

QLARM Estimates of Losses after the M7.8 Earthquake of 25 April 2015 Nepal

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Fatalities reported by news media and government agencies, as a function of time after the earthquake of 25 April 2015 in Nepal (red curve in Figure 1), compared to the real time estimate using QLARM after 5 hours (Black horizontal lines in Figure 1). Some of the reports were taken within days from the web site NINTRAS (http://www.seismo.ethz.ch/prod/nintras/index_EN), others from television reports and government web sites such as the reliefweb (<http://reliefweb.int/report/nepal/act-alliance-appeal-nepal-earthquake-recovery-reconstruction-and-resilience-3r-npl161>).

In a second message, QLARM overestimated the number of fatalities, giving a minimum value of 20,000. This number would have been exceeded if it had not been Saturday and children were in schools, which collapsed.

It is clear that for five days, official agencies and news media believed that the number of fatalities was less than half of that reported in the end. This final report is recognized as a minimum estimate because casualties from remote villages are likely not counted correctly or not registered at all.

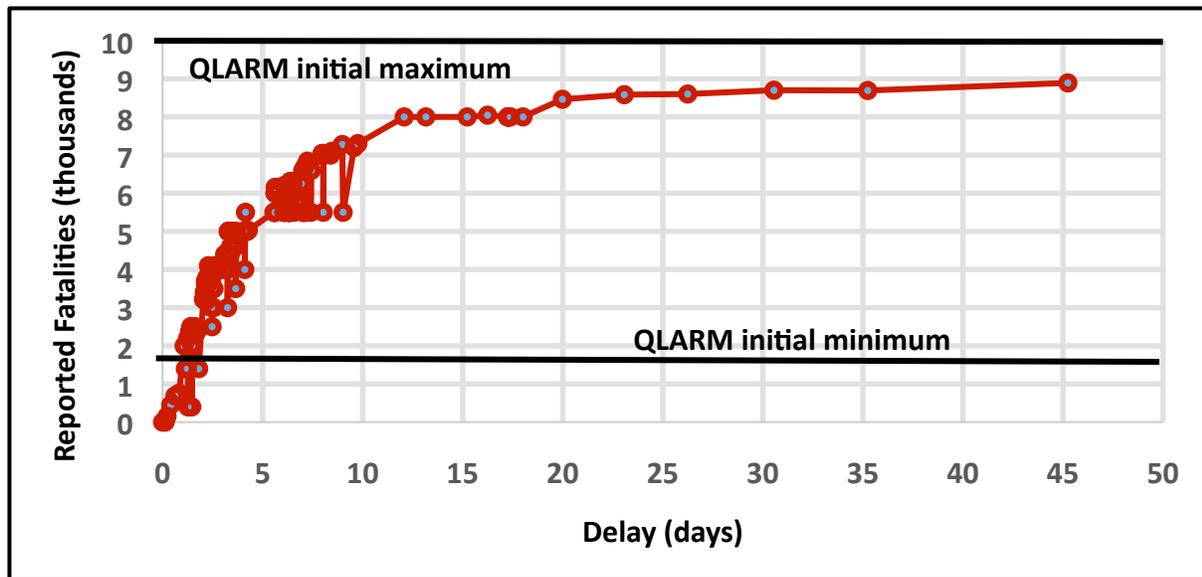


Figure 1: Reported fatalities as a function of time after the M7.8 earthquake of 25 April 2015 in Nepal (red), compared to initial estimates by QLARM after 5 hours (black).

Injured reported by news media and government agencies as a function of time after the earthquake of 25 April 2015 in Nepal (red curve in Figure 2), compared to the real time minimum estimate, using QLARM after 5 hours (black line in Figure 2). The initial minimum estimate by QLARM was exceeded after five days only. For more than a week the world believed that the number of injured due to this earthquake was less than half of the final official count. This final report is recognized as a minimum estimate because casualties from remote villages are likely not counted correctly or not registered at all.

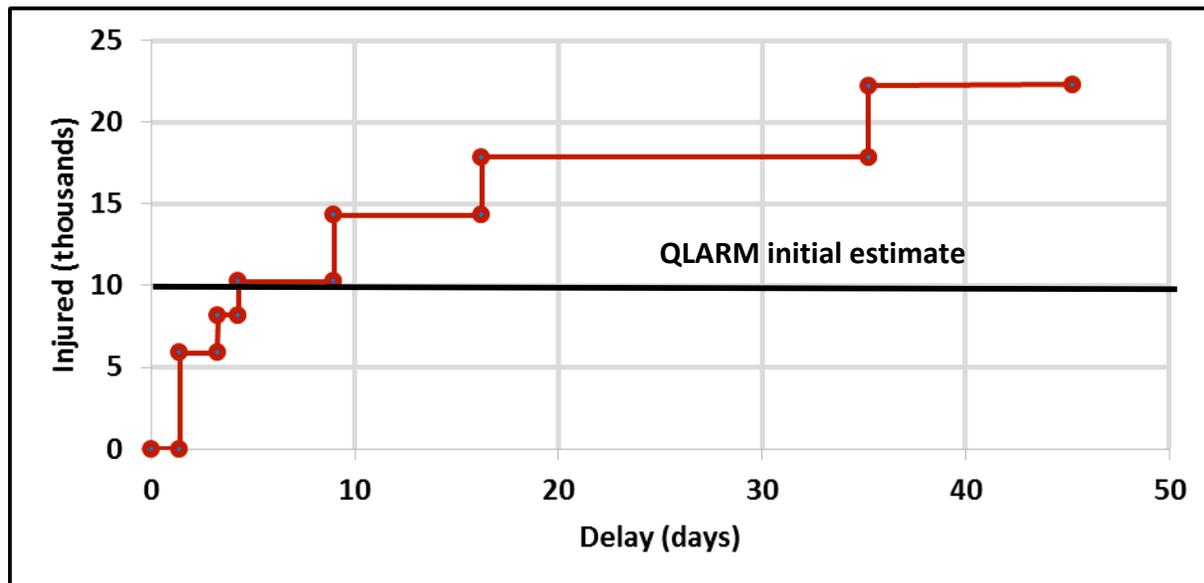


Figure 2: Reported number of injured as a function of time after the M7.8 earthquake of 25 April 2015 in Nepal (red), compared to initial maximum estimate by QLARM after 5 hours (black).