



KNOWLEDGE ABOUT PERSISTENT ORGANIC POLLUTANTS, ASSOCIATED HEALTH HAZARDS AND FACTORS AFFECTING THE KNOWLEDGE AMONG GRADE 10 STUDENTS IN NEGOMBO EDUCATION ZONE

Suranjan P.D.M., Tharaka M.C., Sonnadara S.A and Ranasinghe P

Faculty of Medicine, University of Colombo

pdmsuranjan@gmail.com

Persistent Organic Pollutants (POPs) are a small subset of organic chemicals whose characteristics of persistence in the environment, accumulation in biological organisms; and toxicity makes them priority pollutants and an environmental risk to humans and the ecosystems. Land filling and dumping of persistent hazardous compounds are a big challenge in developing countries like Sri Lanka. This study was used to assess the knowledge on POPs and its associated health hazards and factors affecting the knowledge among grade 10 students. A descriptive cross sectional study was conducted among students of grade 10, in a National School in Negombo. Data were collected using a self-administered questionnaire which contained 03 main sections. Ethical clearance was obtained from Ethics Review Committee, Faculty of Medicine, University of Colombo and data were analyzed using SPSS. Sample size was 150 and males were 107(71.3%) where majority of students (52.7%) were coming from semi urban areas. 43.3% had a family income of more than LKR. 60,000.00 per month and 73.3% had access to internet facilities. 53 students (35.3%) knew about the Central Environmental Authority (CEA) and only 08 (5.33%) students had heard about waste disposing methods recommended by the CEA. The knowledge about POPs among the students was very poor. Mean score was 4.8 out of 33. Comparatively students had some knowledge about the environmental pollutants/POPs associated health hazards where 25.3% students (38/150) scored more than 50% marks (5 or more out of 10 marks) for the questions which were based on knowledge about health hazards. There was no significant association with the knowledge and socio-demographic characteristics. The knowledge about POPs and associated health hazards among grade 10 students was inadequate and other contributory factors did not show any significant association with the knowledge. It is recommended to conduct similar studies with large population and to include information about POPs in the school syllabus after consulting educationalists. Specially improving knowledge and attitudes regarding waste disposing methods and waste management among students will be a great investment for the future.

Keywords: *Persistent organic pollutants, Statistical package for social science (SPSS), Central Environmental Authority*