

Dear Editor:

Regarding the paper, "Estimating Blood Transfusion Requirements in Preparation for a Major Earthquake..." by Dr. Tabatabaie *et al* published in the May–June 2010 issue of *Prehospital and Disaster Medicine*, I commend Dr. Tabatabaie and colleagues for their fine work. However, there are several salient points I feel are necessary to address.

First, the fact that the population for which the calculated estimation was made was based on the seven million Tehran residents. However, it should be noted that should a earthquake occur during the day, the population of the capital would encompass >11 million people—during the day Tehran has an influx >4 million commuters from suburban areas (like Karaj City, Eslam Shahr, Mohammad Shar, etc.) who work in the capital and return home at night who were not considered.

Second, being an anesthesiologist involved in trauma research, I also should note that the major fluid needed in earthquake disasters is serum not blood. In crush injuries, we often encounter hyperkalemia from potassium release that we must wash out with several liters of normal saline serum in order to prevent acute tubular necrosis and kidney failure. Administration of blood could make these cases

worse. I would like to have seen an estimation of how much serum would be needed in such disasters, as we have faced serum shortage in earthquakes such as the Bam earthquake (on Day 1) and should be prepared for such incidents.

Third, most earthquakes result in closed blunt injuries and not penetrating injuries, and thus, do not necessarily need blood transfusion.

Sincerely,

Masoud Saghafinia  
Assistant Professor and Head  
Trauma Research Center  
BMSU  
Tehran, Iran

Mohammad Hosein Kalantar Motamedi  
Professor  
Trauma Research Center  
BMSU  
Tehran, Iran