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“Assessment of Community Concerns after Lombok Earthquake using Social Media Narratives”

After the August 2018 devastating Lombok earthquake, the Indonesian Ministry of Social Affairs conducted field surveys for the need assessment of communities. Based on the surveys, the Government of Indonesia later published a need assessment catalog, called Displacement Tracking Matrix (DTM), to portray the status and needs of the survivors in disaster shelters. The DTM initiative has been well received, but some of its shortcomings are (i) the field surveys were conducted almost two months after the disaster, and (ii) the DTM did not reflect detailed emotional and social concerns of the victims. We argue that considering the high consumption trend of social media in Indonesia, it can be a critical source to obtain quick, easy, personal, and location-specific data of concerns and needs of communities after the

disaster. In this study, we aim to incorporate both field surveys and social media data to assess the needs and concerns of the affected communities after the disaster to enhance the relief operation. Using narrative analysis techniques based on natural language processing, we interpret the tweets of local communities posted from July 29 until October 31 of 2018. We found that the concerns related to feelings and social supports were prominently immense than the physical and material needs. The behavioral reactions to disasters did not occur only in disaster-stricken areas. These reactions also spread and amplified the impacts far beyond the immediate victims and surrounding communities. These behaviors addressed the willingness of people to be more empathetic, to spread benevolence, and to contribute to a philanthropic demeanor in traumatic events such as natural disasters.