Evaluation of knowledge of anaphylaxis in adolescents and implementation of an educational programme in schools in our area

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Aims: To establish the knowledge that exists among adolescents in our region about anaphylaxis and its treatment. To determine the usefulness of a theoretical and practical workshop on the management of anaphylaxis and adrenaline auto-injectors among adolescents.

Methods: We conducted two methodological approaches: a descriptive study of knowledge about anaphylaxis in a cohort of secondary students through a questionnaire; an analytical quasi-experimental study comparing the previous results with those obtained after conducting a workshop on anaphylaxis. The workshop consisted of a theoretical and practical training of 45 minutes.

Results: We included 115 teenagers from 13,74 years on average, being the 13,9% of them allergic to some food. Before the workshop, the 82,6% of teenagers recognized anaphylaxis symptoms. Later, this percentage reached the 87,2%. The 41,7% of them considered the adrenalin as a treatment, a slightly higher (56%) percentage among allergic. After the workshop, the 100% of respondents considered the adrenalin as a first choice, which means a statistically significant change. With regard to the correct use of auto-injectors, it was well identified by the 42,6% of students before the workshop and by the 97,2% of them thereafter. The most frequent cause of error was the location of the injection, followed by the device clamping. In the questions formulated as a clinical case before the workshop, the 41,7% of respondents would administer adrenalin to a patient with anaphylaxis. This figure increased among allergic up to 50%; they would then reach the 99.1%, which is a statistically significant change.

Discussion: It is common for adolescents to develop their activities accompanied by other teenagers, without the presence of their family and caregivers. Hence the importance of an universal education in anaphylaxis in school. We plan to carry out our study on a pilot basis, in order to assess its expansion to other schools in our region. We observed a statistically significant increase in adolescents that identify anaphylaxis and properly use adrenaline.

Conclusion: There is a significant lack of knowledge about anaphylaxis among teens in our sample. The development of a theoretical and practical workshop on Anaphylaxis and the management of self-injectable epinephrine in their education significantly increases their knowledge and makes us consider its universalization.