

Title: Introduction of rural medicine to medical schools in the Democratic Republic of Congo (DRC): Pilot experiment to attract future physicians to rural areas

Author: Ahuka Ona Longombe, MD, PhD., School of Medicine, University of Kisangani, Democratic Republic of Congo

Key words: rural medicine, remote areas, attitudes, clinical educational experiences, DRC

Introduction:

A study was undertaken to ascertain student attitudes towards medical practice in rural areas. Difficult living conditions in the countryside, i.e., no electricity, limited materials, push many physicians to look for better conditions elsewhere, notably in big towns or cities. In DRC, 80% of physicians serve 20% of patients in towns, and only 20% of physicians serve 80% of the population in rural areas. Thus, we initiated a project to introduce rural medicine into our curriculum, with a series of seminars, culminating with sending students to a rural hospital, so they could familiarize themselves with the realities of working in the countryside.

Objectives:

The goal of this study was to sensitize and stimulate students to want to work as physicians in rural areas.

Methods:

This study was undertaken for three weeks with 36 pre-final students (year 5 in 6 year curriculum) in the rural Nyankunde (Beni) 100-bed hospital, located 750 km away from the medical school. The curriculum innovation consisted of:

1. Questionnaire administered to students before and after training to determine their opinion on rural doctors, working conditions, and training quality, using a scale of 1- 5. The post-questionnaire, administered 2 days upon return to medical school, included additional questions for a more informed opinion of work in a rural area.
2. Survey to describe prevalence of pediatric diseases.
3. Three weeks of training in the hospital. The 36 students, together with the study director, were housed in a dormitory or with a local doctor. On the first day, students performed a survey to determine prevalence of pediatric diseases. For the next 20 days, students rotated in groups of 9 through medicine, surgery, obstetrics and gynecology, and pediatrics services. They observed local hospital doctors and performed some clinical activities (e.g., obtaining history, conducting physical examinations, and observing procedures in the operating room).

Statistical analysis included calculating percentages and comparing means using the student's t-test with SPSS software. This test is indicative because the same individuals were observed twice, before and after training.

Results:

Malaria, diarrhea and respiratory diseases were found to be the most common childhood diseases, comprising respectively, 41%, 21% and 16% of all pediatric cases. The pre-and post-questionnaire data showed that students radically changed their opinions once they were exposed to rural realities. The average scores of student perceptions of rural doctors, working conditions and training quality changed significantly from 29.51 ± 2.17 to 35.40 ± 1.44 (maximum possible score = 38) ($t=14.23$, $ddl=35$; $p<0.0001$). Moreover, additional faculty became interested in pursuing similar types of educational experiences in other places in the curriculum.

Conclusions:

These findings show that the problems in rural areas that the students were exposed to appear to be attracting factors rather than discouraging. We plan to continue these educational experiences and follow students to determine whether this type of exposure will draw them back to work in these poor and remote areas. Given our encouraging results with this small curriculum intervention, in the context of extreme conditions in rural and poverty-stricken Congo, we

strongly recommend that other medical schools consider developing this kind of learning to create attraction to rural areas.

Acknowledgements:

The author acknowledges the support of the Foundation for the Advancement of International Medical Education and Research (FAIMER) Institute 2003, and statistical analysis provided by Prof. Dr. Tshimpanga J.B.