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Editorial Letter

Urgent Supplies of Beta-blockers are Required to Mitigate the Deleterious Cardiac Effects of the Recent Turkish and Syrian Earthquakes

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An earthquake is a fast shaking of the earth's surface that is caused by a sudden release of energy due to a break and shift of tectonic plates [1]. On February 6, 2023, a powerful earthquake with a magnitude of 7.8 struck Turkey and Syria, wreaking havoc on civilian and health-care infrastructures. As of February 10, more than 21,000 deaths had been confirmed so far, and more than 76,000 people had been injured by this catastrophic earthquake. However, the World Health Organization (WHO) announced that more than 23 million people may be affected [2,3]. This horrifying figure could be attributed to the earthquake's effects, which caused survivors physical and psychological stress [4]. Beta-blocker medications can be given to the survivors after a disaster to reduce such stress [5]. Although beta-blockers are not indicated to treat hypertension unless there is a compelling indication, about half of Turkish hypertensive patients are still using beta-blockers [6]. The main problem with beta-blockers is the high risk of cardiac events and hypertension crises, particularly after sudden withdrawal [7]. Meanwhile, adherence to medications during disasters like earthquakes usually decreases. Furthermore, the most common problem in previous earthquakes was the limited access of patients with chronic diseases to their medications; such a problem can persist for weeks or even months [8]. On the other hand, the risk of cardiovascular events is increased by earthquakes through multiple mechanisms, including sympathetic nervous system activation, increased blood pressure, endothelial dysfunction, and increased platelet activation [4]. Taking into account the above factors, beta-blocker medications can be considered lifesaving for hypertensive survivors already on such medications. Therefore, it is an urgent necessity to supply hospitals and healthcare centers in the earthquake-affected areas with sufficient stocks of beta blockers. There is also a need to train healthcare workers how to educate patients about the importance of medication adherence. International aid and the WHO can play an important role in this regard.

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