Exploring the perceptions of communities toward the impact novel Coronavirus-2 (SARS-CoV-2), COVID-19 outbreak and response can have on their lives and security.

What are the perceptions of community groups toward preserving their health and wellbeing during a COVID-19 outbreak?

Assessment Sites: this is a multisite assessment:

Both rural, urban, camp, open and conflict settings will be included. Recognising that different locations may have been exposed to COVID-19 in its early phase, it will continue to explore within each setting throughout the outbreak period. So far, the following sites are to be included:

Nigeria: Anka and Benue IDP camps (Pilot)
Jordan: Syrian refugee Zaatari camp
Iraq: Syrian and Iraqi refugee camp(s)
Sierra Leone: Tonkolili project (Pilot)
Malaysia: Penang Rohingya refugees : Myanmar Pauktaw camp, Rakhine state
Bangladesh:Cox Bazaar camps and Kamrangirchar peri-urban slum
Ethiopia Gambella camp
Democratic Republic of Congo: South Kivu (Fizi and Kimbi-Lulenge health zones)

Further sites may be submitted to ERB during the outbreak.

Proposed start date of data collection for assessment(s): April 2020

A note on all investigators: due to a multisite assessment approach and implications on numbers of investigators and contributors involved we have created a “working group COVID-19 community perspective assessment”, investigators and other contributors will be listed alphabetically in all correspondence.

Assessment coordinator: Beverley Stringer

Beverley Stringer is Social science team lead. She will coordinate the multisite assessment. She has supported training, analysis and write up for both pilot sites, Nigeria and Sierra Leone.

Grazia Caleo is Public Health Specialist advisor. She is focal point to support training, analysis and write up for sites Sierra Leone and Bangladesh.

Alyson Froud is Anthropology advisor. She is focal point to support training, analysis and write up for sites Chad, Belarus, Tajikistan, South Sudan.

Nell Gray is Anthropology advisor. She is focal point to support training, analysis and write up for sites Bangladesh, Malaysia, Myanmar.

Darryl Stellmach is Anthropology advisor. He is focal point to support training, analysis and write up for sites Iraq, Jordan, Syria.

Isidro Carrion-Martin is Epidemiology advisor. He has supported sites Syria and Jordan.

Patrick Keating is Epidemiology advisor. He will support sites South Sudan.

Anna Kuehne is Epidemiology advisor. She will support sites Chad.

Annick Lenglet is Epidemiology advisor. She has supported sites Nigeria, Malaysia, Iraq.

Tilly Alcayna is Epidemiology advisor. She will support Belarus, Tajikistan and Uzbekistan.

Annette de Jong is Health promotion advisor.

Kate White is the Chair of the Medical technical unit for COVID19.

Field assessment investigators: See context specific information.

1. **Background and Rationale of proposed assessment**

The COVID-19 pandemic presents a complex humanitarian crisis for MSF and other actors involved in the response; lessons learned from previous outbreaks emphasises the critical role of a good community-level response (1). Communities can play a major role in outbreak prevention, care-seeking and control (2,3,4). This is especially true in places with fragile and war-torn health systems, where health care personnel are already struggling to meet health needs (5). It will be essential for MSF OCA to intensify community activities to prevent and manage COVID-19 and mitigate the potentially enormous indirect impacts it may have on the populations we work with.
The initial response in many affected countries has been focused on technical, medical interventions with health workers playing a front-line role (6,7). However, clinical care alone has a limited impact on transmission, and health structures are at an increased risk of health care associated infections (8). As most cases occur within the family and community, this is where transmission must be managed. At present, there is a lack of proven therapeutics, vaccines or rapid point of care diagnostic tests for COVID-19. This means that community control measures and their perspectives on care must play a critical role in slowing the spread of transmission and reducing demands on health infrastructure.

Past outbreaks such as Ebola have shown us that indirect health impacts often far outweigh the direct impacts of the outbreak (9, 10). Groups such as children, adolescents, and pregnant women seem to be less vulnerable to severe COVID-19 disease (11, 12, 13), however they may hold a substantial excess mortality due to a pressure on already fragile health systems. Outbreak consequences such as conflict and instability, loss of employment, food insecurity, movement restrictions, and disruption to other social and economic coping mechanisms may also negatively impact wellbeing, for example increased burden of mental health will also challenge compliance with control measures.

Having a cross-section of perspectives from different community members will help MSF to better understand the context and plan health activities with communities that are safe, feasible and acceptable, (14). For this reason, it is proposed for several MSF projects to assess with communities a better understanding of their interaction with the COVID-19 and potential reaction to it, including how this may affect their general health and wellbeing. This will be done in multiple locations to inform both feasible programme plans and implementation with people living in these communities. Through a well thought out community approach which was developed by the social science team leading this assessment, (15) the social value is anticipated to include improvement in health both immediate and future that will be realised through inclusion of social adaptations to public health measures in each context. We also see value in the knowledge that will be produced with the different populations affected by this pandemic through this method, [16]. Overall, working with communities can help us support them to play a principal role in prevention, treatment-seeking, and outbreak control to mitigate mortality and morbidity due to impact of both COVID-19 and non-COVID-19 health issues.

*Description of each setting in terms of background and context will be submitted separately to the ethics review board.*

2. **Objectives of assessment**

This assessment aims to provide a better understanding of community interaction with the COVID-19 response in multiple MSF settings to inform programme strategies:

- Describe community and local-level perspectives and attitudes toward the measures that may be taken to control the COVID-19 outbreak, with consideration of how such measures may have been integrated into personal narratives over time
- Document gaps, barriers and influences that impact control measures and care, including ongoing health access
Consider the subsequent value placed on control measures and care to inform ongoing future outbreak response.

Inclusion criteria
Individuals from the community, (including leaders and community members)
Patients and carers
Health workers (including traditional healers)

Exclusion criteria
Anyone that is under 12 years
Anyone that is too sick to participate
Anyone that refuses to participate

3. Methodology
3.1 Participant selection and sampling

This is a participatory multisite qualitative assessment. The assessment has been designed to be pragmatic, systematic, and adaptable for each context. Initially two key informant groups within the community will be identified for in depth conversations or interviews as best placed to share ideas and suggestions about the topics concerned.

1. Community members such as youths, women, men, pharmacists, farmers
2. Leaders identified per contexts as people with responsibility and influence in the neighbourhood. For example, traditional or customary leaders, male and female leaders, teachers, church/mosque leaders, healers, youth leaders

This assessment is designed as a series of conversations/ interviews with identified participants to ensure an iterative and adaptive process which responds to changing dynamics in the context outbreak and response. The expectation is that this will occur over at least four time points for a period of four months during the emergency. Criteria for assessment closure will be based on an agreement with the project and community groups participating have addressed the initial questions related to how best to support wellbeing and health care during the COVID19 outbreak, and subsequent joint work to address this is agreed.

This assessment will rely on purposive sampling, allowing for selection of key informants who will have a useful perspective on potential control measures and care during this outbreak. Participant selection will be based on the two main groups outlined above and will be recruited through routine programme activities using gate keepers and snowball technique. Whilst the final number of participants will only be known once data saturation occurs, (17) in this instance at least 6 participants will be approached per key informant group, so we estimate the total sample size to be approximately 12 participants. Guest et al validate that saturation occurs for such research design “within the first twelve interviews, although basic elements for meta themes were present as early as six interviews, (18).

To enhance this sampling, a maximum variation sample will be used to ensure the consideration of key demographic variables likely to have an impact on participant’s views, for example gender, age,
ethnicity, and occupation. This aims to ensure that the sample is both diverse and representative of the communities in question, and so maximise a fair share of perspectives and views.

Participation in the assessment will be voluntary and participants will be recruited using local knowledge with support from community representatives and programme staff. Interviews will take place in a private designated space convenient for the participant, acknowledging infection control rules, such as social distancing. As the outbreak unfolds, due to access issues we may continue conversations on a selected topic with the participant groups via telephone with adaptations to maintain a participant centred technique, (19) such as topic led telephone diary accounts, (20) which we will arrange with the participants in a timely manner. Participant interviews by telephone with use of solicited participant diaries will be considered dependent on context as a strategy to replace the in-person interviews. A combination of longer telephone calls using a topic guide to frame the conversation with the option of a more regular telephone interview diary technique (for example every other day for 2 weeks) will be arranged. We will apply note taking or recording of interviews for each approach’s dependent on context. There may be adaptations made to the selection of participants, procedures on how to conduct interview (e.g. physical distance or by phone), depending on the stage of the assessment or phase of the outbreak. Handling of paper such as notebooks, topic guides, will be kept to a minimum and will be touched only by the team assessment members. We will follow WHO guidance on handling of paper which includes washing hands after handling and avoid touching the face.

Recruitment and sampling flow chart

1. Explore leadership and community networks and local knowledge
2. Sampling of leadership and community group networks will be done using gate keepers and snowball technique. This will help identify participants purposively:
3. Provide information sheet to potential participants
4. Arrange appropriate time and space for interviews
5. Consent and conduct participant led conversations
6. Transcribe anonymise and analyse data
7. Work with participants on findings
8. Repeat stage 4-7
9. Store data securely and destroy as per institutional instructions C
Two data tools will be implemented for data collection, a topic guide (with prompts) will be used to conduct the in-depth participant led interviews in person or by telephone. For interviews with leaders, a framework adapted from techniques for concept mapping will be used to guide the interview (21), both transcribed by hand or recorded depending on context. Field notes will be taken throughout the period and preliminary analysis will be carried out throughout the data collection. We will discuss data in collaboration with the participants from whom the data was collected, to co-produce the findings.

3.2 Data analysis:
Data analysis at each site will start the moment data is generated. Interviews in person or by telephone will be carried out by a trained epidemiologist or health promotion activity manager (or equivalent), with translator (as needed) and transcriber familiar with the population and setting, (see training and interview language). Data will be coded from all sources by reading and rereading transcripts. After initial coding we will review rigorously and categorise. Emerging patterns, themes and relationships will be identified and labelled. To enhance reliability a subset of data will later be checked by a second person in the social science team. We will use NVivo ©12 or cut and paste paperwork, to organise and sort the text data. Cases that do not fit with conclusions (cases that deviated) will be reanalysed to test emergent themes. We will draw out certain narratives or cases to ensure the individual ‘stories’ will not be lost and to explore how the themes interrelate for particular cases, (22). Data analysis will be conducted per site, a multi-country analysis is not foreseen as our main aim is to develop an in-depth understanding per context. However, should common outcomes or themes emerge from these assessments that may enhance future outbreak response in other contexts these may be compiled at a later stage after all assessments are complete. Currently four social scientists support specific sites with training, supervision, implementation of data tools, analysis and write up, with the social science team lead acting as study coordinator overseeing quality control of all processes, using the critical appraisals skills programme checklist for qualitative methods, (23).

3.3 Data Validation:
As mentioned in the methodology, data is being collected using at least two tools from two different participant groups to compare and strengthen related conclusions. Validation will be established by including deviating cases and testing emerging theories, instead of only selecting examples which reiterate desirable points, (24). Reflection of the role of the assessment team as a confounding factor will be considered throughout the analysis, acknowledging the potential for bias. Documentation of research process¹ will include a clear account of procedures used as an audit trail that can be easily followed. Triangulation will take place by searching for convergence among the different sources of information gathered to form themes or categories within the analysis which will add to the validation.

3.4 Data storage and protection
Data collected (paper notes, transcriptions) will be handled respectfully and confidentially, and used exclusively for the purpose of this assessment. For source paper current studies suggest virus would not survive beyond 5 days on paper (25, 26). All source paper used in transmission sites will be stored

¹ Micro planner tool
in a box with 'do not use/ quarantine' label for at least 5 days before using them for data entry. Paper transcripts will be transferred to a digital format and stored securely in a password protected file shared between co investigators for analysis. Verbal Informed consent records should be stored in good storage conditions until they are authorised for destruction for at least 5 years after assessment end depending on local regulations. All databases will be secured with password-protected access systems. Data collected will not be shared with others, presented, or published without consent of the Medical Director of MSF Operational Centre Amsterdam.

3.5 Training and Interview Language(s):
Due to emergency conditions for this assessment and remote support requirements, a voice recording on different modules for implementing qualitative methods will be developed and shared alongside live training sessions, (1) individual interviews, and (2) training on how to carry out coding analysis. This will be shared with the team with accompanying explanatory slides. Time will be arranged for discussion, questions arising and for practical exercises, (e.g. roleplay of interview). Tools (topic guide and leader concept map interviews will be tested and adapted). Supervision will be continuous throughout the assessment via telephone, this will focus on feedback supervision sessions during testing of data tools, and after each interview with community members. For analysis stage we will compare coding, and the social science focal point will establish theorising on themes arising, including relevant supplementary literature reviews to support findings.

Whilst this will vary per location, in most instances' teams will be trained to carry out the assessment in the local language, using visuals for topic guides where indicated.
For documentation including informed consent/ assent records:
Step 1: Two translators who are native speakers of the target language and are experienced in translating vocabulary that may relate to public health measures, (specific for Leader tool) will independently translate the documents.
Step 2: Both translations will be compared by the same translators to check mistakes and agree on corrections and provide justification within the assessment team. Note takers or transcribers will be used to transcribe the participant led conversations. A confidentially agreement will be signed by translators and note takers or transcribers.

4. Limitations:
The findings of this assessment will be descriptive, but as with a qualitative assessment, the data cannot be generalised to the population, but insights that are useful for teams in similar locations can apply.

5. Ethical Considerations

5.1 Social Value:
Findings will be used to enhance MSF’s support of the community in protecting against and responding to COVID-19. By enhancing the community leadership in decision-making, MSF can better target resources toward prevention and control activities that are known to be better accepted by the community and thus expected to be more effective. Findings will be discussed with teams in the different settings and included in the implementation strategy and project plans. MSF may share externally if of value for other MSF programmes or audiences.
5.2 Benefits:
One perceived benefit is the involvement of the community to drive and lead on influencing decision making about how best they and health providers can continue to support and care for patients, individuals and their families at risk from, COVID-19. The assessment will be carried out across several MSF sites offering a unique opportunity to capture community experience in different context and phases of the outbreak, thus offering a large overview that could inform MSF and other organizations. Whilst we will indicate per context, currently in most of the selected locations there is no other assessment project investigating the experiences of COVID-19 outbreak for these populations, therefore the risk of being over-selected is minimal.

5.3 Potential Risks:
To main burden for participants will be time taken for the individual interviews. If anxiety about the outbreak or other concerns is noted through the interview process, links with existing support teams will be made as needed and attention to expectations raised about other health issues will be dealt with through strong linkage to existing services.

The potential for disclosure will be discussed with participants during the consent procedure. It will be necessary to discuss with the participant beforehand that there may be a potential need for disclosure should any information be revealed during the course of the interview such as is the nature of qualitative methods used. For each context we will document local domestic and international laws related to abuse and neglect, including limitations, in order that we can ensure procedures are in place to report such matters. The wellbeing of the survivor will be prioritised ensuring referral to relevant support services. In all cases the process will be aligned with mission protocols fixed in routine programming. Where needed advice from humanitarian affairs and sexual gender-based violence advisors will be sought. Please see context specific information per assessment site for specific information.

The moral responsibility of inviting people for interviews has been considered, and whilst no remunerations for participation is foreseen, we may consider offering a token of appreciation for support in line with MSF project norms. We do not anticipate people needing to travel for these meetings. Informed verbal consent will be obtained, and patient privacy and confidentiality respected,(see 5.4). MSF health role is well established to participate in outbreaks, so will have communicated with relevant authorities from the outset to ensure correct permission, courtesy, and access to the population.

5.4 Informed Consent and confidentiality:
Consent: Prior to their involvement, all participants will be given detailed information about the objectives and methods of the assessment (that there is no right or wrong answer; we would like to learn about how it may be possible to strengthen and improve our support and care during the COVID-19 response).

The consent/assent (for participants aged 12-17y) will ensure that participants are aware that participation is voluntary, and they can change their mind about participating and/or terminate the interview at any point. It will also explicitly clarify that participation is in no way linked to receiving (or not receiving) services or other benefits. Consent will be briefly outlined verbally to ensure respondent comprehension, with voluntary verbal consent/assent being obtained, with a record of
Should the caretaker/parent/guardian refuse verbal consent or the potential participant refuse assent the interview will not take place.

**Confidentiality:** To ensure confidentiality, all data will be kept private and confidential including all audio files, interview transcripts and field notes, data collection tools, and administrative forms. Whilst personal identifiers, (including contact telephone numbers) will be initially collected to facilitate ongoing conversations, these will be separated, organised and stored securely, shared and deleted by assessment team members on completion of assessment process. Data collected will be identified by using a unique code number. We will remove immediately all data from devices such as voice recorders if used, and store securely. For example, at the end of a set of interview sessions we will transfer the sound files from a voice recorder to our secure storage platform. Names will not be used on any of these documents. Similarly, information including all quotations in subsequent publications and reports we will remove all identifiable detail, and pseudonyms will be used to ensure there is no link to those participating in the study. Audio recordings will be destroyed once translated, transcribed, and checked. All anonymised data will be stored, and password protected on our secure Microsoft SharePoint platform per site using devices that our organisation has approved for storing and processing personal data. Thus, allowing immediate access between assessment teams and the headquarter social science team focal point. We will restrict access to those that need to use the data. We have set up the consent and agreements with the participant acknowledging that they have the right to ask us to access, withdraw or to delete their data at any time.

**5.5 Independent Review:**

This protocol will be submitted to the MSF ERB. Permission and applicable ethical review will be sought at each location in line with outbreak emergency international guidance and conditions.

**6. Assessment Implementation**

**6.1 Pilot assessment sites:**

Two sites have piloted the assessment, Nigeria and Sierra Leone. This has facilitated how best to manage the assessment under emergency conditions given the variation of MSF community team set ups and has facilitated development of assessment and training tools.

From this process, we have established an advisory board which is made up presently by members of the MSF assessment team in each location. The assessment methodology and results has been presented using platforms such as webinar, where pilot sites have shared and therefore supported other team networks starting the assessment at different sites. So far this has included the operational centre, Amsterdam, and the broader MSF movement. We will develop community of practice platforms to share experiences between all involved in the work.

The team have also contributed to an animation film that is being made to highlight the community guidance document, which includes reference to the assessment. We will use this experience to encourage the possibility for community members of both sites to share their experiences with other communities.

**6.2 Collaborative partnership:** At each site where we work with ministries of health and have a Memorandum of understanding for out routine programming, we will seek permission to carry out
the assessment with the relevant authorities. Whilst the assessment is specific to COVID-19; it will be done in the scope of our existing programmes and health activities and in all cases we will discuss this with our existing partners. We will include partners in concurrent planning and include their ideas and support. Due to involved nature of the work with the population groups, findings will be built on through iteration with participants to produce knowledge and understanding linked to prevention and health care activities for MSF projects. This in turn may involve other groups or committees to form platforms that will support activities and plans emerging as a result of the assessment. All context specific information will include all the people and parties involved in the assessment.

6.3 Timeline: from April – September 2020 (including pilot)
For each initial assessment per site we will plan, implement, analyse and integrate the findings over 1 – 4-week period per site.

Subsequent interviews with the community will occur a maximum of four times over approximately four months. Integration of findings to inform activities we will work on together with the community, and will occur over the same period, (4 months). This will happen alongside the project control cycle. We will include participatory qualitative indicators to track the implementation and social value of this assessment.

6.4 Dissemination plan:
Initial findings are shared within the MSF project team so that next steps will be brainstormed as a group. Printed and electronic versions of the findings will be shared with partners in each setting to help promote a comprehensive support to the community approach and work.
An agreement for a publication plan among the working group which includes all people involved in the assessment per site will be made. This will produce study manuscript(s) submitted for publication in a peer reviewed scientific journal. Authorship of any publication will be alphabetical to include all people and parties involved and based on the Uniform Requirements for Manuscripts Submitted to Biomedical Journals as defined by the International Committee of Medical Journal Editors (ICMJE). We will include scientific conferences both national and international relevant to the content of the work and its outreach potential.

Implementation of findings:

For pilot sites in Nigeria and Sierra Leone the implementation process took place over a period of 3 weeks includes turning findings into real time implementation of activities.

6.4 Resources:
No additional resources are envisaged for the assessment, it will be carried out as part of routine project activities and benefit from COVID-19 specific operational funds as part of budget allocation
and management of emergencies. **Explanation of each setting in terms of resources will be submitted separately to the ethics review board.**

**References:**


