

S37-1 Role of Analytical Sciences on Protection of Human Health from Risks of Abused Drugs

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The risk of drug abuse on human health is immeasurable. Also an incident and an accident caused by a drug abuse becomes a serious social problem, which should be solved in Japan and even in world. Many news concerning drugs of abuse, including cases by famous talents, announced by mass media day after day, which show an intensity of abuse. Why does a drug abuse continue? Marijuana is thought as an entrance drug of abuse. The fact that its seeds can be easily purchased by internet and secretly cultivated helps the relatively easy buying and use of marijuana. In Japan, stimulants spread most widely and the arrested numbers due to stimulants are largest among those of abused drugs. They are used in a fashion sense among youth due to their appetite suppressant effect. On the other hand, adding to heroin and cocaine, new designer drugs such as MDMA are increasing and specified as an opiate by law.

The simple and convenient methods for analysis of drugs of abuse are in requisite to prevent of and protect from the risk of human health. Especially, to study the risks such as drug-drug interaction, highly sensitive and precise methods are required. In this symposium, the development of sensitive methods for determination of stimulants and MDMA and its application to examining the effects of drug-drug interaction to show the risks of drug abuse.