



Scientific report

INNOVATIVE METHODS OF EDUCATION OF MEDICINE

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In March 2009 Dr. Rakesh Kumar Sharma visited the Department of Chemistry and Biochemistry at the Faculty of Medicine, of Trakia University in Stara Zagora, as a participant in an international collaborative programme. Dr. RK Sharma is Head of CBRN Defense at the Institute of Nuclear Medicine and Allied Science; Delhi, India (also holds appointment as Adjunct Professor at the Faculty of Pharmacy, Jamia Hamdard University, Delhi and Honorary Advisor to the National Disaster Management Authority of the Government of India). The professional contacts have turned out to be the beginning of beneficial international cooperation in the utilization of good educational practices in working with students as well as in enriching and improving educational content.

The purpose of this publication is to discuss the beneficial international cooperation between scientific and educational organizations with similar educational (pedagogical) interests.

Dr. Sharma is closely following the Metylisocyanite tragedy in the Indian city of Bhopal where 20,000 people died and another 120,000 were intoxicated. In the last three years before coming to Bulgaria, he studied the publications of members of the department. A number of scientific publications and many issues for future research were discussed in place. Innovation lies in sharing our experience in teaching the students. Dr. Sharma shared his lecture notes with members of the Department and gave them written permission to be used in the training of students. In their turn, the professors from the Department provided him with photographs of teaching aid materials, which he used in his presentations for better illustration, and these materials were highly appreciated by Dr. Sharma.

One part of the materials, provided by the Dr. Sharma was used in the lectures in Disaster Medicine (a mandatory course) as well as in the elective course in Biochemical Protection of the Population and National Economy in Crisis Situations. The lectures were conducted with

students of Medicine from the Faculty of Medicine in Trakia University. This is an example how the educational content was enriched. It led to a significant increase in the number of students attending the lectures (e.g. 86 students attended a lecture on April 1, 2009). The higher number of attendees resulted in more active participation during the lectures and the number of questions students asked their instructor increased dramatically. Students were eager to receive the additional information on the discussed content. Furthermore, the preparation of students during seminars as well as the quality of their individual reports on a given topic was improved considerably. All these things lead to stimulating the ability of students to work independently.

Our colleagues from India are interested in Bulgarian researches, especially with regard to new alternative absorbents for gas masks based on lyophilized blood products as well as abilities for radioprotection through food supplements, developing in Department. The use of the latter is allowed by the respective commissions / competent authorities in Bulgaria.

In this respect, new ideas have occurred for future collaborative research projects on the problems of radioprotection as well as the sorption of a number of highly toxic substances such as chemical warfare agents such as sarin, soman, the industrial toxins ammonia and chlorine, pesticides, etc.

In conclusion, such international contacts should be encouraged. They are very beneficial and lead to quality level of education and collaborative scientific/academic development /research projects.

1. Collaborative methods of education become part of the training of Medicine.

2. New scientific development in the field of Chemical, Biological, Radiation and Nuclear Defence take place.