Title: Distance learning in rural areas for students during their internships

Author: Ricardo Borda, M.D.

Context and settings: In Universidad Javeriana Medical School, the last (sixth) year of study is the Internship that is divided in two parts: the first part in small rural towns (approximately eight) and the second part in tertiary care teaching hospitals. Currently, no academic activities take place in the rural part of the internship, except for an occasional visit by one of the professors of the medical school. The medical students take no part in community development and empowerment, which is fundamental to positively modifying the attitudes of a community toward being responsible for their own health and decreasing the incidence of preventable diseases.

Why the change was necessary: The Medical School considers fundamental the acquisition of solid foundations in basic, and particularly clinical, sciences, which have to be reinforced in their medical practice during their internship. Also, it is critical to develop abilities to communicate and educate the community as well as the "teachers" of local medical personnel, such as nurses, health promoters, general practitioners and community leaders. Because of the geographical conditions and the relatively small number of professors available to visit these hospitals, the medical school faces great difficulties in establishing an academic program in these local hospitals.

What was done: Computer Based Learning Environments is used as a learning tool because it provides a rich, academic, multimedia experience with the advantages of having no geographic boundaries. Further, it does not require expensive infrastructure and can be easily kept updated and used by students at any moment they consider appropriate at their own pace. Medical faculty can be at hand through e-mail or other technologies like Skype.

The module includes videos, websites (some of them on the CD) and reference materials. A pilot module on Cervical Cancer and Prevention and Promotion was developed using NeoBook. The module is designed to be useful to medical students from undergraduates to residents.

Evaluation of results: Two groups were established as follows: Group 1 (a total of 58 students: Female 58.62%, Male 39.66% with no difference in age) — NO CBLE was used and an evaluation on the topics was performed; Group 2 (a total of 61 students: Female 60.8%, Male 39.2% with no difference in age) — the same evaluation was performed. The only difference in the evaluation was four questions relevant to software design and their attitude toward it (Is this software useful in your medical education? Is this software useful as reference material? Should more modules be developed? Suggestions?).

Group 1 had 48.5% correct answers compared to 64.5% in Group 2. In Group 2 the questions relevant to the quality of the software were answered as follows:

- 1) Is this software useful in your Medical education? Yes 98.3%
- 2) Is this software useful as reference material? Yes 96.6%
- 3) Should more modules be developed? Yes 100%

This intervention offers the students the resources to increase their competences in a specific clinical discipline and in applying promotion and prevention activities within the community.