

ASTHMA KNOWLEDGE AMONG PRIMARY AND SECONDARY SCHOOL TEACHERS IN RURAL NORTHERN COSTA RICA

Claire Pitstick, St. Olaf College
Advisor: Dr. Anabelle Alfaro

Asthma is a chronic inflammatory disease of the airways. It is very common among children and is a major cause for emergency room visits and missed school days. Costa Rica has one of the highest rates of childhood asthma in the world; so it is important for teachers to know how to prevent and treat asthma attacks in the classroom. Since schools in rural Costa Rica had not yet been studied, teachers were sampled from six schools in Venecia and Aguas Zarcas, San Carlos. During March and April 2014, 185 asthma questionnaires were collected. Among these teachers, 51% were aware of asthmatic students in their classes, and 19% recalled witnessing an asthma attack in the classroom. It is evident that teachers need to learn more about asthma attacks in terms of prevention, triggers, symptoms, and medications. Interest in asthma training was high among 85% of the teachers, and the preferred format was a lecture or workshop. Higher asthma knowledge was significantly related to living with an asthmatic person ($p=0.014$), but not with being asthmatic, having asthmatic students, witnessing an asthma attack in the classroom, sex, age, education level, or teaching experience. Greater interest in asthma training was related to awareness of asthmatic students ($p=0.031$), prior experience with an asthma attack in the classroom ($p=0.033$), and higher asthma knowledge ($p=0.022$). Primary school teachers were more likely to be aware of asthmatic students in their classes compared to secondary school teachers ($p=0.002$). Training for teachers should focus on the prevention of asthma attacks in the classroom, recognition of symptoms, and correct administration of a salbutamol inhaler while waiting for the ambulance or parents to arrive. Hopefully, this study will improve the prevention and treatment of asthma attacks in Costa Rican schools.