Temporal and Spatial Trends of Prevalence of Communicable Diseases During Flood Disasters: The Case of Kilosa

The threat of communicable diseases outbreak is greater during and after a disaster than other times particularly when large population has been displaced. The main objective of this study was to analyse temporal and spatial trends of prevalence of communicable diseases during flood disasters in Kilosa. Moreover, determinant factors for the prevalence of diseases and the needs and options for improving control measures of communicable diseases were investigated. The study was conducted at Dumila, Mateteni, Msowero and Magole which were mostly affected by 2014 floods. Data were collected through physical observation, structured questionnaire, consultation, key informants interview and literature review. The study revealed that cases of communicable diseases during flooding period were higher than non-flooding period. During flooding period many cases of malaria, diarrhea, ARI, pneumonia and UTI were reported with an average of 2376, 494,1573, 281 and 464 cases per year, respectively. Contrary to malaria the prevalence rates of diarrhea, UTI, pneumonia and ARI were higher during floods season compared to dry season. During dry season the prevalence rate of malaria ranged from 318.1 to 782.9 per 1000 people. About 46% of the people in the case study areas use Mkondoa River water and 30% use shallow wells for drinking and other domestic purposes, which were heavily contaminate by fecal matter during flooding due to poorly designed and located pit latrines. All residents (100%) at Dumila, Mateteni, Magole and Msowero are using simple pit and 90% of the latrines were not covered and hence accessible to filthy flies. Poor hygienic practices and improper disposal of solid wastes increased the risk of encountering communicable diseases. Dumila and Mateteni were highly affected by floods sine they are located in flood plain and low lying areas. In the four villages cases of communicable diseases were unevenly distributed, high distributed, high cases of UTI, pneumonia and ARI were found at Dumila and Mateteni. SWOT analysis enabled to derive rational alternative measures for the control of communicable diseases.

For full thesis please contact Mujahid Gabier at mujahidg@sun.ac.za