

Mortality in the East Japan Great Earthquake (4) Infants and elderlies should always suffer heavy rate of deaths?

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With the aim of clarifying age dependency of mortality in earthquakes we have been conducting a series of studies, just employing a simple division of number of deaths over population in age intervals of 5 or 10 years from area to area in devastated region. What we have found up to now is that there are 2 dominant types approximated by the capital U and J letters in English on the 2 dimensional coordinates of X axis as increasing ages and Y axis as mortality. In case of the 2011 East Japan earthquake, the age dependency in terms of J letter type dominates in most of devastated areas, which suggests that the mortality gets heavier with increasing ages but for infants it stays milder. Such result on age-dependency looks to be apart from our general recognition as infants are very much vulnerable in mortality at many disasters. The discrepancy requests further in-depth studies. In order to settle this issue we attempted two different approaches, that is, 1) comparing natural deaths of certain population with number of accidental deaths by an earthquake (Ozaki. 2012) and 2) introducing a way of evaluating the loss of life expectancy as an weighting factor inversely changing with increasing ages.

Consequently, we succeeded to make clear that infants are still very vulnerable in the meaning of bringing heavy rate of deaths.
Reference

Ozaki; kousei no shihyou, 59, 2012 (in Japanese)

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