Chief Complaints Pre- and Post-2015 Earthquake in Rural Nepal

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Introduction: Characterization of presenting complaints is key to establishing locally appropriate healthcare systems, resources, and facilities. Little data exists on the changes in chief complaints (CC) before and after a natural disaster. This study characterized the baseline CC of a village in rural Nepal and determined how these complaints changed immediately post-earthquake.

Methods: We conducted a retrospective analysis of CC logs from Himalayan HealthCare (HHC), specifically from their work in the Lapa village. HHC provides free services in rural locations and records presenting complaints. This group was present before and after the April 25, 2015, earthquake. We aggregated data from physician logs and trends between presenting complaints extracted.

Results: Overall, 1,227 patients were seen, evaluated, and treated by HHC. During the 2.5-day service trip pre-earthquake, a total of 366 patients presented for care (146.4 patients/day), with gastrointestinal (GI) (20%), orthopedic (13%) and ophthalmologic (10%) issues comprising the three most common CC. During the five-day post-earthquake trip, 861 patients presented for care (172.2 patient/day). Primary CC were GI (38%), orthopedic (15%) and respiratory (7%). There was a significant change in CC for diarrhea, which rose from 6% to 23% pre-and post-earthquake, respectively. Only four other diagnoses increased in frequency: GI (excluding diarrhea), non-orthopedic trauma, orthopedics, and neurology (which was driven by headaches and migraines).

Conclusion: As expected, we found an increased demand for trauma and orthopedic services after the 2015 earthquake. There was a significant increase in diarrheal disease, likely from the disruption of infrastructure, i.e., safe ingestible water, damaged toilets leading to open defecation and poor plumbing. More studies are required to better characterize the needs in these remote locations to strengthen the infrastructure and health systems to be more resilient in such disasters.