	House-to-house interpersonal communication (IPC)	Community wide	Not reported	Federal ministry of health set up Ebola Emergency Operation Centre. It partnered with Nigerian Centers for Disease Control (NCDC), in collaboration with partners such as Centers for Disease Control and Prevention (CDC), World Health Organization (WHO), United Nations Children's Fund (UNICEF) and Médecins Sans Frontières (MSF).	New	2014-15	
Massey, et al.	2009	Australia	Upper Income	H1N1	Community consultation for appropriate and culturally safe ways to reduce the influenza risk in communities	Community members from aboriginal population	Planning, trust building	Aboriginal communities	Not reported	Hunter New England (HNE) Aboriginal Health Partnership collaboration between the Area Health Service and all Aboriginal Community Controlled Health Services (ACCHS)	New	2008	

Masumbuko and Hawkes.	2020	Democratic Republic of Congo	Low Income	Ebola Virus Disease, 2014-2018	Student-led educational campaign to increase community awareness and engagement	Medical students fromUniversité Catholique du Graben (UCG),	Risk Communication, BCC	Community wide	Not reported	Université Catholique du Graben (UCG along with Ministry of Health of the DRC, the World Health Organization (WHO), UNICEF, and the Association for Health Innovation in Africa (AFHIA)	Yes	2017-2018	
Mbaye, et al.	2017	Guinea	Low Income	Ebola: 2014-2016	Community Based Surveillance & Sensitization Committee (SABC in french) Religious leaders	Community groups, faith organisations, Community leaders, Community members(youths, women, elders)	Risk communication, BCC, Surveillance, Trust-building	Community wide	Essential commodities(electricity, water...) for Local or ethnic groups and employment, BCC for youths	UN, MoH, NGO, Communities	not reported	2 years and more	As the article focuses at the beginning on community reactions among which resistance. It is relevant to consider the resistance behaviors as a plea for community engagement as they manifest complaints/concerns for not being really involved
McMahon, et al.	2017	Sierra Leone	Low Income	Ebola: 2014-2015	Health Management Committee	Community Groups, community leadership	Provision, Surveillance, Logistics, BCC, Risk Communication	Community wide	N/A	Not clear from article - but usually part of MoH and often supported by NGOs, likely IRC in this case.	Pre-existing	On-going	The majority of this article focused on HMCs, however, some non-HMC members were present within interviews. Notably, some contract tracing community members. However, given the main focus in this article, and how it does not specifically distinguish between different types of CE, we only include HMC.
Meredith, C.	2015	Sierra Leone	Low Income	Ebola: 2014	Community Health Committees	Community Groups; Community Leadership	Case identification and referrals; Risk Communication; BCC; Provision/Logistics	Community wide	N/A	Oxfam, with District Health Management Team, and District Ebola Response Coordination.	Pre-existing WASH programmes	N/A	Community leaders in group too - so multiple 'typology'
Miller, et al.	2015	Australia	Upper Income	H1N1: 2009	Participatory Action Research for redesigning response	Leaders, Individuals	Designing	Indigenous Australians: Aboriginal and Torres Strait Islander people	Indigenous Australians disproportionately affected by H1N1, often due to systematic marginalization.	Academia and Public Health	N/A	One off event	
Munodawafa, et al.	2018	Liberia	Low Income	Ebola: 2014-2015	Traditional leaders, traditional healers and religious leaders	Leaders, Individuals	Trust-building / Community entrance	Community wide	Not reported	County Health Promotion Team, UN Mission in Liberia, Save the Children and Red Cross	New	Not reported	Case study of implementation of Ebola response activities in two rural counties in Liberia: Lofa and Margibi
Nakiire, et al.	2020	Uganda	Low Income	Ebola: 2019	Community Members and Leaders	Informal networks, community leaders	Participatory Mapping	Participants and event locations to ensure multi sectoral representation and incorporate principle locations along community-level movement plans	N/A	Infectious Disease Institute (IDI) Uganda, and Centre for Disease Control and Prevention (CDC)	New	One time event	Ebola outbreak in DRC
Ratnayake, et al.	2016	Sierra Leone	Low Income	Ebola: 2015	Volunteer Community Health Monitors	Individuals	Surveillance	Community Wide	No	Ebola Response Consortium	New	Initiated Feb 2015	
Rudge and Massey.	2010	Australia	Upper Income	H1N1: 2009	Community Members: key informants and stakeholders	Individuals	Design	Community wide	Not reported	New South Wales Department of Health and Aboriginal Community Controlled Health Services	Consultations for specific topic new	Unknown	
Santibañez, et al.	2017	United States - Puerto Rico	Upper Income	Zika 2016	Faith Based Organisations and Community Based Groups	Faith Organisations, Community Groups	BCC, Provision (repellent, condoms), other (inspecting windows, detecting stagnant water)	Community wide	Not reported	Over 100 organised joined alliance with government	Epidemic only	Unknown	Only Box 3 from Article, the rest provides overall guidance but does not detail a CE activity
Sepers, et al.	2019	Liberia	Low Income	Ebola: 2014	Community Leaders	Local Governance/community leadership (chief and religious)	Risk Communication, Surveillance	Community wide	Not reported	MoHSW, WHO and NGOs	Leaders pre-existing, but engaged for Ebola purposes	Reported Feb 2014 - Jan 2015	Evaluating WHO's Ebola Response Roadmap in Margibi County, Liberia. The Road Map had objectives, with one being: achieve full geographic coverage with complementary Ebola response activities within the most affected counties/areas, especially those activities that promoted social mobilization through community engagement.
Skrip, et al.	2020	Sierra Leone	Low Income	Ebola: 2014-2015	Community-led Ebola Action (CLEA) Approach, via community mobilisers and Community Champions	Social Networks, Individuals, Community Leadership	Risk Communication, BCC, Trust-Building	Community wide	Not reported	Social Mobilization Action Consortium	New	November 2014 to December 2015	
Stone, et al.	2016	Sierra Leone	Low Income	Ebola: 2014-2015	Community health monitors	Individuals	Surveillance	Community wide		Ebola Response Consortium, US Centers for Disease Control (CDC) and Sierra Leone Ministry of Health and Sanitation.	New	January 2015 (start), but full implementation June 2015.	

Table 2: Community Engagement Technique Described

Author/ Reference	Name of Engagement	Typology Classification	Composition of community engagement team (including gender)	Recruitment of members	Description of CE/ services delivered / co-delivered by CE	Co-delivering of services with other health actors	Links and relationships with other actors	Monitoring and supervision structures	Training and job-aid provision	Incentives (monetary and non monetary)	Provision of Protective Gear	Contextual Factors:	Key Lessons Reported	Notes:
Abramowitz S., et al	Mass media communications and social learning	Community groups	Not reported	Not reported	Social learning included verbal information sharing, peer-to-peer verbal and text phone communications, public and private conversations, and direct observation of Ebola morbidity and mortality.	Not reported	Not reported	Not reported	Not reported	Not reported	Not reported	*Facilitator:* Urban Liberian neighborhoods shared a common media market; *Barriers:* (1) Serious problems of trusting and interpreting information about Ebola due to problems with mass media campaigns' credibility, coherence and lack of specificity of messages (firehose approach) by district in government, (2) Past experiences with the Liberian government and rebel groups using public health and mass media communications campaigns to spread disinformation in order to gain strategic military advantage. (3) Local conditions create conflicts between beliefs and practices, with beliefs losing strength to accommodate current practices (vs normative ideals).	Under extreme public health conditions, local communities can rapidly learn and internalize positive health messages, abandon negative health messages, and refine known health messages. A combination of the formal mass communications campaign and informal social learning processes can have an amplification effect. Beliefs and practices may be inconsistent with people adopting positive behaviours when still holding conspiracy theories. Changing beliefs may have little impact on changing behaviours.	Method is limited, lacking details on data collection and analytical strategies. Social learning theory is applied beyond behaviour to include communication processes.
Aceng J.R, et.al.	Community engagement for risk communication, BCC and surveillance	Community volunteers and leader	Community volunteers, Village health team	Not reported	Carry out communal and door-to-door EVD health education and community surveillance	Community surveillance and health education	District health team comprising of district political, civic, security, and health leadership as well as technical advisors from different partners working in the districts.	Supervised by District health team	Volunteers were trained on EVD screening	Not reported	Not reported	*Facilitator:* Multi-sectoral plan with committees at different administative level, to avoid duplications, identify gaps, monitoring structure. *Barriers:* Large influx of people from DRC, constrain in funding and resources	A county-wide comprehensive plan with committees to monitor at different levels can help in community engagement for communication and surveillance.	The method has limited information about data collection and analytical strategy. Social learning theory is applied beyond its scope from behaviour to communication processes.
Adongo, et al.	Social mobilization and risk communication	Faith Organisations	Traditional and religious leaders	Not reported	Information for the community for safe burial practices during EVD	BCC messages of high risk socio- cultural beliefs	working with committee comprising of Government and nongovernmental partners	Not reported	Not reported	Not reported	Personal Protective Equipment was provided to health facilities, but no mention if were provided to community volunteers	*Facilitator:* Decentralized governance system and out of 5 key areas for planning social mobilization and risk communication constituted was included. *Barriers:* Risky socio-cultural practices for burials, leading to direct contact with dead. Social norms for hand shakes and self-medication.	Need for dialogue and involvement of community leaders, faith groups to modify high-risk socio-cultural practices as part of preparation efforts. Social mobilization through community leaders and culturally appropriate health education are needed to contain an Ebola outbreak.	Got information through cross-referencing: https://apps.who.int/iris/bitstream/handle/10665/145675/WHO_EVD_PCV_Ghana_14_eng.pdf
Baker, et al.	Community Surveillance Team	Community leadership Community volunteers	Community leaders and Community volunteers	Community leaders identified volunteers	Information sharing, planning process, co-identify problems and implement solutions, service provision	Information sharing, advice on planned interventions, surveillance and identifying cases.	Country health team and NGOs	Not reported	High-quality information provision (through fliers, billboard advertisements and radio messaging) between community members and members of the formal and informal health systems.	Autonomy of taking decision and suggesting solutions.	Not reported	*Facilitator:* Use of community resources and their ingenuity to come with solution for resource constrained situation, like community provided food for laboratory technicians, building isolation facilities and taking care of families in quarantine; collecting funds to keep the local radio station functioning for information sharing. *Barriers:* Limited or no avenues for communication with health officials due to understaffed hotlines, lack of visibility of central government officials.	(1) Building of trust and better communication is key for CE, understand community practices and draw on existing social structures and resources. Trust and CE facilitate community buy-in to health initiatives and are essential to health system resilience. (2) Meaningful CE is a critical component for building trust in the health system and ensuring effective response to crises.To achieve meaningful CE, communities should be treated as active participants in—as opposed to passive recipients of—health response efforts. (3) Underlines the importance of communities to carry out critical health system functions and create innovative solutions to perceived health needs. (4) preference for consultation-type CE approach in which health actors sought opinions and advice from communities to more effectively tailor messages and identify new approaches. (5) Health system actors must work to build public trust and communication platforms for CE ahead of a crisis. (6) A fortuitous cycle of increased trust, improved communication and continued meaningful CE—all necessary conditions for health system resilience.	
Basson, et al.	Social mobilisation	Social groups like community organisations, Schools	Teachers, parents, students,representatives of different community organizations, physicians	Not reported	Awareness and participation in delivering the intervention		Intervention teams University of Republic who were partnering with Ministry of Health, Ministry of Social Development (MIDES) and the Municipality of Salto	A household survey aimed at evaluating the information level of the neighbors about the activity	Broadcasting of message about the activity by using a car with loudspeaker.	Not reported	Not reported	*Facilitators:* Higher contact with home owner resulted in cost effective ways of checks of unused containers, high percentage of the delivered bags and removal of breeding areas. *Barriers:* Electoral processes at national and local levels during the scaling up activities created uncertainty and non-availability of residents during day time home visits. Adjusting the time of visits had cost-implications.	(1) Community mobilization and inter-sectoral partnerships increases the effectiveness and more acceptance of an intervention. (2) To obtain the support of public health authorities, and taking into account the cost increase caused by promotional activities for community participation, it is important to underline the positive impact of this participation on the effectiveness and acceptance of the intervention. (3) Community participation can contribute to empowerment if these processes take place over longer periods of time and are accompanied by the creation of opportunities and environments where issues of power and control are explicitly addressed.	
Charania and Tsuji.	Community pandemic committee	Local leadership, Faith representative and educational representative	Representatives from health center, provincial hospital, nursing station, Band Council, education, clergy, Northern (a store), water treatment plant, and emergency medical services	Not reported	Joint development of pandemic plan	Development of plan related surveillance, supplies, services.	Intervention team	Not reported	Each member receiving a personal copy of the pandemic plan during the meeting, a computer projector was used to display the plan and committee's feedback	Community pandemic committees are federally funded	Not reported	*Facilitator:* Community Level pandemic committee already existed. *Barriers:* confusion and lack of preparedness, ill-defined roles and responsibilities of government bodies overseeing the delivery of health care and insufficient details in community-level pandemic plans.	Community-level pandemic plans are dynamic in nature, so there is need to re-assess and modified with community participation on an annual basis and after each public health emergency in order to meet the evolving needs of the community. Moreover community members possess information from their personal experiences and can provide invaluable insight about local values and beliefs to create up-to-date and culturally-appropriate community-level pandemic plans.	
Dada, et al.	Community liaison team (CLT) and Social science team (SST)	Locally recruited members	CLT comprised of nine locally recruited staff employed by the University of Sierra Leone's College of Medicine and Allied Health Sciences (CoHMAS) and two LSHTM supervisors. The SST was comprised of four locally recruited research assistants, a data analyst, a transcriptionist, and an LSHTM social scientist	Not reported	Acted as liaison to the community to make them understand of the trial, its importance, recruit participants and to address any rumours or misconceptions of the trial . Conducted activities including one-to-one stakeholder meetings, group area meetings, public performances and radio jingles	Not reported	To the vaccine trial team	University researcher	Team received background training on clinical trials and were responsible for implementing the CE strategy, monitoring rumors and concerns circulating in the community, and providing information about the trial at national and international levels	Paid from the vaccine trial budget	Not reported	*Barriers:* Delayed response in effectively addressing the outbreak and other factors like mobile populations, lack of trust in governments, weak health systems, poor coordination, inadequate communication strategy, misconceptions around the disease, ignorance of local culture and customs, and lack of involvement of local communities in the control strategies	CE approach delivered in vaccine trial establishes trust between the teams and community members that was reciprocal, relatable, relational, and respectful	Same intervention description can be found in another article Luisa Enria et.al]
Gillespie, et al.	Communication for development - social mobilization and community engagement	Multiple community partners including religious leaders, journalists, radio stations, and partner organizations	Varied community networks of religious leaders, chiefs, healers, mayors and councilors, and other community leaders.	Identifying influential or trusted influential person like in rural communities religious and other community leaders who have extensive reach unlike in urban areas	BCC messaging for prevention, control and building trust	Not reported	Not reported	Local partner NGOs manage key messages,micromapping of communities to improve targeting	Strong protocols to guide all aspects of the response strategy. Different communication tools like Radio facilitated 2-way communication	Not reported	Not reported	*Barriers:* the situation was rapidly unfolding and full of surprises and the communities that were affected the most were largely low-income and remote, and they often held traditional practices and rituals that were difficult to change	Engaging communities early on, understanding social and behavioral dynamics to shape the response, adapting to the evolution of the epidemic and to feedback from communities, and facilitating a more central and active role of communities with mutual accountability mechanisms. There is need identifying trusted local community members to facilitate community entrance and use key communication networks and channels with wide reach and relevance to the community, such as radio in low-resource settings or faith-based organizations.	
Gary, et al.	Community led prevention and control measures	Community members, particularly the Ebola survivor and local leaders supported by youth groups	Ebola survivors, chief of the village, youth groups	Not reported	Health promotion, identifying the sick,contact tracing, isolating, donated land for community care centers, surveillance and case reporting, provision of hand wash points at entrance to community and houses	Health promotion, surveillance, tracing, tracking, isolating	Community health worker	Not reported	Not reported	Not reported	Not reported	*Facilitator:* Local leadership inspired confidence and reassurance, helped implement measures such as contact tracing and health promotion, and contributed to the planning, ideas, and solutions for effective controls. *Barriers:* Delay in response led the community devising self-treatment or other local options	Health messaging is best conducted at household level through local leaders or people who have experienced Ebola first-hand, rather than mass media	
Health Communication Capacity Collaboration (HC3), 2017	Community Leaders: traditional and religious	Local Governance/ community leadership (chief and religious)	Local leaders	Pre-existing local leaders	Traditional and community leaders combated rumours and assisted communities to accept messages. Leaders part of planning, decision-making, discussed how they could best enter communities, and then did the messaging sharing across variety of settings (i.e. Imam in mosque, leaders holding community meetings etc). Supported overcoming community resistance. They also reported suspected cases of Ebola.	Wider implementation of community level services.	NGOs and UN bodies implementing social mobilisation and community engagement/outreach techniques	Not reported	Training conducted for all community and traditional leaders in November 2014.	Given mobile phones.	Not reported	Community resistance to Ebola notices. Pre Existing democracy and peacekeeping work by NGO, meant foundations were already in place, and the relationships established, and leaders trained. Proved invaluable for gaining trust and supporting engagement. Multi-level targeting: messages were identified by social mobilisation group, then leaders engaged, and also radio messages played, movie played, information distributed, hand-washing stations set up.	Including leaders supported appropriate targeting of messages, especially ones that previous produced fear.	These last four examples were all within one report, which documented SM/CE in Liberia during Ebola in 2014-2015. All were under the government led 'Social Mobilization' pillar, that was s structured facilitated and more systematic way of planning and monitoring such activity. Readers are directed to this document for more details on each type of engagement process, as well as monitoring and evaluation and more background to the SM/CE structures in LBeria. Key challenges/recommendations addressed across all four examples, taken from the document, are as follows. Challenges: 1) partner coordination and communication; 2) local partner engagement; 3) community resistance or challenges working in communities; 4) limited research/data from the field; 5) logistical/financial constraints; and 6) working in difficult terrain/challenging environments. Lessons learned: 1) community engagement and ownership are key; 2) utilise Ebola survivors in social mobilization and community activities; 2) invest in capacity building of community structures and systems strengthening at all levels; 4) systematic, sustainable, and targeted approaches work; 5) develop standards for incentives for community work; 6) coordination and communication are essential; 7) facilitate two way communication with communities; 8) work in collaboration with local media; 9) deliver consistent messages and do not oversimplify. Key recommendations: 1) Maintain clear and consistent messaging; 2) establish clear channels for communication; 3) support continuous community engagement; 4) promote key preventive behaviours in community; 5) set up effective reporting and data systems; 6) build capacity of local media; 7) improve partner coordination and communication; 8) establish risk communication systems/protocols; 9) facilitate strategic cross-border and intercultural activities
	Community leaders and CHWs	Local Governance/Community leadership (chief and religious)	Local Leaders and general CHWs	Pre-existing local leaders	RED Strategy, Reach Every District: general Community Health Workers, Chiefs, elders and religious leaders were trained on prevention and surveillance, then formed watch committees to protect their communities. CHWs would go door to door with BCC, and community support was fostered by leaders.	Not reported	Carter Centre, UNICEF, World Bank, technical assistance from African Union, HCI/OCP, CDC, Tony Blair African Governance Initiative, UNICEF, and WHO.	Not reported	Capacity Building Activities' were provided	Notes: provision of logistical support and incentives empowered communities to actively protect and improve their own health	Not reported			
	Care Groups	Community Groups, Community Leaders	10-15 community volunteers	Not reported	Care Group Model: Implemented by Concern Worldwide, care groups are comprised of 10-15 community volunteers who acted as health educators. Volunteers shared learning with communities and helped facilitate behaviour change at the household and community level.	not reported	Concern Worldwide	Met regularly with programme staff (Concern Worldwide) for training, support and supervision.	Met regularly with programme staff (Concern Worldwide) for training, support and supervision.	Not reported	Not reported	*Facilitator:* Trusted members of community were involved in Care Group. Community members were able to receive individual counselling sessions with members. Large coverage area with limited staff resources.		
	Community volunteers	Individuals	Individual (but 15,000 trained)	Not reported	Listen! Learn! Act! (LLA), by PSI, is an innovative, both-up community approach that used community volunteers facilitate discussions across three phases. 1) Listen: during which community members share experiences, rumours, fears, hopes and successes; 3) Learn: during which facilitators made connections between the group and reliable sources of information (e.g. the call centre, general community health volunteers) that would provide correct information supplied by MoH; and 3) Act: where group would identify ways they can make changes based on discussion. Emphasis on promoting communities to take actions to prevent Ebola. Community workers were trained and mentored to deliver thee	Not reported	PSI	Community workers were trained and mentored by PSI	Community workers were trained and mentored by PSI	Not reported	Not reported	This was implemented under the Ebola Community Action Platform (ECAP), a project developed by Mercy Corps. All community mobilizers under ECAP implemented Listen/Learn/Act. The primary aim of ECAP was to coordinate social mobilization across the country and provide support to local NGOs and community groups.	Bottom-up approach, supporting communities to design own plans, trusting local NGOs with outreach responsibility, building capacity that covered entire country through effective community engagement and ownership, leading to behaviour change. Challenges: transportation, community perceptions, health workforce and capacity, poor sanitation and hygiene facilities, leadership, funding, partners in terms of standardizing approach and having presence in communities.	

Ho, et al. for the Singapore Study Group, 2017	Grassroots leaders, resident committees, volunteers	Community groups, community leaders, volunteers	Unknown	Unknown	Grassroots leaders and volunteers distributed information leaflets and mosquito repellents in their communities and reminded people to check for mosquito breeding groups. Resident committees organised garbage/litter collections and surveyed environment for mosquito breeding spots.	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Once Zika had moved to mosquito population, government used community education and engagement for vector control, which contributed to the reduced spread within four weeks. Quick, national, multi-sectoral action was required.		
Jiang, et al.	Social mobilization for awareness generation	Village leaders, community leaders, religious leaders, and community volunteers	Village leaders, community leaders, religious leaders, and community volunteers	Not reported	Improve the public's awareness in order to change behaviors towards EVD control	Not reported	Not reported	Not reported	Multiple stages of intensive training with a major focus on educating the public on how to prevent the transmission of EVD, as well as encouraging people to promptly seek medical care in the event that they experience signs and symptoms associated with the disease	Not reported	Not reported	*Barriers:* Prevalence of *poor* behaviors, including an unwillingness to report Ebola, a preference for traditional healing, and unsafe burials	The training increased awareness of EVD control and prevention, as well as community engagement. It also established a mechanism for coordination and cooperation between the community and a professional team	
Juarbe-Rey, et al.	Community based participatory research	Women in reproductive age,mothers, sport leaders, students, and community leaders	Women in reproductive age,mothers, sport leaders, students, and community leaders	*Community partners* recruited community members	Co-developing three risk communication strategy- Zika awareness health fair, health education through theater, and community forums and workshops.	Not reported	Linkage with academic/ intervention team	*Periodic meetings* were held to update partners, coordinate efforts, examine publicity plans, distribute responsibilities, and identify needs	Use of facilitator guide	Activities were funded	Not reported	*Facilitator:* Partneing with community members allowed for contextualizing risk communication strategies to convey health information in formats that were easily understood and well-received by community members. community members' involvement in planning, developing, and implementing this risk communication initiative contributed to an increased sense of project ownership	Community-based participatory approaches for the design of risk communication and community engagement strategies enables residents in low-income communities to make informed decisions for the protection against Zika virus and other mosquito-borne diseases	
Kinsman, et al.	Community participation in development of messages	Community members including traditional leaders, imams, pastors, women's leaders, youth leaders, health personnel, and teachers	Imam/pastor, Traditional community leader, youth leader, women's group, Traditional healers	The study team introduced to respective village chief, who then called a meeting with key stakeholders, including traditional leaders, imams, pastors, women's leaders, youth leaders, health personnel, and teachers, who later was identified as study respondents	Co-developing messages on topics as ambulances, burial teams, and the use of chlorine	Not reported	Research Consortium team members, representatives from the MoHS, the US Centers for Disease Control, and local NGOs - Focus 1000.	Not reported		Activities were funded	Not reported	*Barriers:* Lessons learned from messaging in previous viral haemorrhagic epidemics were not taken into account, and which contributed to prolonging the outbreak. Also the messaging was top-down without considering the local social-cultural aspects.	Communication with the community and message dissemination should be conducted on a two-way basis, with the use of trusted messengers for each segment of the population	
Kirk-Sell, et al.	Community and faith-based organisations	Faith organisations, community groups	Unknown	Pre-existing groups	Public health officials responsible for responding to Zika highlight the importance of partnerships with CBO and FBO, especially to improve communication with non-English speakers or hard to reach populations. Targeting a variety of different community organisations (women's clubs, garden clubs etc). Also coordinated with community health workers.	Engaged by Government	Not reported	Not reported	Not reported	Not reported	Not reported	*Facilitator:* Pre-existing groups in the community, that the Public Health officers would link with to help support activities.	Deploying messages across multiple platforms, tailoring nuanced messages for target populations.	Note: does not describe any more in-depth what type of CE was done.
Le Marcis, et al.	Comités de veille villageois (CVV), or village-watch communities AND Cadets Sociaux	Community Groups, Community Leaders	CVVs made up of: local elites, official representatives of youths and women, religious leaders, traditional healers and Ebola survivors. Cadets Sociaux (youth groups set up during 2000s in response to conflict).	CVV were to be selected by community members. Cadets sociaux - recruitment not reported	CVV: intended to create a local mechanism for resolving issues around population resistance and epidemiological surveillance. However, the CVV in itself provoked resistance. CVV meant to engage local leaders to 'develop trust' and improve community acceptability of response, but had many struggles, including assault and no admittance to communities. Cadets sociaux challenged and attacked MoH and other outsiders who came into villages. They established own 'watch committees' to protect communities. Community mediation processes (facilitated by WHO) went in to investigate history Ebola development and enable community empowerment and mobilisation.	Not reported	CVV supported by UNICEF	Not reported	Not reported	Not reported	Not reported	*Facilitator:* Strong historical factors influenced the acceptability of CVVs, and the community (largely influenced by cadets sociaux) response to Ministry of Health and external actors efforts. Outsiders were met with violence, leading to arrest of community members. People had large distrust in outsider interventions, and had previous mechanisms for community monitoring. Cadets took it upon themselves to monitor and enforce rules for Ebola. Lack of historical understanding, and doing pre 'ground work' to establish connections meant CVV implementation did not succeed.	CE is not a 'one-size-fits-all'. Inflexible or top down responses are not appropriate. CE requires 'fundamental recognition that within communities power and legitimacy are always contested resources'. CE requires dynamic awareness of history, context and power.	This article presents three case studies, each using different CE within their own contexts of Sierra Leone, Guinea and Liberia. Case studies are detailed individually, but under the same article heading.
	Community Liaison	Community leader	Woman	Nominated by community	Community representative present during planning stages of new Ebola Treatment Centre, who expressed concerns, priorities, and negotiated for services for communities. Also related concerns regarding post-Ebola and the impact of the ETC. Negotiated for hiring quotas from in the community. Also led to youth leadership working with government/NGOs to raise awareness through outreach programmes, and included training of community task-forces. Weekly meetings were held to inform communities of ETC updates. Establishment of new community based organisation called 'Taking Initiatives', and other initiatives from youths have also resulted.	Not reported	IRC implementing Ebola Containment Centre	N/A	N/A	Not reported	Not reported	*Barrier:* Containment measures (cremation of the deceased, lock-downs and ebola treatment centres that did not have capacity to support all those admitted) led to much rumours, distrust and criticism towards government response. A new ETC was being established in a stadium, which was foreseen to be dangerous and also take away jobs and activities for people in that area, who already had several other treatment centres nearby.	Community leadership/representative need to be present during planning stages, to negotiate on behalf of community, which will support more acceptance and appropriate services. Knock-on effects of such engagement may be establishment of other community initiatives that represent community needs.	Article has several aspects of CE: new initiatives, community task forces, etc. but the most discussed was community representation within the ETC planning, which is reported here.
	Chief	Community leader	Not reported	Pre-existing community Chief	Community-ownership-model' had Chiefs activity involved as chief community mobilisers, who would do BCC but also impose unpopular measures (like fines). For the most part, this was accepted as Chiefs were from the communities and were already an authority figure. When new Ebola case emerged, the government took action to shut-down markets in town, without engaging the Chief community mobilisers.	Not reported	Government Ebola task force	Not reported	Not reported	Not reported	Not reported	Chiefs were initially recruited to support Ebola activities within communities, however when a new case emerged the government took action via closing markets without consultation with Chief, and thus Chief did not get opportunity to communicate with community. Additionally, large mistrust in Ebola response to begin with - many community members considered it a money-making operation for organizations and health workers	Meaningful engagement of leaders/CE activities needs to be embedded throughout, and not abandoned during peak crisis times (i.e. new Ebola case in this instance).	
Li, et al.	Community based response strategy in contact tracing and social mobilisation	Community social mobilizer including including community and religious leaders, community activists, primary health-care workers, and volunteers	Community and religious leaders, community activists, primary health-care workers, and volunteers	Community and religious leaders and activists who had a high school or higher education level or had some health educational background were recruited and trained to form the local community response team	Alert case report, contact tracing, and social mobilization.	Contact tracing, house-to-house visits, prepare health facility reports, and community report; Impart messages of EVD prevention to their community members via face-to-face, and also distributing posters and brochures	Not reported	The community mobilisers were supervised by experienced senior supervisors and field supervisors from the Western Area District Health Management Team. They were systematically trained on their roles and how to implement their task in the community	Training workshop on EVD messages like, infection prevention in the community, and skills needed for social mobilization	Not reported	Provision of soap and hand sanitiser	*Facilitator:* Community education and social mobilization could facilitate public awareness and improve the compliance of community members with prevention and control measures in their communities *Barriers:* in absence of an effective EVD vaccine, community-based risk reduction measures were among the best ways to interrupt Ebola transmission and can be effective even in areas with weak health infrastructure	Community-based education for the local residents with face to face communication,especially for the influential community persons is an effective means for BCC. Need to tailor community education to the context of the community.	
Maduka, et al.	Community mobiliser	Community members trained as mobiliser	Not reported	community mobilizers who already had experience working as community mobilizers during supplemental immunization activities	Record keeping of the area which includes the number of households where IPC sessions held, demonstrations, Information, Education, and Communication (IEC) materials distributed, cases of non-compliance and issues/ rumours raised during the session. For IPC community mobiliser visited house-to-house with EVD prevention and control messages relating to the causes of EVD, its symptoms, prevention, treatment, and care	Not reported	The data manager collated data from all the community mobiliser and transmitted them to UNICEF and the operations manager of the communication and social mobilization team at the EOC.	One supervisor was provided to a cluster of five teams and two supervisors to each state. Also, members of the communication and social mobilization sub-team conducted regular field visits to provide supportive supervision for the teams.	one-day training covered basic facts about EVD, its causes, symptoms, and prevention. The training emphasized early presentation for treatment and care in the event of someone developing EVD symptoms. It also emphasized stigma prevention, safe burial practices, and hand-washing demonstration. The methods employed for the training included lectures, role play, individual and group exercises	Not reported	Not reported	*Facilitator:* Use of earlier developed IPC strategy used during infectious disease outbreak in Uganda *Barriers:* Existing risky Cultural practices like self-medication, open-defecation, ceremonies and mass gatherings washing and staying overnight with dead bodies, unhygienic ways of slaughtering domestic animals, the handling of body fluids during childbirth, and washing the corpse of a man	IPC although resource intensive and time-consuming,this strategy has the potential to contribute to improved knowledge on modes of spread, symptoms, and practices on prevention of EVD	
Massey et al.	Community consultation for appropriate and culturally safe ways to reduce the influenza risk in communities	Community members from aborigina population	Not reported	Key stakeholders in these communities identified by the ACCHS and key informants were approached to input into the influenza consultation	Community inputs were provided on issues of reducing the risk of influenza at home and at community gatherings such as funerals; and providing access to health services. Key inputs were provided on the issues of significance of a local resource person, Clear communication, Access to health services, funerals practice and Social and community support issues.	Inputs for joint development of plans for aboriginal population	Policy and program division of the country	Not reported	The implementation team provided input about the nature of influenza, its transmission, and the evolving epidemic during the consultation.	Not reported	Not reported	*Facilitator:* Australian Health Management Plan for Pandemic Influenza was prepared to protect all Australians and reduce the impact of a pandemic on social function and the economy. *Barriers:* Indigenous people are approximately five times more likely than non-Indigenous Australians to be hospitalised for swine influenza and a similar proportion required intensive care treatment. There is no measures that appropriate to be devised for this group.	Measures to reduce the risk of influenza in communities must be developed with the communities to maximise their acceptance. The process of engagement and ongoing respectful negotiations with communities is critical to developing culturally appropriate pandemic mitigation and management strategies	
Masumbuko and Hawkes.	Student-led educational campaign to increase community awareness and engagement	Medical students fromLihiverité Catholique du Graben (UCG),	Medical students	Not reported	Community outreach activities included a parade with branded t-shirts and banners through the main streets and market, speeches with loudspeaker, one-on-one interactions with community members in public spaces,presentations at faith-based gatherings (Sunday church service), and radio announcements	Not reported	Link with ministry of Health and international organisations	Not reported	Students were provided training (one half day) in the biology, transmission modes, and social dimensions of EVD, together with pragmatic strategy and schedule for the community outreach.	The social mobilisation and the campaign was funded	Not reported	*Barriers:* Poverty, HIV/AIDS, and ongoing violent conflict following civil and international wars, fear of EVD since the last outbreak in West Africa, mistrust of national government and international agencies and security concerns	Medical students appear to be well positioned to act as'opinion leaders' and 'social mobilizers' given their tacit cultural understanding and biomedical knowledge, they can tailor health messages, build rapport, increase interpersonal communication, empower community members, and promote optimal health outcomes	
Mbaye, et al.	Community Based Surveillance Committee (SABC in french) Community Leaders	Groups	Youths, other community members, faith and other community leaders	Community driven with the support of international partners	Community death reporting, Sensitization, Controls at entry and exit points of communities, safe corpse management and burials	Anthropologists used as mediators between communities and the health sector		Community meetings	No	Funding from international partner for community projects, food distribution, hand washing kits distribution, free consultations		71% of rural population, Poor access(38.9%) and utilization (18.8%) of health services, Poor geographic reach of health facilities (about 1033 health facilities for 10.95 millions people. Ethnic and political conflicts, Poverty and Youth unemployment.	Community resistance as being a form of expression for populations during an epidemic can prompt community engagement; Communities are not passive during an epidemic, they take initiatives the state of their knowledge and health system/ State/ International community supports.	

McMahon et al.	Health Management Committees	Committee	Volunteers from community, who work together, often in collaboration with health facility staff, to improve community health and give voice to community's needs. Typically include: community chief, female leader, teacher, and several health mobilizers.	Not disclosed, but specific representation needed (i.e. community leader). Often HMCs have some positions that are elected (i.e. female leader) and some by default (i.e. if they have health facility in-charge in them)	*Various* roles across the country. Not standardised intervention. Prior to Ebola: Regular meetings, fundraising, health promotion, engagement with other health workers, accountability (i.e. medicines). During Ebola: Manual labour (building walls, cleaning facilities, digging graves, manning checkpoints). Administration and outreach (records, contract tracing, screening upon entry to health facility), navigating interactions with community members (BCC and trust-building). Acted as link to health workers (i.e. explained community concerns, asked health workers question on behalf of community) and from health workers to community (built trust, explained prevention and control measures to community for acceptability).	Pre-ebola, would travel with health care workers to deliver services, communicate health messages etc. During Ebola, support health facility activities (see roles/types of services).	Health facility, Community Health Volunteers, Contract Tracers	Linked to Health Facility. During Ebola, some HMCs were supported by NGOs, others were not.	Training by NGOs (IRC) mentioned as source of motivation for HMC members. Specifics of training unclear. Pre-existing HMC that likely had some initiation, and were supported by NGOs at times for some activities within.	Varies - sometimes NGO and/or government support in terms of monetary and non-monetary incentives. Contract tracers were to be given monthly allowance, though this did not always happen.	For health workers and burial team members. Not clear if any HMC members were part of these teams.	*Facilitators:* Many listed, see document for more details. Key contextual factors: 1) Pre-existing relationships between HMCs and Health Facility which supported trust and timely action; 2) External inputs (i.e. trainings by NGOs and IPC supplies) provide direction and support; and 3) specific nature of Ebola and recognition of internal action galvanized community action. Article identified facilitators (via intrinsic and extrinsic motivation) and facilitators. Intrinsic motivation: desire to serve and lead, fear of Ebola, pride/trust in health facility and providers. Extrinsic motivation: compensation, recognition of governments limited capacity, recognition of Ebola severity, and NGO support. *Barriers:* Intrinsic - sadness, grief and loneliness, fear of contracting Ebola, concern that government has forgotten them. Extrinsic - community misconception about payment, and community anger at them for 'collaborating' with health system.	Article articulates 4 key lessons learned (Table 3, pg 8), directly quotes as follows: 1) Community leaders, volunteers, and home committee members can perform vital functions during public health emergencies; 2) The importance of community leaders, volunteers and health committee members rests not only in their capacity to carry out manual labor and administrative tasks, bu also in their capacity to mediate between communities and the health system; 3) Positive pre-existing relationships between communities and health workers are a key enabler for community volunteers to engage in difficult tasks during crises, particularly tasks that violate social norms (e.g. burial rituals); and 4) During emergencies, the resilience and capacity of community leaders, volunteers and health committee members can be supported by ensuring clarity among stakeholders about compensation, reassuring community workers that they are not forgotten, providing trainings and equipment, and creating spaces for dialogue between health workers and community workers.	This article elaborates further on role and responsibility of HMCs during Ebola, contextual factors, barriers and facilitators. Refer to article for more specific details and expansion of points reported here.
Meredith, C.	Community Health Committees	Committee; Leaders	Not disclosed.	Not disclosed	Identified barriers to effective prevention, case management and safe burials. Committees developed action plans to address such barriers. This ranged from logistical (fuel for ambulances, water access) to Behaviour Change Communication, and Risk Communication (i.e. dismantling beliefs that bathing in salt water can cure Ebola, and sharing knowledge on burial practices). Also, in one case. noted, conducted case identification and referrals.	Community Health Committees linked with Community Care Centres	Support by DHMT and District Ebola Response Coordination.	Linked to Community Care Centre	Training on communication, to build confidence of Committees, and to build 'kangosa' or gossip channels. Training on Ebola case identification and referrals.	N/A	N/A	Disbelief and distrust from some community members prior to initiating Committees. Pre-existing implementation and relationships by NGO in the context. However, they note Challenges as "coordinating social mobilisation activities in a context where multiple agencies are active in the same communities, each with their own way of working". This was helped in Sierra Leone due to existing 'Social Mobilisation Pillar (SMP) led by Ministry of Health that is an umbrella structure for all community operations. Logistical issues related to geography cover and remote areas, also need to have strong relationships but also be ready to deploy quickly.	Actively involving community health committees in the development of prevention and protection approaches built trust and and increased community willingness to refer and seek treatment. Communities members are able to engage in social mobilisation with harder-to-reach or less likely to disclose populations (i.e. taxi drivers, drug users). Active case findings with social mobilisation important proactive element.	There are two examples in this one article. They are from different countries (Sierra Leone and Liberia) and different examples. Sierra Leone reports on CHCs, whereas in Liberia they discuss case findings using community health volunteers. For the second, it is unclear if these are 'CHWs' or if they are from the communities. Not enough details, so it is excluded.
Miller, et al.	Participatory Design	Leaders, Individuals	Not reported	Community leaders	Focus Group Discussions, interviews and workshops using participatory action research, specific to H1N1 pandemic plans. Community members and leaders identified key considerations for current and future pandemic plans.	N/A	N/A	N/A	N/A	N/A	N/A	*Facilitator:* Communities have previous experience with PAR, involvement of Aboriginal Health and Medical Research Council, multi-disciplinary and staged researchers.	Pandemic response plans need to consider: social aspects of communities including cultural values, norms, family ties, and social networks.	
Munodawafa, et al.	Traditional leaders, traditional healers and religious leaders	Leaders, Individuals	Not reported	Community leaders	Advocacy meetings with Chiefs, traditional leaders and other influential people to obtain support for the Ebola response effort.	UN, International Organisations and Government.	UN, International Organisations and Government.	Not reported	Not reported	Not reported	Not reported	*Facilitator:* Strong relationships with county health teams, multi-sectoral partnerships and interventions. Context of implementation (lack of facilities, roads, infrastructure, water and sanitation etc) at community level left families more vulnerable, and introduced many challenges for care seeking. Infection control for safe burials had much resistance, as these were incompatible with traditional practices.	Multi-sectoral approaches which include social mobilisation were mapped to reduced incidence of EVD. Key lessons reported, relevant to CD: 1) social mobilisation and community engagement (e.g. involving chiefs, elders, religious leaders) were critical for bringing about community/system changes and services. Key recommendations reported 1) assure early and intense CE activities at the local level (i.e. engage chiefs and elders, religious leaders, women and youth and Ebola survivors in key activities such as investigating rumours and diffusing myths) 2) build capacity and sustained leadership within community health committees through training and technical support for essential community processes (e.g. assessment, planning, developing interventions, intersectoral action, monitoring and evaluation).	
Nakiire, et al.	Community Members and Leaders	Members; Leaders	community leaders, informal traders	Purposefully selected	Focus Group Discussions and Key Informant Interviews with Participatory mapping. Community participants describe movement patterns across borders specifically for: those seeking refugee status, conducting trade or business, seeking health care, visiting family. Also mapped health care facilities that receive patients from DRC.	Not reported	Not reported	Not reported	Not reported	Not reported	Not reported	Findings used to scale-up prevention efforts (via risk communication, community surveillance, screening of travellers etc).		Multiple stakeholders involved in participatory mapping - unclear specific community contribution
Ratnayake, et al.	Volunteer Community Monitors	Individuals	N/A	Volunteers or existing Community Health Workers	Responsible for their own village, or if necessary a few small villages within walking distance. Trained to detect 6 trigger events suggestive of Ebola, and then report any to supervisor who did primary investigation.	Community Surveillance Supervisors and Community Health Officers (MoH staff)	Ebola Response Consortium, International Rescue Committee	Monitors reported events to community surveillance supervisors via mobile phones, the supervisors then conducted preliminary investigations.	Job specific training month prior to actions. Some districts provided informal refresher training. Trained to detect 6 trigger events suggestive of Ebola	Not reported	Not reported	Wider contract tracing was ongoing, this system was to support more efforts at community level. Some of the monitors were previously trained CHWs, and some were also contract tracers. Contextual considerations include: how monitors classify and understand illness, awareness of burial practices and how to identify/importance of reporting, piloting of illness classifications, strong links to wider health system.	CEBS generated alerts for about 1/3 EVD cases. Found to have low sensitivity and positive predictive value, however this is meant as a supplement to a wider tracing system, and the authors noted this was a positive result. Additionally, community monitors found other health issues, including three measles clusters and chickenpox. System may be good to identify cases with no epidemiological links (that contract tracing would usually find), or newly emerging outbreaks. However, still needs thorough coverage, adequate training, and strong links with wider community systems. Before rolled out, validity of the 6 trigger categories need to be tested, and exploration of burial practices would be required, as the monitors did not identify many such incidences.	
Rudge and Massey.	Participatory Design	Individuals	Unknown	Unknown	Focus Group Discussions with 6 different communities on potential solutions for addressing H1N1 in their communities. Their input influenced design/approach to interventions.	N/A	N/A	N/A	N/A	N/A	N/A	*Facilitator:* Pre-existing relationships with communities meant ability to have rapid discussions on such topics.	- identify local 'go to' people, who are trusted and easy to access and who community may turn to for advice; simple, clear information that demonstrates respect; people need information on where to get help and control procedures; infection control messaging should be aligned to reality of Aboriginal communities; people need to have a say in the support provided	
Sanlibañez, et al.	Faith-based and community-based groups	Faith organisations, community groups	Unknown	Pre-existing groups	In 2016, over 100 FBO and CBOs joined an alliance with the government. They had main duties of: 1) establing teams that can inspect their neighbourhoods weekly 2) planning ahead for mission trips and travel to areas with Zika, 3) building a culture of solidarity and commitment to helping on another, 4) educating and empowering community members to help prevent the spread of Zika. they did things such as "zika Action Days' where education was spread and repellent given, inspecting of stagnant water sources and houses with brown screens, education on how to elminate mosquito breeding sites, distributing condoms and repelle.t	Over 100 FBO and CBOs	Not reported	Not reported	Not reported	Not reported	Not reported	*Facilitator:* FBOs and CBOs had direct and existing relationships with communities. They know who is pregnant, where people live, key areas in community etc. They were recognized as first responders in any emergency. Groups joined together, identified common goals and agreed upon roles for groups.		Only reporting Box 3 from article, which describes a CE approach. Rest of article has CDC recommendations for CE, helpful with lessons learned.
Sepers, et al. 2019	Community Leaders	Local Governance/community leadership (chief and religious)	Individual leaders	Pre-existing individuals	Several engagement activities: convened a national consultative meeting with traditional community leaders; conducted community advocacy meetings with local and religious leaders; conducted an engagement programme with community leaders to mobilize them for addressing EVD outbreak; implemented a survivor reintegration programme. Article notes that "[In] Liberia, there was less reliance on community isolation (quarantine) but rather there was emphasis on community self-policing or monitoring, whereby each traditional leader (chief or religious leader) took it upon themselves to enforce policies on visitors, strangers and reporting of sick or decreased."	Several other mobilization activities enacted, though many not through community engagement.	Ministry of Health, Sanitation and Welfare, WHO, The Council of Chiefs and Elders, NGOs	Not reported	Meetings and sensitisation trainings conducted	Not reported	Not reported	Multi-sectoral engagement. CE was part of wider activities including: 1) surveillance, contact tracing and case investigation; ii) case management; iii) safe burials; iv) social mobilization and community engagement and v) delivery of basic services. Prior bad experience with law enforcement, and strong focus on leaders (chief or religious), including support from NGOs and WHO, had government relying on leaders to ensure adherence from communities.	Engagement of community leaders (chief and religious) to support adherence, education, monitoring and reporting within communities.	Table 1 details all implementation components, elements and engaged partners in Ebola response implementation, including all aspects of CE.
Skrip, et al.	Community-Led Abola Action, with community mobilisers and Community Champions	Community Champions, Individuals	Community Champions, supported by Mobilizers (youth workers (18-2 years) who had previously been involved in HIV/AIDS community programme)	Mobilizers: through previous programme. Champions: Identified via community facilitated sessions by mobilisers. Champions: Unknown.	CLEA Approach, a structured participatory approach: Initial visits by mobilisers to communities, mobilisers use structured tools with community group to facilty community inquiry, to facilitate and support community to conduct analysis and develop action plans to prevent transmission. Community Champions are identified, who are focal points and support communities to develop plans. Mobilisers make subsequent visits to communities. Expected that communities identifying priority actions and implementing strategies to address would affect behavioural outcomes.		CLEA approach used within Sierra Leone's Social Mobilization Action Consortium (SMAC).	Follow-up visits by mobilisers approximately every 3 weeks	Trained by mobilisers	Not reported	Not reported	Follow-up visits required, and such visits associated with more satisfied needs. Running of CLEA aligned to more resources in other sectors and areas, which may have supported its success (for instance, community care centres could accept increasing referrals, dignified burial teams and ambulances available). Actions were ones communities know that they can adopt and sustain, that promoted local ownership of the response based on community-defined actions that are protective while consistent with local interest.	Using the approach facilitated actions plans with specific by-laws for implementation, using this and community meetings with local champions facilitated collective buy-in. Follow-up visits by mobilisers were associated with higher prompt referrals. Communities with satisfied capacity had fewer unsafe burials and more prompt referrals. The need for sustained behaviour change in outbreaks may be met by community identification of needs, action plans and implementation (facilitated by Community Champions) and supported by community mobilisers.	Mobilizers do not seem to be community members, but support (trigger) community engagement activities via Community Champions
Stone, et al.	Community health monitors	Community health monitors (Volunteers)	Individuals	ERC identifies community health monitors in collaboration with traditional leaders in each village. 1 monitor for 50 households. 1 Supervisor per Chiefdom. CHMs should be respected residents in their communities with previous experience in a role of responsibility (i.e. teacher). Wherever possible CHMs would be CHWs.	Community members trained to identify 6 trigger events that may be associated with Ebola, and report to Community Surveillance Supervisor via phone call. Ratio of CHM to household was 1:118, and ratio of CHM to CSS 52:1. In trial, 7142 CHM trained across 9 districts, covering approximately 63% of Sierra Leone. Number of events reported increased with time, as roll-out to different districts slower. When operational, 92% of all CHM reported. Large majority of events were not classified by CHM. In evaluation interviews, CHM only recalled 3/6 trigger events. CHMs actively sought information by: speaking to community leaders, visiting households, speaking with other key informants (teachers, health workers).		Wider CEBS system including: supervisor, community health officer, district Ebola response center	Done by Community Surveillance Supervisor. Weekly reporting, even "zero reporting" used as a supervisory tool to check that CHM is still active and looking for triggers.	Trained on 6 trigger events that may be associated with Ebola.	Motorbikes and Mobile phones	Not reported	When possible, previously trained and operational CHWs (Sierra Leone has had community health worker programme since 2006) were used, as they already had relationships with the community which was deemed essential to build trust. District and Chiefdom level stakeholder meetings conducted to get buy-in from local leaders to support community ownership and participation in programme. Failure of closed user group and lack of motorcycles were inhibiting factors. Also, knowledge of CHM: Large majority of events were not classified by CHM. In evaluation interviews, CHM only recalled 3/6 trigger events. 68% noted that the community supported their work. Others noted need for strengthened coordination between CEBS and other Ebola related activities and surveillance. Logistical challenges influenced timeline	Start-up took longer than expected (over 6 months). Importance of stakeholder meetings to get community ownership and acceptance. The implementation of CEBS supported a stronger and satisfying linkage between communities and overall EVD response. More refinement of triggers are needed, and likely more training for CHMs. Community health volunteers are capable of detecting and reporting important health information.	Article also reports on Community Surveillance Supervisors, bu they are often health staff and not situated within community or conducting engagement activities, so this is not reported here.

Table 3: Guidance document synthesis of learning and recommendations relevant to CE for COVID-19

Author	Topic	Focus	CE Approach	Specific Guidance for topic/focus or notes	General Guidance
WHO, 2016	Zika	Risk Communication	General	Risk Communication should use five strands of communication: 1) public communication, 2) translational communication, 3) stakeholder coordination, 4) community engagement, 5) dynamic listening.	1. "Establish and maintain a dialogue with key at risk communities and stakeholders. Listen to, acknowledge and address their concerns. Solicit their guidance in design, implementation, and evaluation of key interventions. Ask for their help to disseminate information." 2. "Be first, be fast and be frequent". Keep ongoing, open lines of communication with communities and key stakeholders. This is especially important when facts and findings are emerging. Communication needs to be regular, reliable and up to date, while engaging communities. People have a right to information. Communication in a straightforward and honest way is essential for building trust. 3. "Contain and maintain trust about what is known and not known". Do not dismiss fears, acknowledge and clarify rumours, myths and misconceptions. 4. "Communicate facts, figures and data with empathy and in language that is understandable by the intended audience". 5. "Recognize barriers to recommended behaviours. Provide resources, strategies, and support on how to address them. Use networks and partnerships to establish good listening mechanisms to identify and quickly address rumours, concerns and misinformation." 6. "Spend time observing and learning directly from local people to understand and respect their cultures, beliefs and traditions. Integrate these findings into communication and engagement strategies and tactics". 7. Contextualise communication so that people can relate, understand and trust it. Use words, visuals and oher aids that are culturally appropriate. 8. "Focus on engaging and empowering people, rather than simply informing them. Prioritize target groups and stakeholders and leverage social networks. Whenever possible, all communications should be discussed, agreed with and delivered by local community leaders and other stakeholders who are trusted within at-risk communities."
Santibañez et al. 2015	Ebola	Health Communication and Community Mobilization	Partnerships with community and faith-based organizations	10 step approach for health communication with community and faith-based organizations (CFBOs) for Ebola response:	1. Incorporate health communications and community mobilization into overarching public health emergency response plan 2. Assemble the appropriate health communications and community mobilization team and determine specific roles and responsibilities 3. Determine which factors place people in a community at risk of disease 4. Locate communities where information about preventing Ebola and stigmatization is most needed 5. Identify, engage and collaborate with CFBOs that can help reach and address the needs of affected communities 6. Anticipate and identify specific information needs 7. Work together to develop messages as part of a community mobilization strategy for Ebola response. Messages should be: Be simple, clear and direct; Use fewest words needed to convey information; Communicate one to three points at most; Be free of jargon; Be translated in appropriate languages for communities; and be framed in positive terms. 8. Use a variety of methods to convert and amplify messages 9. Monitor and evaluate the impact of health communications and community mobilization to make improvements 10. Recognise, publicly affirm, and maintain relationships with CFBOs.
Laverack and Manoncourt, 2015	Ebola	Community engagement and social mobilization	General		Anthropological insights take into account local perspectives and help understand complexity of the problem. However, robust anthropological insights take time and maybe best done at start of outbreak, followed by more rapid social science research geared towards implementation recommendations as outbreak continues and evolves. Important to consider practicality of research into practice, and involving programme staff may be key. Interpersonal communication is complex, and following Communication for Development (C4D) approaches may be best. Evidence from Guinea on 'watch committees' did not have as strong of success as C4D using: SBCC approaches via social mobilizers in conjunction with mass media and print materials. Building of 'bottom-up' dialogue, that can bridge communication and promote self-management, including engaging people and addressing deep-seated practices, is required. As/if disease progress adaptations are required and new engagement needed; rapid adjustment was challenging. Community resistance/fear/distrust may be prevalent - need to build and maintain community confidence from start of outbreak through bottom-up approach that is centred on respect for local perspectives. Urban/Rural and cross-border contexts need consideration. CE often designed for rural areas, but approaches may need to be adapted for urban settings. Cross-border contexts need specific consideration, as often borders are porous and communities travel easily. Engaging local leaders to support cross-border control and organize patrols may be important.
International Federation of Red Cross and Red Crescent Societies, 2020	COVID-19	RCCE - Risk communication and community engagement	General		14 key tips for community engagement: 1. Don't tell people what to do - recognise that communities are experts. Engage through two-way communication. 2. Ger peers and leaders to talk - people more likely to respond to information from trusted sources, especially ones with shared social-cultural contexts. 3. Establish participation and feedback approaches - ask people what they know, what they need, and involve them in designing and delivering services and interventions 4. Ask for feedback - this provides an early warning systems that allows issues to be resolved quickly. 5. Disseminate accurate information immediately - this will help mitigate concerns and promote prevention activities, encouraging care-seeking behaviours. Always date stamp your messages 6. Communicate in the language individuals are most comfortable in - it is important to use the language people prefer to speak to ensure they understand are are confident to share 7. Promote awareness and action - action-oriented RCCE typically contains information including: a) an instruction to follow, b) a behaviour to adopt, or c) information you can share with friends and family 8. Test your approach - pilot testing with communities aims to ensure that messages are understandable, acceptable, relevant and persuasive 9. Accountable to those we seek to help - systematic and coordinated approach to communication that includes feedback and action loops 10. Changing behaviour takes time - we need to understand why people do certain things, and specific barriers to safer practice. 11. Be open, honest and timely - communicate clearly and timely what we know and do not know about the disease, focus on actions people can take. This builds trust. 12. Stay informed on latest news and work with others 13. Use new and innovative ways of communicating with people - social media, mobile phones, speak directly.
Oxfam (Niederberger, Gerron and O'Reilly) 2016	WASH (Water, Sanitation and Hygiene) lessons from Ebola	Community Engagement	General		1. Understanding of diversity and varied vulnerabilities within communities is vital. Need to take approaches to understand community perspectives and advocate for community-focused interventions. Researchers (i.e. anthropologists, epidemiologists) may be required. Applied social research in first phases can contribute to understanding of cultural beliefs, roles and acceptance of traditional community leadership structures, and issues of power and culture. 2. One-size-fits-all model does not work for community engagement. Need to understand and recognise potential capabilities of communities in each setting to allow for context-specific support. These should be identified and co-developed with communities, considering key populations (i.e. leaders, women, youth, etc). 3. Advocacy need to promote inclusive and representative ideas, concerns, questions and solutions of communities. Communities need access to infomation that is accurate and appropriate, and supports them to make informed choices. 4. Multi-sectoral action to increase transparency, especially in contexts with lack of trust, should be done. Also requires active coordination and planning with other sectors at local, district and national levels. 5. Using fear to encourage changes in behaviour can be counter productive. 6. Understand networks of past and current relationships within communities. Leverage existing structures (when appropriate) if available
NUIP (Bjørneseth et al.) 2020, Bøås, Erstad,	Covid-19, with lessons from Ebola	Community engagement, crisis communication, countering rumours	General		1.Context sensitivity is key 2. Including communities in the design and management of response 3. Sensitivity to local narratives and knowledge systems 4. Counter myths and rumours - might be especially important in places with high levels of distrust (why understand context sensitivity is important), or when limited knowledge on topic 5. Transparent and legitimate crisis communication required
Toppenberg-Pejcic, D. et al. 2019	Ebola, Zika and Yellow-Fever	Emergency Risk Communication		One-size fits all approach does not work Local communities needs to be involved with and own emergency risk communication processes	1. Build trust and community engagement 2. Begin well - ideally before the beginning of a crisis. 3. Go local - community engagement should play central role in emergency response and risk communication. 4. Involve local leaders 5. Tailor interventions - communities are different, and their approaches need to be contextually specific 6. Continual two-way communication Barriers to community engagement identified were: top-down communication, stereotyping and paternalism which broke down trust, created fear and alienated communities; use of force was counterproductive; failure to distinguish between evidence-based messages from uncertain messages; if messages change over time, reasons should be clear explained; communication needs to be candid, open and honest; effectiveness should be monitored and adapted over-time. Practicalities of implementation (i.e resources) cannot be ignored, and may hinder success of community engagement interventions.
SMAC (Pedi et al.) 2014	Ebola	Community engagement	General	Community-led Ebola Action (CLEA) aims to empower communities to do their own analysis and planning. There are three steps with associated actions: 1 Preparation 1a. Map and select communities, 1b. meet local leaders to gain permission to enter, 1c. Plan triggering schedule, including logistics and timing for each visit. 2) Triggering, 2a. Community mobilisers enter communities and conduct triggering activities, 2b. If ready, community develops an action plan. 3) Follow-up, 3a) communities carry out their action plans, 3b) community mobilisers make weekly calls and regular visits, including Ebola Survivor welcome-homes, 3c) community mobilisers available for support/referral	Key Principles of CLEA (many more examples and specific lessons, recommendations and tools within document): 1. Be based on collective community decision-making and action for all 2. Driven by sense of collective achievement and motivations, not my coercive pressure or external payments 3. Engage diverse community members in time-bound specific activities 4. Lead to emerge Community Champions, and or new commitment of existing leaders 5. Generate diverse local actions and innovations 6. Build on traditional social practices of community cooperation 7. Focus and celebrate community-wide outcomes 8. Gian momentum and scale-up 9. Recognise the rights of communities 10. Rely on clear, accurate, two way information flow that builds trust and positive feedback loops
WHO, 2018a	Ebola	Risk Communication and Community Engagement	General	Several resources and tools included in document to develop and implement RCCE strategies across multiple implementation levels.	1. Establish mechanisms to listen to and address community concerns, rumours and misinformation. Keep the community updated on the response. Involve trusted community influencers as much as possible and disseminate information. 2. Make sure to involve traditional healers, community leaders and influencers in the response as much as possible. 3. Ensure that the changing needs of the community are communicated back to key social mobilization, risk communication and community engagement focal points and are addressed through the overall response. 4. Inform and advise outbreak response pillars about cultural or social specifications to consider for implementing the response. 5. Ensure standardized and coordinated messaging, community engagement and risk communication interventions across response pillars and partner agencies. 6. Continually adapt the risk communication and social mobilization strategy to address community concerns and rumours.
WHO, 2018b	Ebola	Risk Communication and Community Engagement	General	Similar to document above, with some additions. Also highlights same general guidance for CE as above, in addition to the information provided here.	1. Use existing and trusted community engagement networks and interlocutors - brief them, train them, bring them on board and work through them. 2. Have the capacity to work in the local language and dialect of the community. 3. Observe good practice for entry and exit from the community. 4. Ask about and be cognizant of hierarchies and dynamics within the community 5. Know the spectrum of engagement activities. Do not stop at inform. Move towards consult and co-design 6. Provide feedback to the community and be honest about uncertainty. 7. Don't over-reassure or overpromise.
PAHO, 2017	Zika	Risk Communication and Community Engagement	General		1. Rapidly determine the community's attitude towards [vector control] and the behavioural objectives we want to meet 2. Establish lines of action, prepare materials and test them with target audience 3. Reorient activities in line with the research conducted about the community, such as KAP studies, opinion polls etc. 4. Engage the community and its leaders in an ongoing dialogue about their concerns and response activities, and support them to carry out interventions using social mobilisation and engagement. 5. Identify and communicate often with community leaders, at risk populations and other target groups to learn about their information needs and concerns.

Note: Of the 11 guidance documents, the 7 dealt specifically with with Risk communication, and of those 4 detailed "RCCE" .