

Title: Is research methodology taught to Guinean medical students?

Authors: Alexandre Delamou, Shannon P. Marquez, Aissatou Taran Diallo, Mamadou Bobo Diallo

What problem was addressed: In Guinea, last year medical students should conduct research and publicly defend a thesis to obtain the state doctorate in Medicine. Similarly, faculty members should publish their work to gain professional advancement. However, the quality of theses defended at the school is questioned as scholarly articles resulting from students' and their coaches' researches are limited in national and international peer reviewed journals. Low ownership of the research methodology by students and the faculty has been cited among the main factors favoring such situation.

What was done: We conducted a mixed methods research to describe the current practices, perceptions, and expectations of stakeholders about the development of a Research Methodology (RM) curriculum at the Faculty of Medicine of Conakry. Individual interviews and focus group discussion were conducted with 23 faculty members and thesis supervisors and a standardized questionnaire was administered to 125 medical students who had just completed their sixth year's training.

What was learned: In the qualitative interviews and focus group discussions, the majority of faculty members and thesis supervisors were in favor of the development of a new RM curriculum. They recognized that the current teaching of RM was insufficient and more theoretical and advised that the new curriculum include a practical follow-up during students' thesis research period. The main reasons underpinning the low rate and quality of scientific publications included the lack of qualified public health trainers and researchers in the school, insufficient training of thesis supervisors, lack of funding to undertake high level research such as clinical trials, lack of collaboration with NGOs and institutions for the conduct of their research activities, and lack of incentives for researchers and supervisors.

As for the quantitative component of our research, the mean age of respondents was 27 ± 3.1 years. About 67% were male and 82% were single. Only 20% of students correctly defined RM and 13% to cite the research designs. 21% knew what is research ethics and only 10% had a fair or more level in English.

Students had good attitudes towards RM with 85% stating that RM is important and 86% recommending a RM curriculum in the Faculty of Medicine. Only 39 of them felt that the current training in RM was sufficient and 21% were confident that they could conduct their own research project. In addition, 36% agreed that ethics training is part of RM.

In terms of practices, 33% had followed training in RM but only 17% had a previous research experience and 8% had followed a formal training in research ethics. Only 1% of them had been involved as co-author in a publication and 28 had written their thesis protocol.

According to respondents, the new RM curriculum should include literature review, study design, data analytical software, abstract writing, and poster creation along with basic epidemiology and medical statistics concepts.

In conclusion, the mixed methods research showed a low level of knowledge and practice of RM by students and thesis supervisors. However, they had good attitudes and strong expectations toward a RM curriculum.