Oral Abstracts

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CHALLENGES OF ENVIRONMENTAL LEAD POISONING IN CHILDREN

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Abstract: Long-term exposure to lead can cause serious health problems, especially in young children who are more susceptible to absorbing and retaining lead in their bodies. Lead is concerned to effect the developing nervous system of children. Childhood lead poisoning has received a widely public attention health problem around the world.

After a severe lead encephalopathy pediatric case has been discovered in one industrial area in Thailand, the prototype project of blood lead level (BLL) screening and management in young children (6 month-old to 6 year-old) was carried out in that area in 2015. The medical team consisted of the clinical toxicologists, the pediatricians, the local environmental authorities with the project budget supported by the government.

The protocol for the BLL screening included the socio-demographic questionnaire, and the basic physical examination was performed. Subsequently, the BLL follow-up and environmental intervention protocol for the children was implemented. The nutrition supplement was supported in the children with high blood lead level.

Challenges and lessons learned indicate that health education, environmental management and remediation and preventive measures are important, necessary and should be concerned to minimize or prevent environmental lead poisoning. The public policy of lead screening protocol and the medical intervention should be studied more and emphasized to decrease lead exposure as the primary prevention, particularly in children.

Learning Objectives:
1. The example of the situation of environmental lead poisoning in childhood in Thailand
2. The example of the model of blood lead level (BLL) screening and management in young children