Cardiac pacing in sub-Saharan Africa

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We read with interest the report by Jouven et al. describing the feasibility and effectiveness of a proctorship-based approach to the development of African cardiac pacing capabilities, arguing that three missions (median seven days) enrolling 10 to 15 patients were able to efficiently train local teams.1

The ACC/AHA/HRS has published minimum standards for pacemaker training, which this on-site training approach does not meet for proficiency in pacing.2 We wonder whether this ‘Africa-Pace team’ was able to offer comparable training with such limited exposure (30–45 procedures, assuming that the first implantations were likely observerships) within 21 training days over three years. Careful follow up and troubleshooting of implanted pacemakers appear to be lacking or done remotely from another country, which is not ideal. Implanters are also likely to have an erosion of skills with the infrequent bursts of pacing.

Our recent reports on cardiac arrhythmia services in Africa incorporated most of the 14 countries mentioned in this article and include a survey on training.3,4 No operator reported training through ‘Africa-Pace team’ missions. For instance, Dr Ikama, featured in the article, was trained in France. Likewise, Niger is included among 11 countries where cardiac pacing was initiated through the mission. Yet, Niger is one of the 20% of African countries without pacemaker activity.1 Neither Niger (no existing activity) nor Guinea Conakry (only one mission in 2014) should have been included in this report.

The Pan-African Society of Cardiology (PASCAR) fellowship started in 2016 and has trained pacemaker implanters from three countries at Groote Schuur Hospital in Cape Town through an intense six-month hands-on programme of device implantation and follow up for doctors and technologists.3 Subsequent on-site proctorship when the implanter returns to his country is mandated.

A French-speaking pacing curriculum has been launched in Dakar (Senegal) since 2017. Over 18 months, fellows must perform 25 and 25 implantations as second- and first-hand operator, respectively, with 100 device follow ups. The College of Medicine of South Africa requires at least 30 and 10 single- and dual-chamber pacemakers, respectively, as first implanter.

We therefore believe that episodic mission-based on-site training is not a model to be recommended. This article 1 may be misleading, as the situation on the ground does not reflect its general message.

African populations need to be treated by well-trained specialists. The message, aiming to maintain Africa outside this standard of care, is devastating. Humanitarian missions are welcomed in Africa but provide a mechanism to support comprehensive training initiatives, which cannot replace conventional curricula. Therefore, the misconceptions conveyed by this article in the long term should be taken into account.
References