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Respiratory disorders among adolescent females exposed to pesticides, Menoufia Governorate, Egypt

Adolescent females relative to pesticide applicators are often environmentally exposed to pesticides either by living near planting sites, by using pesticides at home, or by having contact with contaminated clothes and pesticide application work tools. This study aimed to evaluate whether environmental pesticide exposure could be associated with respiratory disorders among adolescent females. A cross-sectional study was conducted on a random sample of 100 pesticide exposed and 50 non- exposed adolescent females at Menoufia Governorate, Egypt during the period of pesticide application season of cotton crop from the first day of May to the end of September 2017. The participants were interviewed using a predesigned questionnaire about pesticide exposure and respiratory manifestations. Also, spirometric measurements and Acetylcholinesterase (AChE) activity were performed before and after the pesticide application season. The control adolescent females had a higher AChE activity, a lower prevalence of respiratory symptoms and higher means spirometric measurements than the exposed group. The exposed group presented a prevalence of 6% and 24% for cough, 4% and 11% for rhinitis, and 6% and 26% for dyspnea during the pre and post season; respectively. In addition, there was a decrease in spirometric measurements (FEV1%, FEV1/FVC%, FEF 25-75% and PEF%) in post than preseason among the exposed group. Also, there were significant associations between (AChE) activity and either of prevalence of respiratory manifestations or spirometric measurements among the exposed females. These findings suggest an association between environmental pesticide exposure and either of respiratory manifestations or spirometric measurements among adolescent females relative to pesticide applicators. Educational and training intervention programs on pesticide handling and safety precautions are recommended for protecting either the occupationally or environmentally pesticide exposed personnel.

Reference

1. Abdel-Rasoul G, Abou Salem M, Mechael A, Hendy O, Rohlman D, Ismail A (2008) Effects of occupational pesticide exposure on children applying pesticides. Neuro 29(5):833–838
2. Abu Mourad TA (2005) Adverse impact of insecticides on the health of Palestinian farm workers in the Gaza Strip: A hematologic biomarker study. Int J Occup Environ Health 11:144–149
3. Adad L, Andrade H, Kvitko K, Lehmann M, Cavalcante A, Rodrigues R (2015) Occupational exposure of workers to pesticides: toxicogenetics and susceptibility gene polymorphisms.

Biography

Gaafar Mohamed Abdel-Rasoul is a Professor of Occupational, Environmental and Community Medicine. He has an experience in public health research including Adolescent and Pediatric health. He has many national and international research articles in this field. He supervised approximately 150 Master and MD theses. He has an experience for 40 years in teaching medicine in the era of public health, environmental and Occupational Medicine, medical and vital statistics, and Epidemiology. He participated in many national and international conferences all over the world. He is a reviewer for many national and international journals. He is a member in Egyptian Universities Promotion Committees (EUPC). He is the Egyptian principal investigator for many national and international medical projects.

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