



Retrospective mortality and baseline health survey in Kutupalong and Balukhali settlement camps, Bangladesh

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Retrospective mortality and baseline health survey in Kutupalong and Balukhali settlement camps, Bangladesh

Study protocol

10 October 2017

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| <i>Second version</i> | |
| <i>Study design</i> | Retrospective mortality and baseline health survey |
| <i>Study period</i> | October 2017 |
| <i>Study site</i> | Randomly selected households within zones Kutupalong and Balukhali settlements, Bangladesh |
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| <i>Data collection and analysis by</i> | MSF-OCA |
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| <i>Collaborating institutions</i> | Ministry of Health (MoH), Bangladesh |

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LIST OF ABBREVIATIONS

| | |
|---------|--|
| ACF | Action Contre Faim (Action Against Hunger) |
| BMS | Balukhali Makeshift Settlement |
| CMR | Crude Mortality Rate |
| 95% CI | 95% confidence interval |
| ERB | Ethical Review Board |
| GAM | Global acute malnutrition |
| GIS | Geographic Information Systems |
| GPS | Global Positioning System |
| IOM | International Organisation for Migration |
| KMS | Kutupalong Makeshift Settlement |
| MenACWY | Meningococcal meningitis group ACWY vaccine |
| MoH | Ministry of Health |
| MSF | Médecins sans Frontières |
| MSF-OCA | Médecins sans Frontières – Operational Centre Amsterdam |
| MUAC | Mid Upper Arm Circumference |
| OCV | Oral cholera vaccine |
| PCV | Pneumococcal virus |
| SAM | Severe acute malnutrition |
| SGBV | Sexual and gender-based violence |
| U5MR | Under 5 mortality rate (mortality rate in children under 5 years of age) |
| UMN | Undocumented Myanmar Nationals |
| UNHCR | United Nations High Commission for Refugees |
| WHO | World Health Organisation |

1. INTRODUCTION

1.1. CONTEXT

In the early hours of 25th August 2017, violence broke out in Rakhine State, Myanmar, when the Myanmar military commenced counter military operations following attacks by Rohingya militants on border guard police. This resulted in the displacement of an estimate of 515,000 people from Rakhine, who crossed the border into Bangladesh.¹ Together with previously displaced people this took the total number of Undocumented Myanmar Nationals (UMN), or Rohingya, in Bangladesh to at least 800,000. The majority of these people are now resident in Cox's Bazar district, in several settlement expansions (additions to pre-existing settlements), spontaneous settlements (newly-formed settlements with little support) and amongst the host community.

The Bangladesh government has focused on pushing for a resolution to the situation in Myanmar, but so far has not significantly tried to stop the flow into Bangladesh and in the first 6-8 weeks of this emergency, the borders have been more open than in previous years.

The Kutupalong refugee camp has a population of approximately 30,000 and is the only camp containing registered refugees. The camp, closed registration in 1992. However UMN continued to arrive, populating areas around the official camp, forming the Kutupalong Makeshift Settlement (KMS). A previous influx of UMNs in October 2016 entered KMS or formed the new Balukhali makeshift settlement (BMS), further south. An estimated 200,000 UMNs have reportedly arrived in the Kutupalong and Balukhali expansions, since mid August 2017 (the remainder have entered new makeshift settlements further south around Mainnerghona and Teknaf, or formed spontaneous settlements or have entered the host community). This figure however is hard to verify due to a lack of registration data, and is expected to grow as government forces continue to move UMNs from spontaneous settlements and the host community to the Kutupalong and Balukhali expansion sites. UMNs continue to arrive.

The government, and humanitarian sector's, ability to respond in Bangladesh has been hampered by the ongoing flood response in the north of the country, which since June has hit 32 districts, affecting nearly 8 million Bangladeshis, and leaving around 300,000 in emergency shelter.²

In the initial weeks many new arrivals presented with trauma-related events such as gunshot wounds, burns and shrapnel injuries, including injuries from mine blasts.

Action Against Hunger (ACF) together with the International Organisation for Migration (IOM) is responsible for water, sanitation and hygiene (WASH) and nutrition in the KMS, and run an ambulatory therapeutic feeding centre (ATFC). Severe acute malnutrition (SAM) cases with complications are treated at an MSF facility. IOM is managing the official expansion beside the KMS; including some outreach activities and WASH in parallel with ACF. Handicap International is also present in the camp with a plan to work alongside MSF inside the MSF clinic.

¹ International Organization on Migration. Bangladesh Rohingya Crisis Response. Situation Report. October 5, 2017.

² ReliefWeb. Bangladesh: Floods and Landslides - Jun 2017

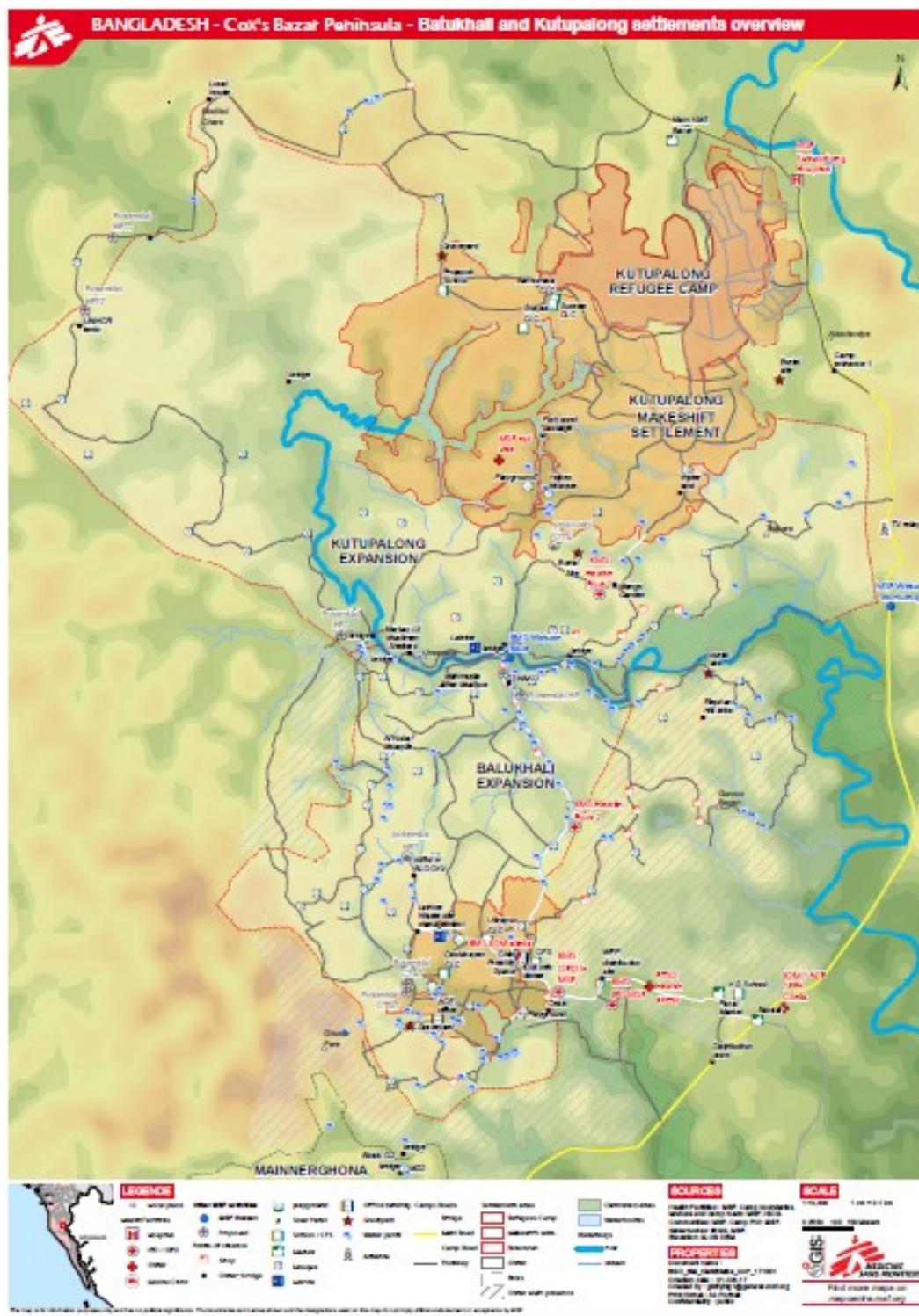


Figure 1 : Map of Kutupalong and Balukhali makeshift settlements and expansions, Bangladesh

1.2. MSF PRESENCE IN THE COUNTRY

MSF-OCA has had a presence in Bangladesh since 1982. Currently three projects are operational – Kamrangirchar project, based in Dhaka, which focuses on adolescent sexual and reproductive health, sexual and intimate partner violence and occupational and environmental health, and the Kutupalong and Balukhali Emergency Health Intervention Projects in Cox’s Bazar.

In Cox's Bazar the MSF-OCA response to the current emergency is currently focusing on increasing existing medical services. These include an inpatient facility in Kutupalong and an outpatient facility in Balukhali. In response to the current influx MSF-OCA so far has established an additional IPD capacity for trauma cases at the pre-existing Kutupalong facility, bringing the inpatient capacity to 70 with three MSF ambulances working constantly to transport patients from the border to the clinic. MSF also operates an OPD in Balukhali Makeshift Camp and currently has two health posts in the expansion area with plans to open further health posts in both Kutupalong and Balukhali expansion areas. Recruitment of additional medical and non-medical staff is ongoing.

MSF-OCP and MSF-OCBA are also responding to the emergency in neighbouring Mainnerghona and Teknaf areas respectively.

1.3. BACKGROUND - JUSTIFICATION FOR THE STUDY

Due to the large-scale, challenging hilly terrain and dynamic nature of the emergency, the scale and severity of the current crisis is not clear.

There is little real-time knowledge and understanding of the health status of the UMN. There is only clinic-based surveillance, and it is suspected that many patients arrive late or do not access health care at all due to the long distances. There is no active case finding and cases of epidemic-prone diseases and malnutrition may only be noted once they arrive in the health facility in high numbers. Community deaths may not be notified as the health facilities are only reporting hospital deaths and community health workers are not yet active in all areas of the camps. The nutritional status of the population is unclear, though health centres are reporting concerning SAM and GAM rates.

Health risks include:

- Meningitis: during the dry winter months of December to February before the first rain showers begin in the region.³ MenACWY vaccination rates among the UMN are unknown, and likely low;
- Pneumonia: the leading infectious cause of morbidity and mortality in young children in Bangladesh. Pentavalent and pneumococcal vaccine (PCV) vaccination rates amongst the UMN are unknown;
- Cholera: endemic in Bangladesh and possibly imported by the UMN. The entire population of Bangladesh is considered at risk by the WHO due to frequent and widespread flooding.⁴ The Government of Bangladesh was planning a large-scale oral cholera vaccine (OCV) vaccination campaign in early October 2017 across the Kutupalong and Balukhali settlements, including pre-existing settlements and host communities. Current vaccination coverage is likely low or non-existent;
- Measles: fifth leading cause of death among children under five years of age in Bangladesh.⁵ The Government of Bangladesh implemented a country-wide measles and rubella vaccination campaign in 2014 and MSF-OCA staged a catch-up campaign in Northern Rakhine in 2015. The Government of Bangladesh also implemented a camp-wide vaccination campaign of children aged 6m-14 years in September 2017; given the large number of new arrivals to the settlements current coverage is unknown; some suspected cases have been identified in the UMN population;

³ Surveillance for pneumococcal disease, Bangladesh — Implications for prevention. Health and Science Bulletin Vol. 4 No. 2, June 2006

⁴ Mohammad Ali, Anna Lena Lopez, Young Ae You et al. The Global Burden of Cholera. Bulletin of the World Health Organization 2012;90:209-218A. doi: 10.2471/BLT.11.093427

⁵ World Health Organisation. Bangladesh carries out mass measles campaign, the largest in history. http://www.who.int/immunization/newsroom/photos_measles_bangladesh/en/index1.html

- Hepatitis E: Due to poor water and sanitation conditions and large numbers of displaced populations in poor health living in close proximity in an endemic country, the potential for a hepatitis E outbreak is high.

There is an urgent need to understand the scale of the current emergency (**mortality**) and the health status of the population (**morbidities, nutrition**). In addition, the risk of epidemic-prone diseases is high so estimation of **vaccination coverage** rates for historic and recent (measles, cholera) vaccination campaigns will help guide future vaccination strategies. The number and capacity of health centres are limited in this setting so it's important to understand the impact on **health-seeking behaviour** (delayed clinic visits, alternative healthcare etc).

Finally, these migrants are known to have fled a conflict in Rakhine State, Myanmar and are likely to have experienced or have family members that experienced **violence or mortality during this period**. Similarly, violence, including sexual and gender-based violence (SGBV), may be a major issue in current camp life. An understanding of the former will support any evidence-based advocacy about the situation in Rakhine and the latter will guide our provision of SGBV and/or trauma services in MSF clinics.

The planned surveys will help MSF-OCA to better target its medical programmes to address the major causes of morbidity and mortality in this catchment area. In addition, this survey will serve as a baseline for future surveys, which will allow us to monitor changes in the population over time, as well as to measure the impact of our interventions and to address key health issues.

2. OBJECTIVES

2.1. PRIMARY OBJECTIVES

To estimate the scale of the emergency through measurement of crude mortality rate for the total population and for children under five years of age

2.2. SECONDARY OBJECTIVES

- To describe the population in terms of age, sex and household composition;
- To determine the coverage of measles, polio, MenACWY, DPT-Hib-HepB (Pentavalent), cholera (OCV) and pneumococcal virus (PCV) vaccination in 6-59 month olds;
- To determine the rate of severe and global acute malnutrition in 6-59 month olds;
- To identify the most prevalent morbidities in the population in the two weeks preceding the survey;
- To describe the health seeking behaviour in terms of access to primary and secondary care;
- To estimate crude mortality rate for the total population and for children under five years of age before and after the SPLA advance into Equatoria, South Sudan;
- To identify major causes of death, by age group and sex;
- To gain knowledge of violence-related events

3. STUDY DESIGN

Retrospective mortality and baseline health survey using simple random sampling, a method by which households are selected by chance (random GPS coordinates within the area of interest)

4. STUDY AREA AND PERIOD

The study area will be the entire catchment area of the MSF-OCA project in Kutupalong and Balukhali settlement camps and expansion areas. Four surveys are planned in total: the Kutupalong Makeshift Settlement (KMS), the Kutupalong expansion area, the Balukhali Makeshift Settlement (BMS) and the Balukhali expansion area (the original Kutupalong refugee camp is well supported and unlikely to require MSF intervention), to allow for comparison of the health status of residents who have arrived in different historical periods and reside in areas that may differ in terms of medical programming.

In order to assess whether there has been any change in the health status of the population, the recall period will cover six months prior to the commencement of the recent displacement that started on August 25th 2017 until the commencement of the survey (October 2017), approximately 233 days (see section 6.2).

These surveys will be repeated at 3-monthly intervals over the next 12 months

5. STUDY POPULATION

The study population will consist of all people living in the zones which are situated in the study area.

Information on current population is based on estimates from IOM. The total population is currently estimated to be at least 450,000.⁶

5.1. INCLUSION AND EXCLUSION CRITERIA

A person will be included in the study if s/he satisfies all the following criteria:

- Living in the randomly selected household (see section 6.1. for the definition of a household)

and

- Informed consent has been given by the head of the household (see section 6.1. for the definition of the head of household and section 10.1. for details on the informed consent form)

A person will be excluded from the study if s/he satisfies one of the following criteria:

- Refusal to participate in the study

or

- Inability to locate the potential participant after two attempts to trace him/her

⁶ International Organization on Migration. Bangladesh Rohingya Crisis Response. Situation Report. October 5, 2017.

6. DEFINITIONS

6.1. HOUSEHOLD DEFINITIONS

Definition of household

A household will be defined as a group of people who slept under the same roof the previous night. Information on the whole household will be included, no matter the age of the household member or the relation with the other members.

Definition of head of household

The head of household is defined as follows:

- Adult household member aged ≥ 18 years, *and*
- Can give accurate information on all demographic and mortality issues in his/her household (can describe with reasonable accuracy the events that occurred during the recall period), *and*
- Is present at the time of the survey

A household will be excluded from the study if none of the household members fulfil all these criteria.

6.2. RECALL PERIOD FOR REPORTED DEATHS

We will use a recall period of approximately 233 days; from February 2017, prior to the commencement of the recent displacement that started on 25th August 2017, until the start of the survey (October 2017). The precise beginning of the recall period will be discussed with the data collectors, considering the experience of the national staff. The end of the recall period will be the day prior to the start of the interviews in the field. Together with the field team, an events calendar will be generated for the chosen recall period to determine more accurately the dates the deaths occurred.

We want to include both the period before displacement and the period after, to understand the experience of the population and its impact on health. This gives us approximately 183 days (pre-displacement) and 50 days within the camp for earlier arrivals, up to 233 days (pre-displacement) for the most recent arrivals.

7. SAMPLE SIZE AND SAMPLING

7.1. SAMPLE SIZE

Sample size was calculated with the help of "ENA for SMART 2011" software⁷. Although surveys are usually powered on the primary objective, in this case, in order to be able to achieve the secondary objective of detecting significant malnutrition, the sample size was powered on detecting a global acute malnutrition (GAM) rate above the emergency threshold of 15% (i.e. with the lower 95% CI above 15%), using a precision of 5% and a design effect of 1 (simple random sampling). This gave a sample size of 207 children aged <5 years.

⁷ <http://www.nutrisurvey.de/ena2011/main.htm>

Assuming <5 year olds represent 20% of the population and the average household size was 6 persons and 10% non response rate, an estimated number of 212 households will therefore be included per survey.⁸

| Criteria | CMR | GAM |
|---|---------|---------|
| Population | 450,000 | 450,000 |
| Expected crude mortality rate (CMR, per 10 000/day) | 0.5 | |
| Global acute malnutrition rate (GAM, %) | | 16 |
| Precision (per 10 000/day) | 0.3 | |
| Precision (%) | | 5 |
| Design effect | 1 | 1 |
| Recall period (days) | 233 | |
| No. population to be sampled | 997 | |
| No. Children aged <5 years to be sampled | | 207 |
| Proportion of the population aged <5 years (%) | | 20 |
| Average household size Error: Reference source not found | 6 | 6 |
| Proportion non-response households (%) | 10 | 10 |
| Number of households to be surveyed (assuming average household size of five persons) | 185 | 212 |

Table 1 : Criteria for sample size calculation

7.2. SAMPLING

Simple random sampling of households will be carried out using randomly-generated GPS coordinates. Using GIS or conducting a perimeter walk around the study area, an electronic outline of a village can be replicated in software such as Google earth or Epop⁹. Using this outline, the software can create random points within this perimeter corresponding to the number of households that need to be visited inside that area. Teams using either GPS receivers or android phones with GPS localisation functionality, will visit the households that are identified to be physically closest to randomly generated GPS points and interview these households. This does create a bias as households in rural areas, with large distances between households, are more likely to be selected than households in densely packed urban areas. However in this setting where the distances are fairly similar, the bias becomes negligible.

If for unforeseen reasons a selected household cannot be visited, it will be replaced by the household at another randomly-generated GPS coordinate. This will be reported as a limitation of the survey.

⁸ IRC, Relief International. October 2017 Assessment Report: Undocumented Myanmar Nationals Influx to Cox's Bazar, Bangladesh

⁹Epop population estimation software, Epicentre (v0.1.0.343 viewed 7th March 2017)

8. DATA COLLECTION

Community leaders will be contacted and consulted in the days prior to the start of data collection, with permission sought to conduct the survey in that location. If there are instances where the community has very recently arrived and no community leader is yet in place, this step will be omitted. It will be clearly explained to the heads of households during the consent process, that they are freely allowed to decline participation without any consequences or penalty. If the head of household agrees, oral consent will be obtained to conduct the interviews (see section 10.1. for details on the informed consent procedure). If s/he declines to participate this will be accepted, the reason will be written down and the next household approached; the number of household refusals should be noted and a household participation ratio included in the study report.

The household interviews will be based on a questionnaire that consists of (for example):

- Age and sex of all household members
- MUAC and Oedema assessment of those between the ages of 6m-59m.
- Vaccination enquiry and viewing of vaccination cards of household members
- Movements of household members (i.e. who arrived, who left, who was born or who had died in the household during the recall period of the survey).
- Recent morbidity and health seeking behaviour among people in the household.
- Information on episode(s) of violence experienced.
- Cause and date of deaths for all deceased persons in the household.

Due to the sensitive nature of the questions concerning violence, these will be directed at the head of the household who it is assumed will have knowledge of all violent events that have been experienced by members of the household during the recall period. The aim is to interview him/her alone at that stage of the questionnaire (if the head of the household is unsure of the details, we will ask for the oral consent of the survivor to be interviewed alone if that person is aged ≥ 18 years. Anyone aged < 18 years, will not be asked to provide oral consent, so it is assumed their information will not be gathered if not provided by the head of the household).

9. DATA ENTRY AND ANALYSIS

Data will be entered into EpiData by the study investigators if collected on paper forms. If collected electronically, databases will be automatically generated so EpiData will not be needed. All data will be anonymised (names are not being collected) and electronic files stored password-protected by MSF. Only study investigators will have access to these data files. Data cleaning will be done to check for inconsistencies in data entry and responses. Data analysis will be conducted using STATA 13 (StataCorp, College Station, TX, USA).

No identifiable (name-related) data will be collected during the survey and all GPS coordinates will be destroyed; reducing the risk that participants will be identifiable after the survey has been completed. The electronic database will be password protected. The paper versions of the questionnaires (if used), and the electronic database will be stored at the MSF-OCA headquarters or country management level for 5 years after the survey. Access to the electronic and paper version of the survey will be restricted to the co-investigators of the study and the Medical Coordinator. After 5 years, the paper copies of all the questionnaires will be destroyed.

All indicators (i.e. sex and age of the survey population) will be calculated as proportions with 95% confidence intervals (95%CI). Estimates of actual design (cluster) effect will also be calculated for each variable and those with effects greater than 1 will be reported. Where appropriate, differences in proportions will be measured using Pearson χ^2 test and p-value (p) will be presented.

The end of the recall period will be calculated individually for each member of the household present at the start of the recall period or born within the recall period. The recall period will end either with the day of the study or the day of death of the household member. An average of all recall days will be taken.

Denominators for mortality rates will correspond to the mid-period population sizes, assumed to be the total population at the end of the period minus half of persons joining the sample during the recall period (new-borns and new household members) plus half of persons leaving the sample during the recall period (deaths or departure). 95% CIs will be calculated and adjusted for the design effect.

10. ETHICAL ISSUES

The study will be conducted in accordance with the Council for International Organisations of Medical Sciences (CIOMS) International Ethical Guidelines, 2016¹⁰ and the World Medical Assembly (WMA) Declaration of Helsinki - Ethical Principles for Medical Research Involving Human Subjects, 2013¹¹.

This protocol will be submitted to MSF-ERB for expedited review as it complies with the standard mortality survey template that has been re-submitted to the MSF-ERB (after responding to MSF-ERB comments). It will also be presented locally to the concerned ethics committee (for example the Ethics Committee of the MoH) for approval.

MSF-OCA commits to sharing study results with everybody who has participated in the study. The refugee community will be involved and informed through posters at the MSF clinics. The MSF medical team will decide about the best venues to display the results.

The MSF medical responsible in the field will advise the study team on the referral practices when finding sick people (for life threatening cases and information for non-emergency cases) in the study sites as well as procedure regarding psychosocial issues or victims of violence.

The Principal Investigator is overall responsible for ethical compliance of the study.

Participant privacy will be respected during the interviewing process. Staff will be trained in how to assess for appropriate conditions to help maintain confidentiality during the interview process, including choosing the optimal location when a setting makes privacy difficult (e.g. single room dwelling).

10.1. ORAL CONSENT PROCEDURE

Oral consent will be sought from all heads of households participating in the study.

All household members present will have the study explained to them in a language in which they are familiar and be offered an information sheet to keep which will be translated into Burmese (see Appendices). Every household member will be offered the opportunity to refuse participation in the study at any time during the interview without penalty, and no

¹⁰ <http://cioms.ch/ethical-guidelines-2016/WEB-CIOMS-EthicalGuidelines.pdf>

¹¹ <http://www.wma.net/en/30publications/10policies/b3/>

incentives or inducements will be provided to respondents. Everyone is completely free to participate or not.

All data will remain anonymous throughout the data entry and analysis process. Identifiable data will not be distributed outside the study location, or appear in any report or publication.

10.2. RISKS AND BENEFITS OF THE STUDY AND CONTINGENCY PLANS

The survey does not cause any physical harm to participants. Nevertheless, asking the heads of households for details of recent deaths of household members may be upsetting, relatively intrusive, and even re-traumatising. Additionally, in village contexts there may be limited privacy. Using local staff and careful training on interview-techniques can mitigate this. In addition, psychological first aid will be added to the interviewer training as well as referral procedures for cases of re-traumatisation.

There is also the risk to communities of breach of confidentiality and/or stigmatisation at community level. This risk will be explained to participants.

However, benefits can be seen both at the study participant level and at the community level. A better understanding of the rates and causes of mortality in the area will allow better tailored programming and more efficient use of resources. Accurate data on mortality and estimates regarding causes of mortality are of tremendous importance for advocacy on national and international level. Benefits at the individual level include referral for medical treatment for current morbidities.

An external threat could be security issues due to an unstable context, which might result in the exclusion of some parts of the study area. This is impossible to foresee.

11. COLLABORATION

This study will be carried out in collaboration with the MoH of Bangladesh, who will be a co-investigator. MSF-OCA is the study sponsor and is responsible for the funding. It oversees the field component of the study, the analysis and report writing.

Study results will belong to MSF-OCA and the MoH of Bangladesh.

12. IMPLEMENTATION OF THE STUDY IN THE FIELD

12.1. SELECTION AND TASKS OF THE STUDY TEAMS

The task of the interviewers will be to carry out informed consent, ensure privacy and confidentiality during the interview, decide on referral for medical or psychological reasons if needed, perform psychological first aid for cases of re-traumatisation and collect the necessary data for the study.

Each study team is composed of two interviewers. To finalise the field part in a reasonable time in this challenging terrain, we need 15 study teams of two people each (see also section 12.5). All teams will work in pairs to support each other through the interview process and to ensure an efficient procedure by helping to answer questions from the household and local population, performing MUACs and verifying vaccination cards (whilst the other interviewer records the information), and by providing 'crowd management', particularly when the violence section is reached and the other interviewer requires privacy with the head of household.

General selection criteria for all interviewers:

- Able to read and write in English, *and*
- Fluent in one of the local languages (Bangla, Burmese), *and*
- Available for the entire time of the study (training and interview days), *and*
- Willing and able to work on weekends and holidays during the survey time (see section 12.5. for a possible timeframe in the field), *and*
- Motivated to participate in the study

12.2. SUPERVISION

The principal investigator is the overall responsible for the final version of the protocol, overall quality of the survey and data analysis, and the final report

The principal investigator will ensure that the following tasks are performed through delegation to the field epidemiologists (study coordinators) and emergence medical coordinator:

- Preparation of all necessary documents (protocol, questionnaires, informed consent forms) for the study;
- Secure the necessary local approvals;
- Preparation of the field component of the study (training of the study teams, logistics, materials) together with the MSF team in the field;
- Follow-up of the field component of the study;
- Data entry (if needed);
- Data analysis;
- Report writing;
- Ensuring ethical compliance during implementation of the study through supervision and training

12.3. SUGGESTED MSF SUPPORT IN THE FIELD

- Administrative support for study preparation at the field level and during field work, such as presentation of the survey protocol to the ethics committee of the MoH, payment of study teams, etc.
- Human resources support, such as hiring study team/interviewers.
- Logistics support for study preparation at the field level and during field work, such as organizing sufficient cars including drivers for the field part of the study, providing communication tools and MSF ID (e. g. aprons, vests or arm bands) to the study teams, stationary, printing the questionnaires and consent forms.

12.4. TRAINING OF THE STUDY TEAM AND PRE-TESTING OF THE QUESTIONNAIRES

Two days training will be given to all interviewers to familiarise them with the background of the study, the questionnaires, the information sheet and the informed consent process. The training will be given by the study coordinator. It consists of an intensive review of the questionnaires and the information sheet including role-plays. As the interviews will be held in English, the study coordinator should ensure that all interviewers are using the same and correct wording for providing information to the households and for the interviews.

The 2-days training will end with a pilot study in households that have not been selected for the survey. The pilot study allows for the testing and possible final adaptation of the

questionnaires and informed consent to field conditions. The households will be informed that their interview will be used for training purposes only and that their information will not be kept. However, they will still receive protection of privacy and confidentiality, as well as referral for medical or psychological care when needed (see section 10.2).

A 'training' meeting will be held with associated staff such as logisticians, community liaisons, drivers and data clerks to explain the overall study and their roles and expectations

12.5. TIMEFRAME IN THE FIELD

A preliminary plan of the field part of the study is indicated in Error: Reference source not found (note the working week is Sunday to Saturday).

| Date [2017] | Day | Days | To do |
|----------------|-----------|-----------------------|--|
| 15-19 October | Sun-Thurs | 5 | Final preparation of the study |
| 21-22 October | Sat-Sun | 2 | Field work, including training and pilot testing |
| 23-26 October | Mon-Thurs | 4 | 2 surveys in parallel |
| 28- 31 October | Sat-Tues | 4 | 2 surveys in parallel |
| 1-6 November | Wed-Mon | 6 | Data analysis/initial report |
| | | Total: 21 days | |

Table 2 : Preliminary plan for the field component of the survey

13. LOGISTIC

13.1. SUPPLIES NEEDED

Supplies for the conduct of the study will be purchased via the Bangladesh mission (Table 3).

A computer record entry form will be prepared by the principal investigator.

| Item | No. needed per team |
|---|---------------------|
| Clipboard | 2 |
| Pencil | 3 |
| Rubber | 2 |
| Sharpener | 2 |
| Aprons, vests, arm bands or similar with MSF identification / logo | 2 |
| Plastic folder (for protection of questionnaires against rain and dust) | 3 |
| Referral slips | 20 |
| SMARTPHONE/TABLET (if electronic platform used) | 1 |

Table 3 : Supplies needed for the field part of the survey

13.2. TRANSPORT NEEDED

For the study supervisor: transport in one car, with 1 driver, in the morning and evening. Given the lack of road access to the settlement, all households must be reached by walking.