Article

Rohingya mHealth: Investigating Mental Health in Kutupalong Refugee Camp

Lars Rune Christensen[1], Hasib Ahsan[2] & Subrata Kumar Mandal[3]

[1]PhD, Associate Professor, IT University of Copenhagen, Denmark, [2]MDS, PhD Researcher, IT University of Copenhagen, Denmark, [3]MIT, Head of Management Information Systems, Friendship (NGO), Bangladesh

Abstract

The mental health needs of people affected by humanitarian crisis are significant but may be overlooked by healthcare providers. This paper reports on a 3-month, mixed method, field trial of a digital screening tool to identify people suffering mental health issues in Kutupalong refugee camp in Bangladesh. First, findings show that of 958 persons screened 20.46% exhibited indications of significant mental health issues. Second, ethnographic enquiries provide insights into the stressors of camp life, including, socio-spatial confinement, idleness, break-up of families, domestic disputes and uncertain prospects for the future, which in combination may explain the outcome of the screenings. The paper adds to the body of research on mental health in humanitarian crisis, and seeks to demonstrate the value of combining quantitative and qualitative data and analysis.

Keywords: Bangladesh, digital humanitarian response, humanitarian crisis, mental health, mental health screenings, mixed methods, Rohingya

Introduction

The Rohingya refugees in Bangladesh are experiencing one of the worst humanitarian crises in history. Almost 655,000 Rohingya entered Bangladesh following the attacks by the Myanmar military in August 2017. The estimated total affected population, including already existing refugees, new arrivals and host communities is 1.2 million people (UNICEF, 2017).

This paper examines a 3-month intervention to screen for mental health issues in a camp in Bangladesh hosting forcibly displaced Rohingya from Myanmar. A digital screening tool based on the WHO SRQ-20 standard (Beusenberg & Orley, 1994) was designed and pilot-tested in Kutupalong camp in eastern Bangladesh bordering Myanmar. Screening data were collected over two rounds, with 958 individuals. In addition, ethnographic methods were used to track a subset of the screenings over the 3 months. In brief, the quantitative findings stemming from the use of the screening tool show that 20.46% of the subjects exhibited symptoms of mental health issues warranting referral to a clinic. The qualitative data of the ethnography allow us to consider some of the context and reasons behind the outcome of the screenings – highlighting the stressors of life in a refugee camp including, the sociospatial confinement at play in the camp, idleness, the break-up of extended families, domestic disputes and uncertain prospects for the future that may all combine to sustain and amplify the plight of the refugees. That is, the ethnography uncovered subtle properties of the displacement, the camp culture and the environment that are indiscernible to a screening tool such as SRQ-20.

A screening tool such as SRQ-20 may tell us that people have symptoms of mental health problems but cannot tell us why or inform us of the sociocultural context of their plight. This paper demonstrates that an ethnography conducted alongside an organised effort to screen for mental health issues in a refugee population can provide essential insights into the mechanisms that led to the observed outcome, the plight of the refugees, and thus potentially inform action that may lead to change. After all, without a firm idea of the reasons behind phenomena such as mental health issues in a refugee population, subsequent meaningful intervention and change may be hampered.

The paper adds to the body of research on mental health in humanitarian crisis (Tay et al., 2019; Ventevogel et al.,

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Address for correspondence: Dr. Lars Rune Christensen, IT-University of Copenhagen, Rued Langaards Vej 7, 2300 Copenhagen S, Denmark. E-mail: Lrc@itu.dk

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2015), and on computing in humanitarian intervention (Meier, 2014), especially with a focus on healthcare (Perakslis, 2018; Talhouk et al., 2016). Digital health care technologies may be proven effective and useful in low resource settings when properly designed, engineered and implemented (Perakslis, 2017). However, success is far from ensured and requires stakeholder involvement and a collaborative approach as we shall consider below. Moreover, the paper adds to the growing literature that seeks to demonstrate the value of combining quantitative and qualitative data and analysis to study questions pertinent to humanitarian crisis and development. The use of mixed methods in humanitarian interventions and development has long been advocated, and their use has been growing (Rao et al., 2017). However, to the best of our knowledge, this paper represents the first effort to integrate ethnography with a digital screening tool to both analyse the quantitative extend of mental health issues in a refugee population and the mechanisms and processes by which the phenomena has been sustained and amplified.

Mental Health in Humanitarian Emergencies

The mental health needs of people affected by emergencies are significant but may be overlooked by healthcare providers (Mollica et al., 2004; Ventevogel et al., 2015). Worldwide, people are facing an increasing number of humanitarian crises arising from conflict and disaster. In 2019, there were 70.80 million forcibly displaced people worldwide (UNHCR, 2019b) of them 914,988 were Rohingya, our case in point, living in camps in Bangladesh (UNHCR, 2019a). The Rohingya influx into Bangladesh followed their forceful displacement from Myanmar in 2017. Although estimated rates of mental health issues in the wake of humanitarian emergencies vary somewhat with circumstances and study methods, a meta-analysis indicate rates of 22.1% for mental disorders (i.e. depression, anxiety, posttraumatic stress disorder, bipolar disorder and schizophrenia) in conflict-affected populations (Charlson et al., 2019).

In regard to the Rohingya refugees in Bangladesh, research from 2013 shows that earlier arrivals frequently exhibited symptoms of mental health issues (Riley et al., 2017). An assessment in 2018, following the most recent cycle of violence and displacement, indicated high levels of mental health issues (International Organization for Migration, 2018), and a limited survey among Rohingya refugee children in 2018 found symptoms of emotional problems in around half the surveyed children (Khan et al., 2019). However, there are yet no other prevalence data on the pervasiveness or extent of mental health problems among the Rohingya refugees in Bangladesh that fled Myanmar in mid 2017 (Ager et al., 2019). However, there are other relevant studies that should be mentioned. An interview study with 24 Rohingya adolescents in Bangladesh, some had arrived before the mass exodus of 2017 and some with it, showed high levels of suffering and worried about the mental health of their family members (Montanez et al., 2019a). In the context of the Rohingya humanitarian crisis, studies report positive experiences, akin to our as we shall see, of training general health workers to be part of an effort to mitigate mental health issues. However, specialised support is essential (Montanez et al., 2019b; Tarannum et al., 2019).

As a community who have been displaced and live in uncertain conditions, then the Rohingya are highly vulnerable and have as indicated gone through extreme trauma and violence in many cases. A high level of mental health disturbances have been reported with women, children, adolescent girls and boys and older adults having stress and mental health problems, including explosive anger, psychosis-like symptoms, somatic or medically unexplained symptoms and suicidal ideation (Tay et al., 2019). Also note that, there is no direct correspondence between Western defined diagnostic categories and the Rohingya lexicon of distress (Tay et al., 2018).

There is increasing recognition of the high burden of mental disorder. Mental health service warrants attention because deficiencies in this area are associated with great suffering, morbidity, mortality and economic cost or those affected by mental disorder and their families. Strengthening mental health has been identified as a global health priority (Faregh et al., 2019).

Screenings tools, such as SRQ-20, have had a wide influence in humanitarian work in low income countries and are considered a reliable way to identify a phenomenon such as mental health issues among refugees. The SRQ-20 is a 20-item screening tool which was developed by the World Health Organization (Beusenberg & Orley, 1994) and it has been widely used in low income countries (Netsereab et al., 2018; van der Westhuizen et al., 2016). The SRQ-20 is particularly valuable for screening in humanitarian crisis in the Global South, as it can be effectively administered by lay interviewers with only minimal training, as well as easily understood and completed by respondents with low literacy (Ali et al., 2016). However, there are well known limitations to screening tools like SRQ-20, with their short format and dichotomous (yes/no) answers. This paper attempts to address an important critique faced by screening tools such as SRQ-20 in the context of providing humanitarian assistance, namely, the black-box critique: While screening tools may be able to identify with relative precision people exhibiting, for example symptoms of mental health problems, they tell us very little about why and how these issues came to manifest themselves in this particular group of people (Faregh et al., 2019). As mentioned, this paper demonstrates that an ethnography conducted alongside an organised effort to screen for mental health issues can provide essential insights into the mechanisms that led to the observed outcome and thus potentially inform action that may lead to change.

The Mental Health Screening Service

The mHealth screening tool for mental issues was made in collaboration between the international NGO, Friendship, based in Bangladesh, the IT-University of Copenhagen, the Rohingya refugees in the area of the field trial, and the Novo Nordisk Foundation. While it was the role of the

Novo Nordisk Foundation to provide funding for the project, it was the role of Friendship, the IT-University of Copenhagen and selected refugees in the Friendship area of operation in Kutupalong camp to develop the mental health service module. This was done in a highly cooperative manner where the IT-University facilitated the design process, and Friendship staff and Rohingya refugees joined as co-designers. Briefly put, the design process took approximately three months and included field trips and design workshops in addition to more technical activities and tests. The latter was carried out by the Friendship technical mHealth team.

As indicated, it is a screening tool for mental health issues based on the WHO SRQ-20 standard that we designated to be part of primary care in Kutupalong Refugee camp in Bangladesh. Friendship has a substantial presence as a primary care provider in Kutupalong camp with 24 mHealth Teams, 24 Satellite Clinics, 11 Static Clinics, one Maternity Centre and one Comprehensive Maternity Centre. Due to camp restrictions, only the Maternity Centre can provide 24/7 services. The static clinics operate from 9 am to 4 pm every day, and the mHealth teams work as a part of these clinics' outreach programme. Each mHealth team is made up of one paramedic (female health care professional with a degree in health care) and one coordinator (male and often without formal education in the field of healthcare). Each mHealth team is dedicated to one area and goes door to door to provide primary health consultations and support to every household. Given the low health awareness level and community members' hesitation to seek help, this proactive approach serves to improve healthcare access for Rohingyas.

Each mHealth team supports around 300 households, making 10 to 15 household visits every day. As beneficiaries' symptoms, history and primary diagnostic data are entered on the app by the paramedic, health records are maintained accurately and digitally for each registered beneficiary and household. For every household, the mHealth team makes follow up visits within 14 days from the previous consultation session. Challenges to mHealth service delivery are inevitable in communities as vulnerable as the Rohingya. Friendship has adapted to many challenges in the Rohingya camps over time, such as overcoming the language barrier and building rapport between mHealth teams and the communities they serve. As mentioned above, a high level of mental health issues have been reported among the Rohingya in the camp. What we set out to do is to address this issue by providing a mHealth module designed to support the paramedics working in the camps to monitor the psychological wellbeing of the Rohingya and refer those in need to treatment.

The module consists of 20 questions and a summary with a referral option. The 20-questions, according to WHO standards, are as follows: (1) Do you often have headaches? (2) Is your appetite poor? (3) Do you sleep badly? (4) Are you easily frightened? (5) Do your hands shake? (6) Do you feel nervous, tense or worried? (7) Is your digestion poor? (8) Do you have trouble thinking clearly? (9) Do you feel unhappy? (10) Do you cry more than usual? (11) Do you find it difficult to enjoy your daily activities? (12) Do you find it difficult to make decisions? (13) Is your daily work suffering? (14) Are you unable to play a useful part in life? (15) Have you lost interest in things? (16) Do you feel that you are a worthless person? (17) Has the thought of ending your life been on your mind? (18) Do you feel tired all the time? (19) Do you have uncomfortable feelings in your stomach? (20) Are you easily tired? The questions are to be answered with *}yes{* or *}no{*. If the subject answers *}yes{* to seven or more of the questions, then that person is referred to a clinic for further evaluation. The tool is for screening purposes rather than for diagnostics. This is in line with the intentions of the SRQ-20 as envisioned by the World Health Organization (Beusenberg & Orley, 1994).

The questions appear in the digital screening tool we developed in both English and Bangla – the Rohingya language does not have a written script. Initially (before scaling up) the tool and the translation was discussed and tested with members of the community working with the mHealth teams. In addition, the paramedics of the mHealth teams received training to ensure consistency in terms of questioning technique and their Rohingya phrasing of the questions. The training took the form of workshops with the presence of the paramedics, the authors, as well as additional Friendship staff.

The Field Trial and Methods

To gain experience with the service and to provide input for further development, the service was put through a 3-month field trial. The total number of paramedics taking part in the trial was four, and the total number of refugees taking part was 958. The field trial started in November 1st 2019 and ended in January 31st 2020.[1]

The four paramedics taking part in the trial were selected from a larger group of 42 paramedics working with Friendship (NGO) based on their work experience in the camp as well as their mastery of the Rohingya language. As questions and answers during the screening process were conducted verbally in Rohingya, the latter language skill was essential.

During the field trial, each of the paramedics visited the households in their area of the camp and in addition to providing primary health care as per routine (i.e. in relation to somatic issues), the paramedics also screened the member of the household for symptoms of mental health issues using the mHealth application. In that sense, the participants in the field trial were quasi-randomly selected, as they were all part of the regular rounds of the medical assistants making house calls.

The screenings, then, were part of the regular outreach health visits mentioned above. The screening process worked in the following manner. First, before the screening interview, each potential respondent was informed about the confidentiality of the process, they were assured that participation was voluntary and that they could withdraw from the screening process at any time. Furthermore, the potential participant was informed about the referral process and how the data from the study might be used. One

main point being that the individual Rohingya choosing to take part would be anonymous in the context of dissemination. If the participant agreed to participate, informed verbal consent was taken. Second, as a further preamble to the interview, the paramedic told the participant that the questions that follow *"are related to certain pains and problems that may have bothered you the last 30 days. If you think the question applies to you and you had the described problem in the last 30 days, answer 'yes'. On the other hand, if the questions do not apply to you and you did not have the problem in the last 30 days, answer 'no'"*. Third, during the screening process, the paramedic asked the refugee the series of twenty questions in succession. Because of the low literacy rate among the Rohingya, the paramedic read the questions. The interviewer read the questions as they appeared one-by-one on the tablet computer running the mHealth application, and each "yes" or "no" response to the questions asked was recorded in the mHealth system's database. Fourth, once the 20 questions had all been asked and answered, the application calculates the respondent's score by simply adding up the number of positive (}yes{) answers each having a value of 1. If the respondent's score was seven or above, the application generated a referral to a consultation with an MHPSS officer, who in turn was tasked with evaluating the patient's condition and determine if treatment is called for. The MHPSS officers in turn handled further referrals to other services if need be.

After the field trial, we compiled the quantitative data generated by the screening process on an aggregated and anonymised level. Using SPSS statistical package, the number of screenings and referrals with associated gender and age distribution was displayed. The data were extracted from the mHealth production system as a CSV file.

Furthermore, we conducted three focus groups with the medical assistants taking part in the trial to get their perspective on delivering the service and their impression of the situation of the beneficiaries. Having worked with the families for more than a year, the medical assistants had achieved rapport with the majority of their households and were able to provide insights into their situation and camp life in general. The focus groups had the participation of the four medical assistants taking part in the trial. All focus group were conducted in the local language of Bangla, audio recorded and subsequently translated and transcribed.

In addition, the authors also conducted studies of the screening process. That is, with the consent of the beneficiaries, the authors shadowed the medical assistants during their household visits and observed the process for five days. These observational studies provided us with a contextual understanding in addition to informing on the particularities of the screening process. The observations were recorded in field notes and photographs.

Moreover, we conducted 12 semistructured interviews with individual beneficiaries. These interviews especially informed our understanding of the plight of the refugees and the stressors of camp life. The interviews were conducted in the Rohingya language, with the aid of a translator. Additionally, we conducted three interviews with counsellors to get their general perspective on the mental health challenges of the refugees. Interview guides were used to balance thematic structure with room for participants to express their perspective and personal understandings. The interview guides left an open space for questions to become constructed in the interplay between our evolving understanding as researchers and the set of activities we participated in and observed. All interviews were subsequently translated and transcribed into English.

The analysis of the qualitative data was based on an iterative process of gathering together, listening, categorising, comparing and contrasting common themes and significant issues found in the data. The coding of data involved the creation of labels and tags, which are based on how frequently the issues were mentioned or observed and the level of importance they were given, and led to the discovery and development of categories. In the process of collecting and analysing data, we focused our primary attention on the stressors of camp life.

Finally, note that this is a pilot study and that we make no claims to external validity (generalisation) in terms of the mental state of refugees in general. What we aim to investigate is an approach by which mental health issues and their context of origin can be mapped. As indicated, we propose using a digital screening tool in combination with an ethnographic investigation. This is not an epidemiological study. Having said that, the study does show promise, and future research on a larger scale may confirm the approach taken in this pilot.

The Findings of the Field Trial

In this section, we present the findings of the field trial. We start with the quantitative inquiry before moving on to the qualitative one.

Quantitative Inquiry

During the field trial, we conducted 958 screenings for mental health issues and referred 196 beneficiaries to further consultations. The screenings were as indicated conducted in the dwellings of the beneficiaries and on all members of the households present. Of the 958 beneficiaries screened, 740 were female and 218 male (see Table 1.). The larger representations of women in the field

Table 1: *Total number screenings in the period sorted by age group and gender*

Screenings: November 2019–January 2020				
		Female	**Male**	**Total**
Age groups	15–30	367	54	421
	31–45	220	69	289
	46–60	116	58	174
	61–75	35	31	66
	75 and above	2	6	8
Total		740	218	**958**

Figure 1: *Age Distribution of the Camp Population*

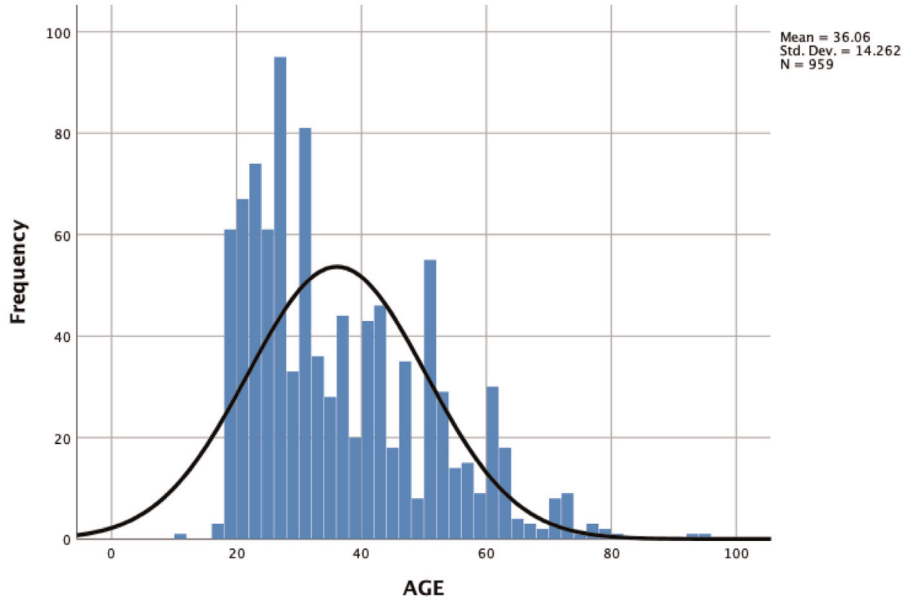

Table 2: *Total Number of Referrals During the Field Trial Sorted by Age Group and Gender*

Referrals: November 2019–January 2020				
		Female	**Male**	**Total**
Age groups	15–30	30	6	36
	31–45	46	22	68
	46–60	39	19	58
	61–75	14	15	29
	75 and above	1	4	5
Total		130	66	**196**

trial reflect the fact that the majority of the refugees are women and that women tend to stay more indoors than men thus being more often in the home when the medical assistant team calls. The majority of the beneficiaries taking part in the field trial were in the age groups 15 to 30 years and 31 to 45 years, these two age groups made up 61.11% of the trial. This age distribution reflects the overall demographics of the camp population at large (see Figure 1).

The 958 screenings resulted in 196 referrals to consultations for further assessment and (if need be) treatment (see Table 2). That is a referral rate of 20.46% for the whole group. Of the 740 female beneficiaries screened, 130 were referred to further consultations at a clinic. This is a referral rate of 17.56% for the female beneficiaries. In comparison, of the 218 men screened, 66 were referred to consultation amounting to a referral rate of 30.27%. The referral rate of men taking part in the trial, then, was significantly higher than that of women, i.e. 30.27 % for men compared to 17.56% for women. Arguably, this difference in referral rate between men and women begs an explanation. Working with a population of 958 screenings puts this difference somewhat outside of the realm of pure chance making it hard to see it as purely a random occurrence. Having said that, the 218 men taking part in the trial only made up 22.76% of the participants and as such makes it harder to make any definite conclusion. However, as we shall consider in the next section, men do complain about the stresses of camp life especially in regard to not being able to provide for their families, as they are not allowed to take a paid job. On the other hand the stressors on women in the camp are equally abundant including domestic disputes and domestication. Other explanations include differences in help-seeking behaviour, and we shall return to this below.

The field trial resulted in a 20.76% referral rate unevenly distributed between the 740 women and 218 men taking part in the trial. The rate of mental issues for the group as a whole is close to the 15–20% seen in other crisis (Steel et al., 2009). As such, there is perhaps nothing surprising about the numbers. It may be expected considering the situation in the camp and the circumstances of violence that led to its creation.

We shall now turn to consider the results of our qualitative inquiry with an emphasis on the nature of camps life and the stressors that may contribute to mental health issues for the inhabitants.

On the Stressors of Life in Kutupalong Camp

Standing on a hill, of which there are many in the area of the camp, lets one appreciate the sprawl of shelters reaching into the horizon. Hosting close to 600,000 people in one-storey shelters makes the Kutupalong extension site, as it is formally known, striking by its extent alone. According to the official Bangladesh policy, the ⟩displaced Myanmar nationals⟨ living in the camps are not refugees *per se* and are not to settle permanently. Our qualitative inquiries, that is, observations, interviews and focus groups, reveal that life in the Kutupalong expansion site is associated with several stressors including, the socio-spatial confinement at play in the camp, idleness, the break-up of extended families, domestic disputes and uncertain prospects for the future.

The shelters are built to be temporary to reflect the status of their inhabitants. That is, they are made with tarpaulin suspended over bamboo frames and have compacted stamped earth for floors. A dwelling will typically have a heavy cloth curtain, rather than a door, to separate the main entrance from the rough paths outside that serve as the street. Spread out empty sacks may serve as carpets. Each shelter leans on the next in long winding rows. From conversation, it emerged that living conditions are notoriously cramped:

Compared to Myanmar this street, this block is much more crowded. We have nowhere to sit outside, and there are no gardens, no space. And inside we are just too many people on too little space. In Myanmar, our family had a house four times the size of this hut, we had a vegetable garden and a small front porch, we had a cow, and fields to work. Here we have nothing, nothing to do. Everything is handed to us. I get up, wash, eat breakfast, and lie down again. I can spend what seems like a whole day on my back just looking up at the ceiling. The only pastime is cooking, queuing for food, or going to the health clinic..Rohingya woman, age 42, Camp 11.

The lack of space for socialising outside the shelter leads to passing most of the time in the house, which may lead to limited social interaction and loss of contact with neighbours and friends. Poor light and ventilation inside the dwelling are often associated with a sense of restlessness and suffocation, especially for the women and adolescents girls that rarely venture out. It is an ideal among many Rohingya that adolescent girls, and to a lesser extent married women, should spend their time in the home. We were told that this purdah involves that *}*women should not show themselves to men*{* other than their relatives by blood or marriage. One of the few acceptable reasons to leave the home for women in the camp is to collect relief items or to access health services, with approval from the male head of the household. This ideal and its practice are not uniform, as it varies with the household, age and status of the women. There is a risk of harassment if they, the teenage girls, go outside unaccompanied by a man. At times women would "overrepresent" being housebound rooted in the ideal that staying at home is "something a respectable women does". For example, an interviewee stated that "I have not left this house in a full year" and only further probing would reveal that she has a morning routine of going to the water post talking to other women. Culturally rooted ideals may travel across physical context. Arguably, staying at home most of the time in a (relatively) large house in a village in Myanmar is a different experience to staying indoors in a small shelter with (too) many others in a refugee camp. Life in the overcrowded camp was reported to us as abhorrent at times. In addition to the practice of purdah, women and adolescent girls face a range of barriers to leaving their shelters. These include fears around safety (especially at night), lack of appropriate clothing for some, and feelings of shame around using the wash facilities while men also stand in line to use them. Some women reported that they would avoid eating or eat very little to minimise their trips to the communal restrooms. The use of space is heavily gendered in the camp. As one man put it *}*the difference between [adolescent] girls and boys is that boys can go and play outside while girls have to stay indoors*{*. The men have much more freedom of movement, their main grievance being the idleness that follows from not begin allowed to work.

The forced idleness and unemployment in the camp stem from the transient status of the refugees. The Rohingya living in the camps are stateless as no country has yet to recognise them as their citizens. This means that they are not free to travel and work in Bangladesh. The official policy of the Bangladesh government and the UN is to seek their repatriation to Myanmar. However, return for the majority of the refugees is a very long and uncertain process that may take years if not decades of negotiation. Meanwhile, the Rohingya are in a limbo of uncertainty in terms of their future. No refugee is allowed to take a paid job outside the camp. The inability to support their family through paid labour stressed many of the men we talked to who expressed frustration with their wives and families demand for cash, especially concerning dowry. Marriage means a dowry if you are Rohingya and have a daughter – dowry is a gift by the family of the bride to the family of the groom. When Rohingya women marry, they typically leave their family and become a member of the husband's household under the supervision of the mother-in-law. Among the Rohingya in the camp, the dowry varies according to the bride's family's means, but it is hardly ever negotiable, and most often involves gifts of jewellery and cash. We were told that this is a stressor to a man (and his wife) if he has no income, because then he may have to go to the moneylender to be able to resource his daughter's marriage. More daughters than one compound the problem sometimes leading to domestic tension, distress and disputes.

I am safe here, thank Allah for the Bangladesh government sheltering us, a place of respite for us to stay. But I am without work here, without land to farm, and without income and cash. We are not allowed to work. So, since you ask, I do worry about the future, not least about the future of my two daughters. They are getting older, and I cannot keep them here forever, nor do I want too. I want them to have husbands and children of their own. But how can I afford their marriage when I have no income? Man, father of two girls, Camp 11, October 2019.

The tension with and within the family surrounding the lack of employment and money rests on the family as a whole, and was reported to us as being especially troublesome for the men perhaps as it fell to them in Myanmar to provide cash.

The refugees were assigned to blocks and shelters in the order they arrived, and not in accord with the village of their origin or with their relatives. The consequence of this is that the social cohesion of the camp is somewhat challenging and people may live apart from their families and friends from Myanmar. Moreover, relatives, even close relatives, such as father and son, mother and daughter, sister and brother, may live much farther apart in terms of

travel time that they did in their villages in Myanmar. Support in times of distress is therefore also somewhat removed, or can be. One informant told us about her situation:

When I am unhappy in my marriage, I used to talk to my mother, and that would make me feel better about it. She would be my comfort. My mother is my support. I still talk to her but not as I used to. She has found work in the camp doing work in a clinic. She has no time to travel to me here, and my husband will not let me go to her. It is too far and not safe for me he says. Married woman, age 26, Camp 11, October 2019

The sprawl of the camp, then, and the close to random distribution of refugees across the camp, i.e. in the order of their arrival, have created distance between what was once close loved ones, making support and coping with distress harder. Talking to the family may be substituted by a larger focus on prayers and reading the Quran. There has been a shift in coping mechanisms we were told by NGO staff. Sleeping excessively was mention as a way to cope with the distress of camp life and the perpetual enforced idleness that the majority of refugees experience. Cramped living conditions, inactivity, unemployment and a lack of social cohesion are also associated with domestic disputes and at times violence.

I have gone hungry very often. On the other hand, sometimes, there is food but I feel I cannot eat anything [. . .] Sometimes my husband beats me. He returns late into the night, his temper hot, and he strikes me. When I try to go to my mother's house to get away from his thrashing, he blocks my exit and beats me some more. Then he stops bringing food into the house. More importantly, he keeps relations with another woman going on three months now. It makes me feel I cannot eat. Rohingya woman in her twenties, Kutupalong camp.

Coping with such incidents is hampered by the dispersion as mentioned earlier of family and relatives. The woman quoted above is 20 years old and with a 6-year-old child. It is her first marriage and her husband's second. Her husband is bored with camp life, she tells us, and he flirts and has affairs with other women for recreation and something to do. When she confronts him, he beats her, we were told by the medical assistant tending to the household. After she was screened for mental distress, the women in question were referred to counselling. She scored above the cut-off point of seven on our mental health application. Her score was nineteen out of a maximum of twenty. This speaks to the gravity of her situation. Also, this kind of response can be considered "a cry for help", a counsellor tells us. The only question she did not reply with a "yes" was the one asking, "Has the thought of ending your life been on your mind?" The paramedics taking part in the trial tells us that no Rohingya will ever say "yes" to that question as per religions conviction, making its value somewhat dubious. We were told that Rohingya with suicidal ideation were reluctant to share their thoughts with not only counsellors but also with family and friends. Going to hell is the outcome of suicide according to most Rohingya we talked too. Previous reports on Rohingya in Myanmar confirmed this attitude, the Rohingya will often hide ideas of ending their lives out of shame and fear of being judged (Tay et al., 2018).

To reiterate, the Rohingya living in the camps are stateless as no country has yet recognised them as their citizens, and the official policy of the Bangladesh government and the UN is to seek their repatriation to Myanmar. However, return for the majority of the refugees is a very long and uncertain process that may take years if not decades of negotiation. Meanwhile, the Rohingya are in a limbo of uncertainty in terms of their future.

Discussion and Concluding Remarks

We have investigated an approach by which mental health issues and their context of origin can be mapped by using a digital screening tool in combination with a qualitative investigation of interviews, workshops and observations. Screening 958 refugees in Kutupalong camp resulted in a referral rate of 20.46% which is in line with related meta-studies (Charlson et al., 2019). The referral rate was unevenly distributed with women (17.56%) and men (30.27%). Whereas stressors such as cramped living conditions, idleness, break-up of extended families and uncertainty about the future were commonly reported by both groups, women were more often subject to being housebound and domestic violence, and men more often reported issues related to a lack of earning opportunities and joblessness. These findings are in line with Riley et al. (2017). It is noteworthy that none of the refugees we talked with mentioned their violent displacement from Myanmar in relation to our conversations with them about their mental wellbeing. They did not point to their past experiences of violence in Myanmar as responsible for any mental hardship they might have now. Perhaps this is because they do not make a causal link between the experience of exiting Myanmar and later mental hardship, or perhaps these past events are too painful to share with relative outsiders such as ourselves.

As indicated, there is no direct correspondence between Western defined diagnostic categories and the Rohingya lexicon of distress (Tay et al., 2018). One key strength of the approach of the SRQ-20 and by extension, our screening app, may be that it bypasses the issues of vocabulary by focusing on symptoms quasi-universal to the human body. A key rationale for our screening app then is that by being attentive to bodily symptoms, rather than cultural idioms of distress, the screening tool can defer the cultural-linguistic issues of talking about mental health issues to the counselling situation, making the task more straightforward for the paramedics – that is they "just" have to screen. In counselling, however, there is no escape from engaging with the idioms of mental distress as they manifest in Rohingya language. The counsellors we worked with recognise the Rohingya concepts around mental distress and mental illness. The point is that while the digital SRQ-20 based screenings can be conducted by health workers that have less than perfect knowledge of the Rohingya concepts of mental distress, the counselling session that follows cannot

as they rely on an intimate understanding of the local idioms of mental distress.

Finally, if we extrapolate our 20.46% referral rate based on 958 screenings to an *adult* site population of about 300,000 in Kutupalong alone, then the number of people potentially suffering mental hardship becomes 61,000. Our small pilot project does not have the resources to deal with a mental health crisis on that scale. Therefore, we may call for mental issues to be part of standard mental health services on a more regular basis. Hopefully, our experiences can inform future efforts.

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Conflicts of interest

There are no conflicts of interest.

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