

**"TRAINING AND QUALITY OF WORK OF
MID-LEVEL HEALTH PRACTITIONERS FOR
SURGERY (NPCS) IN MOZAMBIQUE".**

**Caetano Pereira, MD, PhD
Ministry of Health Mozambique**

3 TVET CONFERENCE

Shangai 13th-16th May 2012

Training of Non-Physician Clinicians (NPC) as a response to the human resource crisis in Mozambique

- In 1980, Mozambican health system weakened especially in rural areas due to civil war.
- 80 NPCs were trained to face significant unmet need for obstetric emergencies and war casualties.
- Outside the three central hospitals (that serve 10% of the population), the "*técnicos*" now constitute the backbone of emergency surgical care in Mozambique for 90% of the population.

Characteristics of trainees to NPCs

- Trainees to become NPCs/TCs have two years of clinical surgical training at the Central Hospital in Maputo, followed by one year “internship” supervised by qualified surgeons and obstetricians at regional hospital level.
- Nurses/midwives, "*técnicos de medicina*", clinical officers trained for clinical activities, particularly diagnostics and treatment of obstetric emergencies and trauma.
- The trainees have previous three years clinical experience, some of them in surgery, which is an advantage.

NPCs' work are safe and effective and include wide range of major surgery

- No clinically significant differences in postoperative outcomes between 978 caesarean deliveries performed by *técnicos* and 1,113 caesarean deliveries carried out by obstetricians.
- Others TCs major surgeries interventions are obstetric hysterectomies, fetotomies, bowel resections, skin transplants, colostomies, splenectomies and war surgery.
- 70% were emergency interventions and the post operative mortality was 0.1 for elective interventions and 0.4% for emergency interventions.

NPCs, if duly trained, expand access to comprehensive EmOC

- NPCs perform about 90% of major surgical interventions in obstetrics at district hospital level in Mozambique.

NPCs, Técnicos are well retained in the district hospitals

A revision of retention rates of *técnicos* compared to doctors (graduating in 1987, 1988 and 1996), revealed that seven years after graduation:

Técnicos (n=34)

- **88% of them remain in district hospitals at seven years after graduation**

Doctors (n=59)

- **Often there was not a single one in a district hospital at seven years after graduation**

Técnicos' quality of care widely accepted

A study assessing perceptions among health staff of the standard of care provided by the *técnicos*, found that 90% of doctors , including surgeons, obstetricians, traumatologists, and other health workers rated the care provided by the *técnicos* favourably.

Enabling environment

- In Mozambique , over the last decade there has been a strong commitment from the government.
- A Higher Institute of Health Sciences was created to clarify career paths for *técnicos de cirurgia*.
- The Ministry of Health approved the Human Resource Plan for the development of the HRH, focusing on management, supervision, work condition, (rehabilitation of infrastructure and equipment) and retention

Conclusions

- Obstetric surgery, including caesarean sections, and other surgical emergencies can be provided by NPCs, duly trained, with good quality even in remote areas where there are no doctors.
- Task-shifting and task-sharing are feasible strategies in comprehensive emergency obstetric care and should be seriously considered, to address the human resource crisis in other countries with a similar crisis like Mozambique in human resources for health.

20 years with surgically trained assistant medical officers (tecnicos cirurgia) saving mother's lives in Mozambique

