Sophie MASSON, Epicentre, France

Background

On August 25, 2017, a counter-insurgency military operation in Rakhine State, Myanmar, led to the displacement of approximatively 626,000 Rohingya civilians into Bangladesh in under three months. To inform humanitarian assistance, Médecins Sans Frontières (MSF)/ Epicentre performed a survey to estimate retrospective mortality, and set-up a prospective mortality surveillance system among the population of Balukhali 2 and Tasnimarkhola settlements, in Cox's Bazar District, Bangladesh.

Methods

In November 2017, MSF/Epicentre conducted a retrospective survey with systematic sampling among a population of 135,980 Rohingyas (1,529 families included) who had recently arrived in the two targeted settlements in Bangladesh. The recall period for mortality extended from May 27- November 12, 2017, spanning roughly equal periods before and after August 25, 2017. Heads of family described the family structure, and provided the date, location and cause of death for family members who died during the recall period. Following the survey, a prospective mortality community-based surveillance was implemented using a weekly systematic sampling (1/4 households interviewed every week) and a recall period of one week.

Results

Before the crisis, the crude mortality rate (CMR) (expressed as deaths/ 10,000/day), was 0.6[95% CI: 0.4-0.8], and the under 5 mortality rate

(U5MR) 0.5[0.2-1.1]. Following the crisis mortality rates were 4.6[4.1-5.2] and 3.8[2.8-5.2] respectively. Violence caused respectively 77.4% and 57.5% of these deaths. Over this later period of time, 88.1% of the deaths reported occurred in Myanmar or during the exodus and 86.1% during the first month of the crisis. During this first month, coinciding with the pic of displacement, the CMR was 10.2[8.9-11.6], and the U5MR 7.4[5.2-10.6], with 85.3% of the deaths reported as due to intentional violence. Following the survey, the prospective surveillance showed a rapid decline of the mortality to reach a CMR of 0.1[0.0-0.2] and an U5MR of 0.4[0.0-0.9] end of December.

Conclusions

This survey provided epidemiological evidence of high rates of mortality due to violence among the displaced Rohingyas in Myanmar, while the prospective surveillance in the camps in Bangladesh showed a mortality comparable to the mortality among this population prior to the displacement and the events.

In November 2017, MSF/Epicentre conducted a retrospective mortality survey among recently settled Rohingyas in Tasnimarkhola and Balhukhali 2 settlements in Bangladesh. This survey provided epidemiological evidence of high rates of mortality due to violence in Myanmar.