## Anesthesiology: The Global Reality

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Low-income countries are suffering from a critical shortage of anesthesiologists. In much of Africa and Southeast Asia, where premature death and disability (burden) are the highest, the fewest health care workers exist. Most developed nations enjoy approximately 19-26 physicians/ 10,000 population, and approximately 4 anesthesiologists/

10,000 population. But in low-income countries in Africa and Asia, many countries have only 1 physician per 10,000 population and only a few anesthesiologists for the entire country. A striking example is Ethiopia, with a population of approximately 85 million, which has only 12 practicing anesthesiologists! This reality means that not only are few surgical patients cared for by doctors, but that few doctors are training nurse or technician providers, and as time progresses there

are fewer and fewer anesthesia physicians being trained.

The crisis in trained anesthesia providers is further compounded by the lack of adequate monitoring and essential medicines. In many operative settings in low-income countries, there are few "required" monitors. In fact in most operative settings there is no pulse oximeter, and the only oxygen supply may be an oxygen concentrator. So the anesthesia providers in low-income countries often have limited training, and routinely function with less than what they need to provide safe anesthesia. The preventable anesthesia death rates in low-income countries are unknown, and the actual operative death rates are rarely documented. Anecdotally, preventable anesthesia deaths are noted to be common by anesthesiologist



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volunteers in many of these settings, and one of the only reports in the international literature suggests that the anesthesia death rate may be as high as 1 death in 144 anesthetics (Hodges.)

This shocking reality suggests that the developed world must become interested in the global anesthesia crisis. The history of anesthesiology in North American and Europe suggests

nothing short of an undeniable role of physician providers and the role of monitors in the practice of safe anesthesia. We must now share our success with low-income countries worldwide. This is not to suggest that this is a new truth. Organizations such as the WFSA, ASAP Today and the prior ASA Overseas Teaching Program have been involved in advocating for increased attention to the global anesthesia crisis and the important role of teaching, training,

education and academic partnerships.

The WFSA and OTP have been actively involved in overseas teaching since the 1990s. The ASAP Today, www.asaptoday, while only founded in 2007, has been working to inform the literature about the global anesthesia crisis and is an important, independent voice for the role of academic partnerships and nongovernmental organizations (NGOs) who collaborate for the essential role of safe anesthesia in low-income countries and the need for a commitment to improving delivery and data collection on anesthesia issues. The new Committee on Global Humanitarian Outreach will collaborate with these efforts, along with the American College of Surgeons, International Organization and NGOs to improve anesthesiology in low-income countries.

Stay tuned for the new Global Humanitarian Outreach committee webpage and the ongoing activities for increasing awareness on the global anesthesia crisis, and opportunities for the ASA membership to become involved in humanitarian outreach and disaster response. Haiti remains a significant focus for this committee as Haiti begins to rebuild (see article on next page). The anesthesiologists of Haiti need our support and encouragement in all their endeavors. The GHO webpage will continue to provide updates on rebuilding Haiti and opportunities for the ASA and its membership to collaborate and contribute to education and training, as well as ongoing delivery of safe anesthesia care.