

## **Teaching Research Methodology within an Ebola Virus Outbreak**

### **What problem was addressed?**

The recent Ebola Virus outbreak in West Africa has had a devastating impact on affected healthcare systems. An important part of the international response to the crisis is the development of national staff to better equip them to meet the healthcare needs of the West African population. The TKM-Rapide EBOVA trial was conducted in Sierra Leone between March and June 2015. The in-country clinical trial team combined international researchers and national nurses and doctors. The trial presented an opportunity to conduct an educational simulation exercise to teach research methodology and proposal development within the context of real-time application of the principles being studied.

### **What was tried?**

The exercise was structured as a game. The TKM-Rapide trial team was divided into two teams for the simulation, comprising international researchers and national staff. Each team was asked to develop a research proposal that would answer an important healthcare question relevant to Sierra Leone. National doctors were appointed as principal investigators and asked to assign roles to other team members. The rules of the Game required adherence to a strict word limit, time frame for submission and approval from a mock research ethics committee. The teams were competing for a hypothetical funding source and had to present their proposals to the group for peer review. There was a prize for the winning team. Multidisciplinary seminars led by the international staff were conducted during the exercise on clinical research-related topics. The exercise was evaluated using focus groups.



### **What lessons were learned?**

All participants reported worthwhile learning as a result of the simulation. The national doctors particularly valued applying research methodology to their own questions in conjunction with more experienced international researchers. This had been their first opportunity to adopt lead roles and be directly involved in project development. The competitive nature of the Game had proved motivating for both national and international staff and increased engagement.

However, some international staff reported frustration at working within the given team structures. Cultural differences to leadership roles, communication style, time management and team working were points of tension. Consequently, some international staff believed their team would be at a competitive disadvantage unless they took charge, whilst others became disengaged. In future, greater initial discussion about team working, roles and expectations would be beneficial.

International staff had been encouraged to use interactive teaching techniques when delivering the seminars; this proved a useful introduction to some of using new teaching methods. The national nursing staff reported feeling intimidated by the greater understanding and experience of the international staff during the seminars; inhibiting their learning. In addition, international team members were drawn from several countries, with some accents proving challenging to national staff. However, elements delivered by the national staff themselves were more accessible, particularly when international staff facilitated small group work to consolidate learning.

Overall, the exercise proved useful for building local research capability within a low-resource setting. Adapting the simulation as discussed would enhance learning further.