

On the Advancement of Science in Developing Countries: an Example of Seventy Croatian Young Scientists Educated in Germany and USA

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Aim. Analysis of the outcome of postdoctoral training of 70 Croatian fellows trained in Germany and USA.

Subjects and Methods. Since 1980, the author has selected 55 male and 15 female candidates, and sent 19 to Germany and 51 to USA for postdoctoral training. Their age, sex, alma mater, average mark achieved during graduate study, employment status at the time of leaving the country, and the country of training were analyzed as independent variables. The outcome of the training was assessed by the evaluation of a trainee's work after the first two years of training, and in June 1996, by determining whether the trainee had returned to the home country, and analyzing the type of job he/she finally choose.

Results. The trainees under 30 years of age, and with higher average examination marks achieved during graduate studies tended to be more successful but they also emigrated more frequently. However, the unemployment in the home country at the time of leaving for the training proved to be the only independent factor determining the emigration. In general, every sixth trainee failed to complete the training, every second did not return to the home country, and a half of those who returned did not upgrade their scientific work at home. Only every fifth trainee was a gain for the science in the home country, and every fourteenth actually constituted a hallmark in the development of science at his home university.

Conclusions. Education of postdoctoral fellows from small, developing countries in scientific institutions in developed countries calls for extreme caution. To avoid failures, the selector of future trainees should strictly obey the defined objective criteria of selection. To avoid that the candidates emigrate, those unemployed at home should not be selected.

Key words: Croatia; education, medical, postgraduate; educational measurement; fellowships and scholarships; training support, educational