

Doctors' Knowledge of Preparedness and Response to Nuclear Power Plant Emergencies

TO THE EDITOR: In the September 2011 issue of *JNM*, Dauer et al. presented current concepts on health risks from nuclear power plant accidents (1). The authors emphasized that education about medical preparedness has a direct association with the treatment of radiation-induced injuries and with radio-nuclear emergency response.

To further expand this point, we would like to add that the level of doctors' knowledge about preparedness and response to nuclear or radiologic emergencies is deficient.

Using a questionnaire based on the protocol of the International Atomic Energy Agency and the World Health Organization (2,3), we assessed the level of knowledge of 233 physicians (47 specialists and 186 general practitioners) about preparedness for and response to a nuclear emergency in Bushehr, Iran, where there is a nuclear reactor under construction. Overall, the physicians did not achieve acceptable scores in subjects such as physics of radiation, diagnosis and management of acute radiation syndrome, and triage and management of nuclear accidents.

To address this deficiency, we implemented regular workshop-based training and education for medical practitioners, nursing staffs, hospital administrators, and radiation safety officers. In our recent evaluation study, a substantial improvement in the level of doctors' knowledge regarding preparedness for a nuclear or radiologic emergency was gained.

Following the damage to the Chernobyl and Fukushima nuclear power plants, it became even more clear that there is a need for a pragmatic approach to education and training of medical practitioners for management of casualties in the event of a severe nuclear power plant emergency.

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DOI: 10.2967/jnumed.112.105494