

ABSTRACT

Background Current data on cardiac surgery capacity on which to base effective concepts for developing sustainable cardiac surgical programs in Africa are lacking or of low quality. **Methods** A questionnaire concerning cardiac surgery in Africa was sent to 29 colleagues-26 cardiac surgeons and 3 cardiologists in 16 countries. Further, data on numbers of surgeons practicing in Africa were retrieved from the Cardiothoracic Surgery Network (CTSNet). **Results** There were 25 respondents, yielding a response rate of 86.2%. Three models emerged: the Ghanaian/German model with a senior local consultant surgeon (Model 1); surgeons visiting for a short period to perform humanitarian surgery (Model 2); and expatriate surgeons on contract to develop cardiac programs (Model 3). The 933 cardiothoracic surgeons listed by CTSNet translated into one surgeon per 1.3 million people. In North Africa, the figure was three surgeons per 1 million and in sub-Saharan Africa (SSA), one surgeon per 3.3 million people. The identified 156 cardiac surgeons represented a surgeon to population ratio of 1:5.9 million people. In SSA, the ratio was one surgeon per 14.3 million. In North Africa, it was one surgeon per 1.1 million people. Open heart operations were approximately 12 per million in Africa, 2 per million in SSA, and 92 per million people in North Africa. **Conclusion** Cardiothoracic health care delivery would worsen in SSA without the support of humanitarian surgery. Although all three models have potential for success, the Ghanaian/German model has proved to be successful in the long term and could inspire health care policy makers and senior colleagues planning to establish cardiac programs in Africa.