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**SOAP A-80**

**INITIATING AN OBSTETRIC ANESTHESIA  
COLLABORATION TO REDUCE MATERNAL AND  
NEONATAL MORTALITY AND MORBIDITY IN GHANA**

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**Introduction:** Ghana is a West African country with 20 million inhabitants. It is an English speaking, peaceful and religious society with a stable government. It is famous for gold, cocoa, and historically, slave trade. Maternal mortality in Ghana is 540 deaths/100,000 live births; from acute hemorrhage, sepsis, preeclampsia, obstructed labor and non-hemorrhagic anemia. Four anesthesiologists representing the SOAP international outreach committee, Kybele (a non-profit medical organization) and the Obstetrics Anaesthetists' Association visited Ghana in November 2004 at the invitation of Korle Bu's Anesthesiology Department to seek information and identify opportunities for collaboration to reduce maternal and neonatal death and suffering.

**Methods:** The preliminary visit consisted of a tour of 3 hospitals: Korle Bu Teaching hospital, Accra; Central Regional hospital, Cape Coast and Ridge Hospital, Accra.

Staffing, training standards, facilities, equipment availability, the conduct of anesthesia, and the case mix were observed. The group participated in a 1 day anesthesia seminar on maternal mortality and a 3 day pediatric seminar on neonatal resuscitation. There was very active discussion with anesthesia, obstetric, pediatric, nursing and administrative staffs regarding future collaboration and needs in order to reduce maternal and neonatal mortality. The group also discussed plans concerning a future medical student exchange program.

**Results:** Sixty delegates from southern Ghana attended the courses. The seminars were highly evaluated and the participants requested that this be an annual event. Cultural and local issues impacting health care were identified. There are significant shortages in anesthesia and nursing personnel. For example, there are only 10 qualified anesthesiologists in Ghana with 6 in Korle Bu, the primary teaching center. Many doctors who train emigrate abroad. Countywide anesthesia is provided primarily by nurse anesthetists or doctors with 1-2 years of post-graduate training. Anesthesia equipment such as pulse oximeters, capnographs, and oxygen analyzers are generally limited, except in the district hospital where modern equipment and facilities are underutilized due to staffing shortage. The teaching hospital has 12,000 deliveries/year and 10-15 cesarean sections/day. Labor analgesia is not routinely provided. Halothane general anesthesia is used in 50 % of cesarean sections. Training in regional anesthesia for obstetrics is suboptimal due to staffing and supply shortages.

**Conclusion:** A 5 year strategic plan was developed regarding how anesthesiology personnel in Ghana can be better trained in obstetric anesthesia. SOAP and OAA members will be recruited for participation in future on-site training missions. The training priorities will be safe anesthesia for cesarean section, the management of obstetric emergencies and neonatal resuscitation.

**Reference:** United Nations Children's Fund 2004: <http://www.unicef.org/sowc04>