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Effects of Chemicals in Elderly

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Abstract: There are about 800 thousand chemicals in our environment and the number is increasing more than a thousand every year. While most of these chemicals are used as components in various consumer products, some are faced as industrial waste in the environment. Unfortunately, many of these chemicals are hazardous and affect humans. According to the "International Program on Chemical Safety" of World Health Organization; Among the chronic health effects of chemicals, cancer is of major concern. Many substances have found in recent years to be carcinogenic in one or more species of laboratory animals. Especially with respect to long-term effects, the response to a chemical may vary, quantitatively or qualitatively, in different groups of individuals depending on predisposing conditions, such as nutritional status, disease status, current infection, climatic extremes, and genetic features, sex and age of the individuals. Understanding the response of such specific risk groups is an important area of toxicology research. People with age 65+ is defined as "aged (or elderly)". The elderly population in the world is about 600 million, which corresponds to ~8 percent of the world population. While every 1 of each 4 people is aged in Japan, the elderly population is quite close to 20 percent in many developed countries. And elderly population in these countries is growing more rapidly than the total population. The negative effects of chemicals on elderly take an important place in health-care related issues in last decades. The aged population is more susceptible to the harmful effects of environmental chemicals. According to the poor health of the organ systems in elderly, the ability of their body to eliminate the harmful effects and chemical substances from their body is also poor. With the increasing life expectancy, more and more people will face problems associated with chemical residues.

Keywords: elderly, chemicals' effects, aged care, care need

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