

**Training Ethiopian Surgeons in Cleft Lip Repair
Blinded Quality Assurance Outcome Evaluation**
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The Operation Smile UK and Ireland Cleft and Plastic Surgery Project - Ethiopia

Background

Jimma University Hospital is situated about 335 km southwest of Addis Ababa and has a mainly rural catchment population of over 15 million people. Operation Smile developed a partnership with Jimma University Medical School and Teaching Hospital in 2006 and, every year since then, has visited with a team of local and international volunteers to carry out large cleft surgery missions. It was always the intention to help develop a Plastic Surgery and Cleft service by transferring skills to the general surgical residents. We report the results of a blinded quality assurance outcome evaluation from the inaugural training rotation in March 2012.

Method

80 patients were screened, 50 Cleft and Plastic surgery cases were selected to be performed with teaching and training in mind. Of these 31 primary cleft lips were included. The training experience according to whether cases were assisted (AA), performed under supervision (PS) or performed solo with the trainers unscrubbed (P).

The pre and immediately post op images of cases were judged, according to the Operation Smile Quality Assurance Programme system, by an experienced evaluator (MJE), blinded as to whether the cases were performed by the trainers (PNH and DA) or by the trainees as principle operator (1 general surgical consultant and 2 general surgical residents) using the following scheme.

Results

13 out of 14 of the Cleft lip cases performed by the trainees were judged to be either excellent or good which compares favourably with those performed by the trainers (15/16).

Level	Comment
Excellent	All elements are in balance
Good	Nasal alignment, cupid's bow, white roll and free vermilion are in balance: but some characteristics can be a little off.
Fair	Overall balance is disrupted and one element is significantly off.
Poor	Overall balance is disrupted and more than one element is significantly off.

Conclusions

We believe this model shows that Cleft Lip surgery is a skill which can be taught to general surgeons used to operating with limited resources in this remote part of Africa. It is an example of the transferrable Plastic surgical techniques which could augment the armamentarium of these highly dextrous yet under-resourced surgeons.