Título: AN APPROACH FOR ENVIRONMENTAL MICROBIOLOGY TEACHING BASED IN THE DAILY LIFE

Autores: Barbosa, A.A.V. 1, Granato, T.M. 1, Intorne, A.C. 1


Resumo:

The microbiology is often transmitted in an unappropriated or fragmented way at school. It leads the students to the wrong idea, that microbiology is just memorization and pathologies. Thus, it propagates in the population the idea that all microbes are harmful. Teaching methods used emphasize the elimination of microbes, teaching how to wash hands, bathing and brushing teeth confirms it, disregarding that along with the pathogens, are also eliminated the beneficial microbes associated with the human body. Despite being taught to know the microorganisms is important in preventing diseases, only this argument does not convince the students of the importance of microbes in their daily lives. In this work, our aim is to demystify the idea of microbes such as pathogenic beings and explain about the benefits of microbes in the student’s lives. Then, lectures about that were applied to students from elementary schools public education of São Fidélis, RJ to talk since microbes of our food to those used in agriculture and water treatment. It is also shown their benefits in human health by mutual associations, improving digestion, producing vitamins and assisting the immune system to prevent diseases. To evaluate the efficiency of the lectures, questionnaires were administered before and after the talks with objective and discursive questions. It was observed that students who understand that most microbes are beneficial rose from 35% to 70% and that ones who find them useful microbes increased from 65% to 76%. The understanding of the potential use of microorganisms in industry increased from 41% to 56% and the understanding on the aid of microbes in plant growth increased from 68% to 88%. The rate of students who understand that microbes can help plants, people and animals also increased, ranging from 41% to 79%. When asked if life human would be easier if there were no microbes, the rate of positive responses decreased from 38% to 15%. Thus, we conclude that the lectures are achieving positive effect on the target audience, demystifying the idea that microbes exist only to cause disease, using human daily actions to demonstrate how they may be relevant to the life of the planet.

Palavras-chaves: school, beneficial microbes, teaching methods

Agência Fomento: UENF, Faperj