Understanding the health status and humanitarian impact of the recent events in the internally displaced population (IDPs) in Tal Abyad and Manbij districts, northern Syria, 2017

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Mixed Method Survey proposal

Version 2.0, 12 June 2017

List of abbreviations

CI	Confidence Interval
CIOMS	Council of International Organisations of Medical Sciences
EPI	Expanded programme of immunization
ERB	Ethical Review Board
GAM	Global Acute Malnutrition
IDP	Internally displaced persons
INGO	International non-governmental organisation
IS	Islamic State
KII	Key Informant Interview
MoH	Ministry of Health
MSF	Médecins Sans Frontières
NCD	Non-communicable disease
OCA	Operational Centre Amsterdam
PFA	Psychological First Aid
PTSD	Post-traumatic stress disorder
UN	United Nations
UNHCR	United Nations High Commission for Refugees
VPD	Vaccine-preventable disease
WHO	World Health Organisation
WMA	World Medical Assembly

Survey Information

Draft	12 June 2017
Revisions	Version 2.0
Survey design	Mixed Methodology Survey
Survey type	Simple random sampling and convenience sampling
Survey period	June-July 2017
Survey site	Tal Abyad and Manbij districts, northern Syria
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Data collection and analysis by	MSF OCA
Collaborating institutions	Kobane Health Administration, Kobane Syria Manbij Medical Council, Manbij district, Syria

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1. Introduction

1.1. Context

The ongoing Syrian crisis has caused the largest scale of displacement since World War II . Half of the Syrian population have been displaced since the war started in 2011 . Over five million sought refuge in neighboring countries and the rest remain within Syria . It is estimated that 6.3 million people are currently displaced throughout the country . Tracking the rates of internal displacement has been a challenge, but it is estimated that 56% of IDPs inside Syria have been forced to move more than once, on several occasions . “Most IDPs reside in unofficial settlements and temporary camps with limited security, protection, or access to essential aid and medical services. IDPs occupy a status that affords them less recognition, protection, and inhibits their access to humanitarian interventions compared to refugee population” .

The conditions of the IDP populations and their access to services are subject to the local governance of the region they settle in. This makes them highly vulnerable and poses different challenges that disproportionally impact IDP populations . The most recent large internal displacement is occurring in northern Syria. In November 2016, an offensive campaign was declared to retake control of Ar-Raqqa from the Islamic State (IS). The majority of the current population (100,000 – 200,000) is expected to leave Ar-Raqqa city and its surrounding areas as a result of the conflict. According to the latest situation report published by the United Nations High Commission for Refugees (UNHCR), the total number of displacements from Ar-Raqqa Governorate since early April reached 107,000 individuals. The axes of displacement accessible to Médecins Sans Frontières Operational Center OCA (MSF OCA) are mainly between Tal Abyad and Manbij districts (figure 1). As of May 2017, the displacements recorded 26,220 persons in Ein Issa (Tal Abyad district) and 31,296 in Manbij (figure 1). The displaced people arrive to the registration sites and stay in transit camps until they finish the registration process. Currently there are two transit camps in Tal Abyad district (Ein Issa sub district) and one transit camp in Manbij managed and supported by the Kurdish local authorities.

1.2. Background

The political instability, armed conflict, food insecurity, breakdown of government services, limited access to healthcare, insufficient vaccination coverage and the shortage of qualified medical staff and supplies have contributed to a an excess in morbidity and mortality among civilians living in Northern Syria since the conflict started . As the conflict intensified, IDPs are suffering from the deterioration of their health situation putting them at risk of infectious diseases and the aggravation of non-communicable diseases due to absence of continued care. Additionally, psychosocial distress is likely increasing further: “Lack of access to basic needs such as food, clean water, and healthcare were also reasons Syrian IDPs reported a deteriorated state of mental health” .

The displaced population is at higher risk of communicable diseases, particularly the vaccine-preventable diseases (VPDs). Several VPD outbreaks occurred in northern Syria during the past years which include measles, polio and meningitis . Statistics on vaccination coverage is

lacking, but data from UN and MoH suggest that vaccination rates dropped markedly after the onset of the conflict . The overall vaccination coverage was estimated to be only 50% in 2015 . In 2015, MSF conducted a vaccination coverage survey in Kobane which found out that only one in five of children (26.6%) under 5 years of age had received all vaccines due for age.

In March 2016, MSF OCA identified a few malnutrition cases in Tal Abyad district among children under the age of 5 years. This was highly contributed to the lack of food supply and low socio-economic status among the IDPs in the rural areas. Results from other surveys on the Syrian refugee population indicate that the global acute malnutrition is relatively low, but the high prevalence of anemia suggest a serious public health problem among women and children .

While little is known about the IDPs in Syria, studies on the Syrian refugee households in neighboring counties reported high NCD prevalence between 40% and 50% . The most prevalent NCDs were hypertension, Cardiovascular disease, Diabetes, Chronic respiratory disease and Arthritis Our recent facility-based and community-based surveillance data in northern Syria confirm a significant prevalence of NCDs amongst the displaced population. For instance, during March 2017 hypertension and diabetes were among the top five presented cases among adults in the MSF supported health facilities (7% & 5.6%, respectively).

Protection risks in northern Syria were assessed by INGO “Concern Worldwide” in early 2017. The displaced population stated that “violence occurs everywhere: in schools, at work, at home and in public spaces like markets and on the streets”. Students suffer discrimination based on their ethnicity and gender at several schools. Women and children are the groups most at risk. Women are more vulnerable to abuse, harassment and forced marriage and young men and boys are facing forced conscription and recruitment by armed groups .

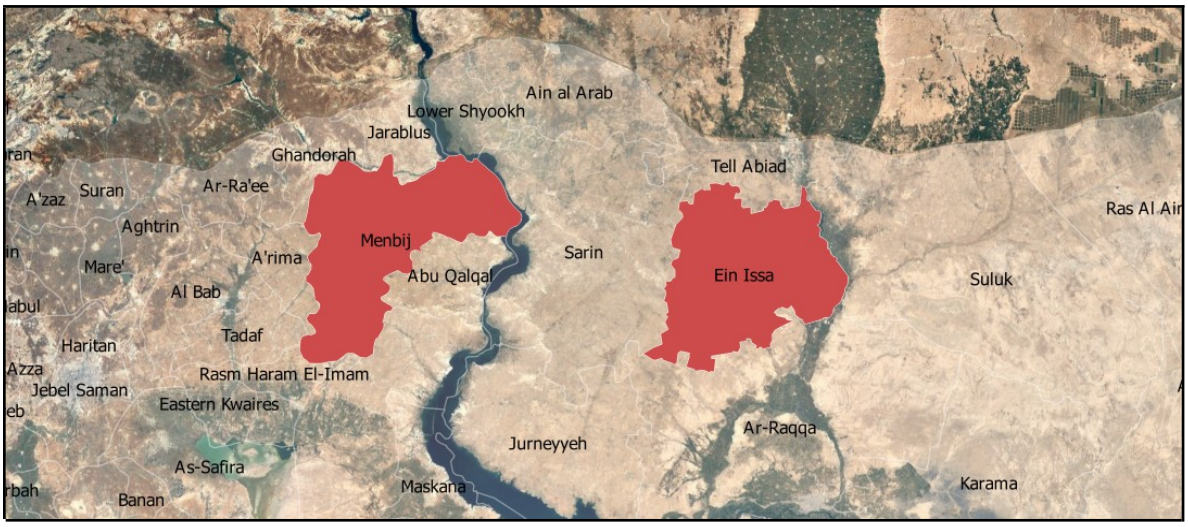
People arriving from Ar-Raqqa are expected to be highly distressed. Displaced families frequently mention that family members, usually sons, were killed in the fighting, imprisoned or disappeared. A lot of them have experienced or witnessed intense violence related events. Findings from other studies indicate that recurring negative emotions among the older Syrians were common particularly anxiety, depression, and loneliness . Reports on mental health from refugee camps in Turkey and Lebanon described high levels of psychosocial distress (42%), anxiety and depression and post-traumatic stress disorder (PTSD) .

1.3. MSF in Manbij and Tal Abyad districts, northern Syria

MSF-OCA returned to Tal Abyad in January 2016 (after a security driven absence since last intervention from March 2013 – May 2015). It currently supports the Tal Abyad National Hospital and the Expanded Programme of Immunization (EPI) in 13 different sites around the district. MSF also supports a health post in Ain Issa cotton factory transit camp and a mobile clinic that provides primary healthcare to the IDP population in the district. In Manbij, MSF runs a mobile clinic and supports the Manbij National Hospital providing primary and emergency healthcare as well as vaccination services to the community and the transit camp. As military operations continue, there is a potential for a large outflow of IDPs into Tal Abyad and Manbij districts. MSF is planning to scale up its activities to respond more effectively to the current emergency by

improving access to emergency stabilization and referral of war wounded patients in areas close to Ar-Raqqa city as well as improving the capacity for lifesaving surgeries for those in need.

Figure 1 Ein Issa and Manbij map (indicated in red)



1.4. Justification of the survey:

Limited information is available on the humanitarian and medical situation of the IDPs in northern Syria, particularly those fleeing from Ar-Raqqa governorate. According to MSF sources, people living under the IS control have constrained access to primary healthcare services and essential treatment. Moreover, the immunization services are almost non-existent. Given such poor conditions in the place of origin, the IDPs are expected to be highly vulnerable. Since information is scarce and there has been no accurate data on the health conditions of the IDP population in northern Syria, the proposed mixed methods survey will allow us to collect qualitative information on the current concerns, priorities and experiences suffered by the displaced population. Additionally, it will provide concrete quantitative indicators to better understand the health situation of the new IDPs in order to tailor its response strategy to their immediate healthcare and mental health needs. Moreover, reliable data on the underlying health conditions and the vaccination coverage would help in advocating and liaising with stakeholders for targeted interventions which would help in reducing morbidity and mortality in the population.

2. Aims and objectives

2.1. Primary objective

To estimate the prevalence of current illnesses (self-reported), vaccination coverage, and mental health distress related symptoms in the IDP population in order to obtain a baseline that can guide MSF response activities in Raqqa as well as in Tal Abyad and Manbij districts.

2.2. Secondary objectives

1) To estimate the vaccination coverage for key vaccine preventable diseases in children aged 6-59 months among the new IDP population;

2) To describe the demographic characteristics of the IDP population;
3) To describe the displacement routes and experiences of the IDP population;
4) To estimate the prevalence of self-reported morbidities in the previous two weeks;
5) To estimate the global acute malnutrition (GAM) rate of in children aged 6-59 months and pregnant women;
6) To estimate the prevalence of self-reported major chronic diseases;
7) To estimate the prevalence of symptoms commonly associated with mental health distress;
8) To estimate the prevalence of conflict-related violence/trauma experienced during the recall period (365 days);
9) To estimate the retrospective mortality since the beginning of Ar-Raqqa offensive in northern Syria (12 June 2016);
10) To gain more understanding related to the concerns, challenges and priority needs of the IDPs in the community.

3. Methods

3.1. Survey design

The conflict in Northern Syria is unpredictable. The need for and the ability to implement key informant interviews and focus group discussions (that adhere to ethical standards) and the need to estimate (quantitatively) the prevalence of morbidity, mortality and access to care will change. As these needs cannot be predicted or planned for, we have written the following protocol to cover two possible types of data collection that may occur over the next 12 months in Northern Syrian: cross-sectional population based surveys and qualitative interviews (focus group discussions and key informant interviews).

Thus, this survey will use mixed methods inter-changeably and repeatedly over the next year. In short this will consider of:

- **Quantitative design (Section 3.2):** a cross-sectional population-based survey to estimate the prevalence of morbidities and mortalities amongst the IDP population. We intend to conduct this survey on a regular basis in order to monitor the health situation and assess the impact of forced displacement on the IDPs during different time periods in the future.

- **Qualitative design (Section 3.3):** We will gather information through key informant interviews and focus group discussions (FGDs) in order to understand any potential healthcare access barriers and gain more contextual understanding on the concerns, challenges, and priority needs among the displaced population.

At the time of writing of this survey protocol we know that as survey (quantitative) component will be implemented in newly IDPs in Manbij and Tal Abyad as soon as the Ethical Review Board of MSF and the local authorities provide their clearance for the protocol. The other

components or the repetition of the survey cannot be planned in advance and we commit to informing the MSF ERB of the times that these are implemented.

3.2. Cross-sectional population based survey:

3.2.1. Study area and population

The newly displaced population at the registration screening sites in Tal Abyad and Manbij districts will be considered the study population. There are 2 registration sites in Tal Abyad district and one in Manbij district. The new IDPs have to follow the registration process and wait in the designated transit camps until they are permitted to continue their journey to their intended destinations. On average, people have stay in the transit camp between 1 to 5 days. The survey will be conducted in the transit camps.

3.2.2. Definitions

A **household** is defined as a group of people who live together under the same roof and are under the responsibility of one person (head of household).The whole household will be included, no matter the age of the household member or the relation with the other members. The household definition includes all individuals who have been living in the household at any time during the recall period, including those who arrived or departed within the recall period. Visitors who are not considered under the responsibility of the household head will not be considered as household members.

A **head of household** is defined as:

- adult household member aged 18 years or older, **and**
- can give accurate information on all demographic issues in his/her household, **and**
- has lived in the household for the majority of the recall period, **and**
- Is present at the time of the survey.

3.2.3. Inclusion and exclusion criteria:

A household will be included in the survey if the head of household meets the definition above, provides an informed consent and currently living in the selected household. A household will be excluded from the survey if we were not able to locate the potential participant (head of household) after two attempts of tracing **and** if the head of household refuses to participate in the survey.

3.2.4. Recall period

We will use a recall period of up to one year. The precise beginning of the recall period will be referred to the date when the first phase of the Raqqa offensive was announced on 12 June 2016. The aim is to understand the experience of the population before displacement and its impact on health. 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.

3.2.5. Sample size

The sample size was determined assuming simple random sampling for vaccination coverage, nutrition and mortality surveys (table 1). Vaccination coverage was considered the key survey outcome taking into consideration the sample sizes needed to achieve the secondary objectives of estimating the GAM prevalence and retrospective mortality rate for a 365 days recall period. The coverage rate estimate of 50% was used as the most conservative. Based on an average household size of six with 15% of children aged 6-59 months we expect on average a frequency of 0.9 children aged 6-59 months per household. To measure vaccination coverage of 384 children aged 6-59 months, 384 households need to be included in the vaccination survey. Allowing for a 10% non-response rate a total of **423 households** will be included.

The sample size calculated will be sampled from each district separately. Therefore, 423 households will be interviewed in each district. In Tal Abyad, 192 households will be selected in each registration site.

Parameter	Value	Comment
Vaccination Survey Sampling[A]		
Estimated vaccination coverage (%)	50	Assumed low coverage for largest sample size
Desired Precision (%)	5	
Design Effect	1.0	Population assumed homogenous
Average HH Size	6	Based on UNHCR data (May 2017)
% of children 6-59 months	15	Based on UNHCR data (May 2017)
% non-response rate	10	Unknown potential non response rate
Children to be included	**384**	Children
Total HH to be included	**423**	Households
Nutrition Survey Sampling [B]		
Estimated GAM Prevalence (%)	15	Emergency threshold
Desired Precision (%)	5	
Design Effect	1	Population assumed homogenous
Average HH Size	6	Based on UNHCR data
% of children 6-59 months	15	Based on UNHCR data
% non-response HH	10	Unknown potential non response rate
Total children to be included	**196**	Children
Total Sample size	**269**	Households
Mortality Survey Sampling [B]		
Estimated death rate per 10,000/day	1	
Desired Precision (%)	0.3	
Design Effect	1	Population assumed homogenous
Average HH size	6	Based on UNHCR data
Recall period (days)	365	
% non-response HH	10	Unknown potential non response rate
Total sample population	**1169**	Individuals

Total HH to be included	**217**	Households

[A] Sample size for the vaccination survey was calculated using OPENEpi (http://www.openepi.com/Menu/OE_Menu.htm)

[B] Sample size for the nutrition and mortality survey was calculated using the Emergency Nutrition Assessment (ENA) for SMART 2011 software (version 9th July 2015).

Please note that we will recalculate the sample size before each survey to be conducted, and will reconsider the parameters and assumptions used in each of these.

3.2.6. Sampling Strategy

Option 1: Probability sampling

Assuming a homogenous population, to get a representative sample of the studied population, a simple random sampling will be performed. The households in each transit camp will be selected randomly. This will be done by numbering the tents and then selecting tents using random number table. The team will prepare a rough sketch-map to clearly show the movement through the camp.

Option 2: Non-probability sampling

In the event that we cannot employ probability sampling for the survey, we might have to resort to non-probability sampling (through convenience sampling from different areas of the transit camp) in order to account for this. For instance, some people stay in their vehicles while others wait outside the camp near the registration site if the transit camp is full. In such case and depending on the situation, a convenience sampling will be used. To ensure sampling for diversity, a convenience sampling method will be used ensuring to select households form different locations where people gather. However, the majority of households will be selected from the transit camps.

We fully recognize that the use of non-probability sampling will reduce the representativeness of the sample used. However, we consider that the current humanitarian situation in North Syria is grave enough to compromise on scientific rigor in order to obtain information that can help with decision making quicker.

3.2.7. Questionnaire

The questionnaire will be administered to the household head and will cover questions related to the following aspects:

- Household demographics and mortality
- Household morbidity
- Household chronic disease symptoms
- Experience of violence/trauma
- Mental health status using the WHO-UNHCR standardized assessment tool
- Vaccination status of children aged 6-59 months
- Nutritional status of children aged 6-59 months and pregnant women

The questionnaire is available in Appendix 3. The questionnaire will be translated to Arabic and back translated to English to ensure consistency of language. The questionnaires will be piloted in the field with a convenience sample of households during the training to ensure they are understood.

3.2.8. Data collection

In the households selected according to the above methodology, the head of the household will be provided with an information sheet explaining the survey purpose (Annex 1), data to be collected, risks and benefits, how confidentiality will be maintained and how the data will be used. The trained survey staff will read and/or explain the information sheet if required and answer any questions in the language the head of household is familiar with.

Written consent will be sought from all heads of household participating in the survey. If they decline to participate this will be accepted, written down and the next household approached; the number of household refusals will be noted on the survey control form.

The head of the household will provide information on the household make up and information around their displacement. They will also be asked to answer questions around mortality in their household members since the recall period. They will also be asked to answer questions around their personal mental health and that of households members aged more than two years in the household.

All eligible children (those aged between 6 and 59 months of age) in every selected household will undergo anthropometric measurements and the head of the household will be asked to provide information on their vaccination status for measles and polio. If an eligible child is absent at the time of the visit, it will be noted on the data collection and survey control forms and the team will revisit the household later in the day. All pregnant women in the household will be assessed through mid-upper-arm circumference (MUAC) for their nutritional status.

3.2.9. Data entry and analysis

Data will be entered into EpiData by the survey investigators if collected on paper forms. If collected electronically (using Kobo collect or similar), 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 14 (StataCorp, College Station, TX, USA).

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 $\chi 2$ 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 survey 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.

3.2.10.Data protection and management

No identifiable (name-related) data will be collected 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 survey and the Medical Coordinator. After 5 years, the paper copies of all the questionnaires will be destroyed.

3.3. Qualitative Component:

We aim to collect qualitative information around the time during displacement and thoughts and concerns at the time of the discussion through key informant and focus group discussions at regular intervals during the follow months. Additionally, we aim to identify any protection concerns among the displaced population who are living in the community (not in the transit camps). The information will add to the quantitative data that is collected, and will provide the 'human narrative' to the very complex humanitarian situation currently being faced by a large proportion of the population in North Syria.

3.3.1. Sampling Strategy:

A purposive selection of participants will be performed to enhance understanding from the information-rich cases. We aim to choose cases of different attributes to ensure diversity. For instance, we will choose people from different gender, age groups (over 18 years old), geographical areas and duration of displacement. Participants will be approached by the surveyors after being introduced by the community leader or mayor about the objective and purpose of the survey. The key persons in the IDP community would be ideally the head of households as they are expected to have rich information about their families and the community they live in. We will also aim to include those who are considered influential in their community, like community leaders, teachers, doctors or shop owners.

3.3.2. Focus Group Discussion:

When possible, focus group discussions will be organized with groups of women and groups of men in the transit camps or along their route of displacement. There might be situations during acute displacement where ensuring such separation will be difficult to achieve. We will try as much as possible to balance that equal numbers of discussions are held with women and men. Focus group discussions will be composed of not more than 8 participants at a time. Purposeful sampling will be applied and the groups will be divided by sex to alleviate any discomfort

participants may find discussing these issues in front of a person from another sex, due to the cultural norms of this region, a homogeneous group will be more informative. The focus groups will be organized and conducted sensitively in a private neutral location (to be identified at the time of the focus group discussion). This will enable a space for explanation and dialogue to speak about the purpose of this discussion and allow for potential sensitivities to be addressed.

Full information about the purpose and uses of participants' contributions as well as clarification of how contributions will be shared will be explained during the informed consent process (Annex 1). Participants need to be encouraged to keep confidential what they hear during the focus group and be reassured that data from the group will be anonymized using pseudonyms with care taken for quotes not to be traced back to individuals by the researcher.

Participation in a focus group discussion will be voluntary.

3.3.3. Key Informant Interviews:

Through purposeful sampling, we will identify different key persons in the IDP community, either at the transit camps, in resettlement camps or still on the route of their displacement. Such persons will be considered to be key informants. We may also use snowball sampling to help identify other persons in the community with a deep understanding of the population, their experiences to date and their immediate concerns and priorities for their families.

All key informant interviews will be conducted in private spaces (identified at the time of the interview).

Full information about the purpose and uses of participants' contributions as well as clarification of how contributions will be shared will be explained during the informed consent process (Annex 6). All information collected during the key informant interview process will be anonymous.

3.3.4. Data Collection, Analysis and Management

The Focus Group Discussion Guide is attached in Annex 3 and the Key Informant Discussion Guide is given in Annex 4.

All interviews and focus group discussions will be conducted in Arabic. We will train an Arabic speaking research assistant who would conduct the key informant interviews and focus group discussions. The assistant will take detailed notes (following the scripts for the FGDs and KIs) during the discussions and interviews. These notes will be translated into English and themes will be extracted from these translations.

Qualitative data will be collected from a variety of sources in order to compare and strengthen related conclusions. Qualitative data will be analyzed using grounded theory approach. Concepts and themes regarding access to healthcare services, protection concerns and priority needs will be analyzed using qualitative data analysis software. Data will be sorted and organized using Excel or Nvivo 11, depending on which software is available at the time.

Data checking will be conducted through respondent validation at the end of each interview and focus group, as well as doing repeat transcriptions on 10% of transcripts to ensure validity. We

will neither record the FGDs nor the KIIs. We also anticipate that fewer people would feel 'safe' to participate if we did record the discussions and thus have decided against this approach. The data collection will be done by a trained/skilled staff member who has experience in interviews and facilitating focus group discussions. As the FGDs and KIs are fully scripted, the interviewer will ensure that he/she take notes to capture the main answers/themes and topics that arise. We recognize this will reduce our ability for transcription of interviews and discussions, but we think our staff members are sufficiently skilled to ensure that all themes are accurately captured and quotes properly recorded.

The translator will be trained and supervised by going over the survey methodology and all questions will thoroughly be examined, any issues around content will be discussed and resolved, including informing on local idioms that will help better understand the translating. A "Terms of reference" will include respect towards all parties involved in the survey; maintenance of confidentiality and accuracy when translating; confirming no conflict. A confidentially agreement will be signed by the translator.

3.4. Combined Analysis

The findings of the qualitative and quantitative components will be combined at the interpretive level under different themes as below:

Health status and priority needs: As the quantitative component provides the numerical estimates of morbidity and mortality prevalence, which can be generalized to the total population, the qualitative component will provide information about the cultural perceptions and individual experiences in relation to their health status. The combination will increase our understanding of the conditions and the needs taking into consideration the contextual attributes of the community.

Access to healthcare: the qualitative component will be combined with the quantitative in order to assess the health care service provision needed for the most prevalent illnesses identified by the quantitative component. Besides, the qualitative component will provide some insights on the health care utilization by the community.

Mental health and violence: as a complementary to the quantitative findings, the qualitative analysis will supplement the interpretation with individual experiences and further insights about the communities' perceptions of mental health needs and problems that affect the new IDPs.

3.5. Scenarios for use of qualitative and quantitative components

As the current situation in Northern Syria is dynamic and unpredictable, the use of the quantitative and qualitative components cannot meet a fixed schedule or order. Several factors may influence our decision to implement only the qualitative or quantitative component or both.

We foresee different scenarios which will alter the objectives slightly of the different components and our ability to use the data collected. We have described these scenarios below with the respective limitations we foresee for each of them.

Scenario 1: Qualitative component only
This would be done in the event that we only have limited time, or staff or security concerns prohibit more extensive teams from moving in affected areas by IDPs. The qualitative component (which might include KIs only, FGDs only or both) would then have as an objective to better understand the concerns and needs of IDPs and their ability to access healthcare. This information, though qualitative in nature might facilitate MSF to adapt current humanitarian assistance strategies or feedback to other stakeholders with qualitative information around the current status of these affected populations.
The limitation to this approach will be that we will not be in a position to estimate how representative the findings will be to the overall IDP community as FGD and KI participants will be chosen on a convenience based approach.

Scenario 2: Qualitative and quantitative component together (possibility A)
The objective in this case would be to use the qualitative data to better understand our quantitative results. Thus we would combine the analysis of both components at the interpretive level. We foresee no limitation to this approach.

Scenario 3: Qualitative and quantitative component together (possibility B)
In the event that we realise from qualitative discussions and interviews that the questions covered in the questionnaire of the survey are no longer relevant or that they need to be re-formulated to better capture the true concerns and limitations around access to healthcare, we would use the qualitative component to inform the adjustment of the questionnaire. In this case, it would results in an official amendment of the protocol submitted to the MSF ERB to alert you of these changes. The limitation that might be associated with this is that the altered questions would no longer be comparable to questions asked in previous surveys. However, if the decision was taken to change the question, it was taken in order to justify a more accurate understanding of the affected population, thus comparability to previous surveys is not justified to keep old questions.

Scenario 4: Quantitative component only
It is unlikely that the quantitative survey would be implemented as a stand alone, however still a possibility. The objective at this point will be to obtain estimates for the affected community on the aspects covered in the questionnaire. The sole limitation to this approach will be that we will not have access to rich qualitative narrative to highlight specific findings. However, it is anticipated that in the event we only implement the survey, our teams will have enough understanding of the specific context to be able to interpret the data from the survey.

3.6. Ethical considerations

The survey will be conducted in accordance with the Council for International Organisations of Medical Sciences (CIOMS) International Ethical Guidelines, 2016 and the World Medical Assembly (WMA) Helsinki Declaration on Ethical Principles for Medical Research Involving Human Subjects.

The protocol will be approved by the Ethical Review Board of Médecins san Frontières before implementation. In addition official permission will be requested from Kobane Health Administration, Kobane Canton, northern Syria.

The camp administrators and the relevant authorities (including identified community leaders) will receive a letter one week prior to the start of the survey explaining the purpose of the survey

and its procedures, specifically also explaining how the survey ensures anonymity of respondents and their right to refuse participation in the interview.

The MSF medical responsible in the field will advise the survey team on the referral practices when finding survey participant who show signs or symptoms of illness requiring immediate clinical attention, children or pregnant women identified as malnourished as well as the procedure regarding psychosocial issues or victims of violence.

3.7. Informed Consent

Heads of the selected households will receive oral and written information about the survey objectives, survey procedures and a clear explanation of the risks and benefits derived from participation in the research through a trained survey staff. The trained survey staff will answer to any queries that the head of household may have regarding the same. Those willing to participate will be requested to give verbal consent to participate and their consent will be recorded by the survey teams.

All key informant and focus group discussion participants will receive written information about the survey objectives of the qualitative part of the survey, the procedures to be used and any risks and benefits that will be derived from participating. They will all be asked to provide verbal informed consent and their consent will be documented by the research assistant.

Participants will be informed that they have the right to withdraw from the survey at any time during the research.

3.8. Confidentiality

No names will be collected and household identifiers will be delinked from the data collection tool after data has been collected and verified.

Verbatim quotation in dissemination material will be designated by the age group and category of the person (e.g. male aged 40 years, head of the household) to preserve anonymity.

Access to the survey data will only be granted to authorized and trained staff.

3.9. Benefits

The survey results are expected to inform MSF to make operational decisions better suited to the needs of the targeted population. By interviewing people recently displaced from Raqqa it will also provide MSF with the ability to better plan operations inside Raqqa city in the future. The qualitative information will provide us with more understanding of the experiences, concerns and priorities as perceived by the community.

The survey will be unique in that it will provide quantitative data on the health situation of people living in areas under the control of IS. This information will not be generalizable to the whole population living under IS control but it will provide an insight into a population for which very little information is available.

3.10. Risks

The survey participation is not expected to convey any risks to the participants. The interview will be conducted in privacy by trained survey staff. The questionnaire has been designed to deal the sensitive topics delicately. However, the interviews will cover several sensitive topics which may cause some anxiety for the participants. We will try to mitigate this by ensuring that our interview teams are appropriately trained in psychological first aid (PFA). In the event of a visibly traumatized individual, the team will conclude the interview and will identify follow up measure to offer appropriate support in liaison with the MSF Mental health staff. Each respondent will be assured of the confidentiality and privacy of the interview, and informed that s/he is free to stop the interview at any time or refuse to answer any questions.

FGDs may create some tensions in the group, but the interviewer will ensure that participants are comfortable enough to share their thoughts and opinions to avoid unnecessary tension. Also, community members who are not invited for the focus group discussions and key informant interviews may become jealous and resent being left out.

For MSF, the risk would be that the security situation may deteriorate to a level that we would not safely be able to deploy the survey team.

4. Community Engagement

MSF has been actively supporting the local health authorities in providing healthcare to the IDPs arriving to the transit camps in Tal Abyad and Manbij districts. MSF's connection to the community is slowly increasing as the project develops in both districts. To date it has focused mostly on providing primary healthcare and vaccination services through a health post and mobile clinic in Tal Abyad and a mobile clinic in Manbij. MSF's ongoing community engagement strategy is to support the local authorities through improving access to emergency care including surgical capacity. An event-based surveillance is planned through establishing a network with the community leaders and community members to monitor their health status and create an early warning system for a faster response to any potential outbreak or any other event with public health impact.

5. Collaboration

This survey will be conducted by MSF OCA, with cooperation of the Kobane Heatlh Administration and Manbij Medical Council, norhter Syria.

MSF OCA is the survey sponsor and is responsible for funding. It is in charge of the field part of the survey, the analysis and report writing. Permission for publication must be obtained from the MSF OCA and the Kobane Health Administration.

Survey results will belong to MSF OCA and the Kobane Heatlh Administration, northern Syria.

6. Recruitment, training and logistics

6.1. Selection and tasks of survey teams

The task of the interviewers will be to collect the necessary data for the survey.

Each survey team is composed of two interviewers. To finalise the field part in a reasonable time we need eight survey teams of two people each

General selection criteria for all interviewers:

- Able to read and write in English and/or Arabic *and*
- Fluent in the local language Arabic *and*
- Available for the ENTIRE time of the survey (training and interview days), *and*
- Motivated to participate in the survey, *and*
- Not biased in expectations of the outcome of the survey
- Experience with interviews in difficult settings and survey populations would be an advantage

In addition, two local supervisors will be employed to supervise the survey teams in the field.

6.2. 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:

- Preparation of all necessary documents (protocol, questionnaires, informed consent forms) for the survey
- Preparation of the field component of the survey (training of the survey teams, logistics, materials) together with the MSF team in the field
- Follow-up of the field component of the survey
- Data entry
- Data analysis
- Report writing

6.3. Suggested MSF support in the field

- Administrative support for survey preparation at the field level and during field part, such as obtaining permission from the Kobane Heatlh Administration and payment of survey teams.
- Human resources support, such as hiring survey team/interviewers, a translator for the principal investigator if needed
- Logistic support for survey preparation at the field level and during field part, such as organizing sufficient cars including drivers for the field part of the survey, providing communication tools and to the survey teams, stationary, printing the consent forms

6.4. Training of survey teams and pre-testing of the questionnaires

Two days training will be given to all interviewers to familiarise them with the background of the survey, the questionnaires, the information sheet and the informed consent form. The training will be given in in English with translation if needed by the principal investigator. It consists of an intensive review of the questionnaires and the information sheet including role-plays. As the interviews will be held in the national language, the principal investigator 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 finish with a pilot study. The pilot study allows for the testing and possible final adaptation of the questionnaires and informed consent to field conditions. We will also aim to pilot test the scripts for the FGDs and KIs and make any adjustments to those scripts to improve the flow of the questions (not the content). For the pilot testing of the questionnaire and the scripts for the FGDs and KIs, we will ensure to explain to the participants that the information is being used for pilot-testing and that the collected data will not be included in the analysis. Survey teams will make it clear that they will extend the same courtesies as would be provided to actual study participants in relation to protection of their privacy and confidentiality of the information obtained.

The pilot study will be conducted on the target population in the transit camps located in Tal Abyad and Manbij districts. We aim to conduct 18 interviews to ensure that each surveyor has the chance to test the questionnaire and perform real practice on the ground. The data will be included in the analysis, unless significant changes are made to the questionnaire. Customized information sheet and consent forms are not needed, but the surveyors will verbally inform that the participants about the pilot study.

7. Survey schedule

We have pre-defined the following time points in the implementation of this survey:

Output	**Estimate Deadline**
Submission to MSF ERB	May 2017
ERB approval MSF	June 2017
Preparation field survey (hiring of staff, training of staff, piloting of questionnaires and logistics for field implementation)	June 2017
Survey implementation	July 2017
Analysis of data and report write up	July-August 2017
Dissemination of report to stakeholders	September 2017
Submission of manuscript to peer reviewed journal (if relevant)	December 2017

8. Budget

An estimated budget for the survey is included in Annex 7.

9. Dissemination

The findings will be written up by the Principal Investigator into an internal report which will be shared with all collaborators for their input. If relevant, a manuscript will be prepared for submission to a peer-reviewed journal. We may also use some of these findings to write reports for advocacy purposes. MSF will use the information to guide programming of MSF operations in Tal Abyad and Manbij districts, northern Syria.

10. Annexes

Annex 1: Information sheet and consent form
Annex 2: cross-sectional survey questionnaire
Annex 3: Focus Group Discussion Guide
Annex 4: Key Informant Interview Guide
Annex 5: FGD information sheet and consent form
Annex 6: KII information sheet and consent form
Annex 7: Estimated survey budget

11.Bibliography

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