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Error in medicine

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Studies from the early 1990's suggested that 3-4% of patients hospitalized in America suffered an injury caused by their treatment, and that more than half of these injuries were caused by errors or systems failures. It was estimated that as many as 98,000 people die annually in U.S. hospitals because of medical errors. If the same rates apply in Italy, 19,000 people die needlessly in Italian hospitals every year. The American studies have since been repeated in 6 other countries, where the average rate of injury has been found to be close to 10%, suggesting the problem is even worse than imagined.

Studies from cognitive psychology and human factors engineering, as well as everyday life experience, show that errors are normal part of human existence. But studies also show that most errors result from faulty systems, not from carelessness or incompetence. That is, the design of the tasks and processes that we work in leads us to make

mistakes. For example, two medication containers that have similar appearing labels are an invitation to a mix-up. Requiring a nurse or a doctor to work a full shift after they have just been awake working all night increases the chance they will make a mistake. Excessive work loads make errors more likely. To prevent errors, the systems need to be redesigned. This is what commercial aviation has done with such great success.

This is what health care must do.

A major effort is underway around the world to redesign health care systems to improve patient safety. A number of new safe practices have been developed that will significantly reduce medical errors. They now need to be implemented widely in hospitals. This is part of the mission of the World Alliance for Patient Safety. Other examples of recent successes will be described. The time has come for a world-wide effort to reduce medical mistakes.