Health hazards of exposure to mercury

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Mercury exists in various forms and people are exposed to each in different ways. Mercury is used in thermometers, barometers, manometers, sphygmomanometers and other devices. Mercury is an ingredient in dental amalgams. Some medicines use small amounts of these compounds as preservatives e.g., thimerosal. Mercury poisoning can result from exposure to water-soluble forms of mercury (such as mercuric chloride or methylmercury present in fishes), by inhalation of mercury vapor or by ingesting any form of mercury. The most toxic forms of mercury are its organic compounds, such as dimethylmercury and methylmercury. Other exposures may result from using or breaking products containing mercury. Mercury can cause both chronic and acute poisoning. A severe form of mercury poisoning first presented in Japan as Minamata disease. Dental amalgam is a direct filling material used in restoring teeth. It is made up of approximately 40-50% mercury. Metallic mercury when used as dental filling mainly causes health effects when inhaled as a vapor where it can be absorbed through the lungs. Symptoms of prolonged and/or acute exposures include: Tremors, emotional changes, insomnia, neuromuscular changes and disturbances in sensations. In conclusion, mercury and most of its compounds are extremely toxic and must be handled with care.

Biography
Monica Kelkar has completed her Bachelor of Dental Surgery (BDS) from Maulana Azad Medical College in India in the year 1998. She has done certificate course in Hospital Waste Management (CHCWM) from Indra Gandhi National Open University (IGNOU), New Delhi. She is working as a Medical Officer in Maulana Azad Institute of Dental Sciences (MAIDS), New Delhi, India, for the past 18 years. She has presented several papers and posters in reputed journals. She has also conducted programs in biomedical waste management and infection control under the aegis of Delhi Dental Council. She is also serving as an Assistant Biomedical Waste Management Officer in the Dental Institute.

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