

12<sup>th</sup> International Conference on**ENVIRONMENTAL TOXICOLOGY AND ECOLOGICAL RISK ASSESSMENT**

October 19-20, 2017 | Atlanta, USA

**Pathological changes of coal-burning type of endemic fluorosis and its prevention****Zhi-Zhong Guan**

Guizhou Medical University, China

Endemic fluorosis widely occurs in the world and is characterized by skeletal and dental fluorosis and a vast array of pathological changes in whole bodies, which has been proved by our large number of basic investigations. Coal-burning type of endemic fluorosis is the severest one, which was confirmed in China in 1970's. This type of endemic fluorosis is primarily induced by fluoride-contaminated food and air indoor caused by smoke emitted during burning coal, which contains a high concentration of fluoride. In China, about 36 million of people live in such areas of coal-burning type of endemic fluorosis. Among the population, 18 million are suffered from dental fluorosis and 1.5 million are skeletal fluorosis. Since 1980, an efficient strategy relating integrated control has been carried out for eliminating the disease in China. After taking the measurement for many years, the adapted coal-burning stoves have been set up and the improve health education obtained in most of families in the endemic fluorosis areas, which brings the significant decline of fluoride contamination on food and air indoor. The strategy has successfully resulted in a significant decrease in the numbers of the patients with dental and skeletal fluorosis, and in a great improvement in health conditions of the people lived in the areas. At present, the coal-burning type of endemic fluorosis in China has been efficiently controlled at present. Importantly, it is necessary to take a long-period of integrated control for efficiently eliminating the hazard of coal-burning type of endemic fluorosis.

1457658298@qq.com