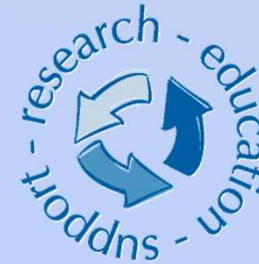


15th Annual Conference of the
National HIV Nurses Association (NHIVNA)



National HIV Nurses Association

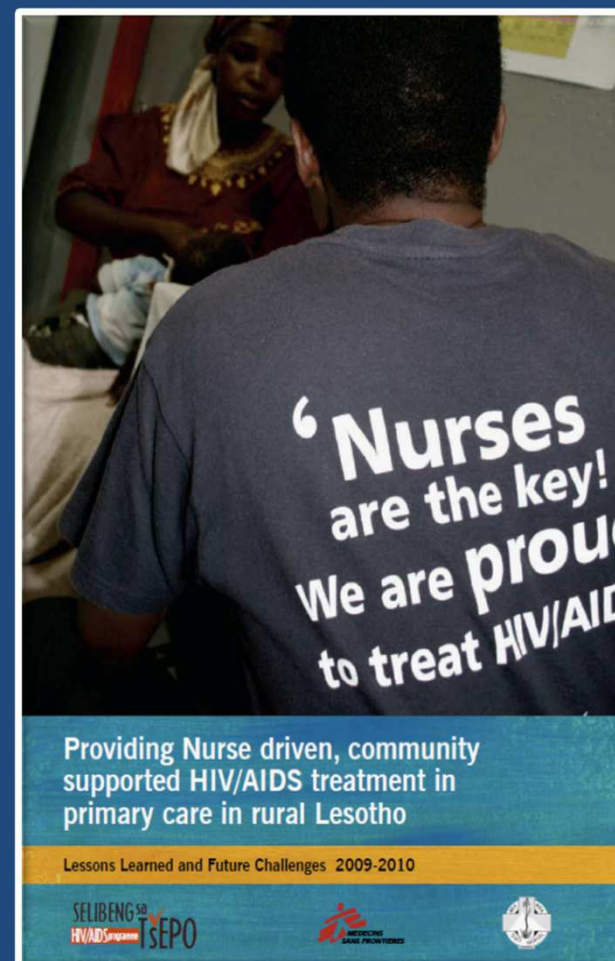
Keni Ramapepe

Médecins Sans Frontières, Lesotho

27-28 June 2013- The International Convention Centre, Birmingham

Safe ARV prescribing and effective medicine management: Role of nurse prescribing in a resource-poor area

**M. Ramapepe, Nurse Clinician
Medecins Sans Frontieres, Lesotho
27th June 2013**



OVERVIEW

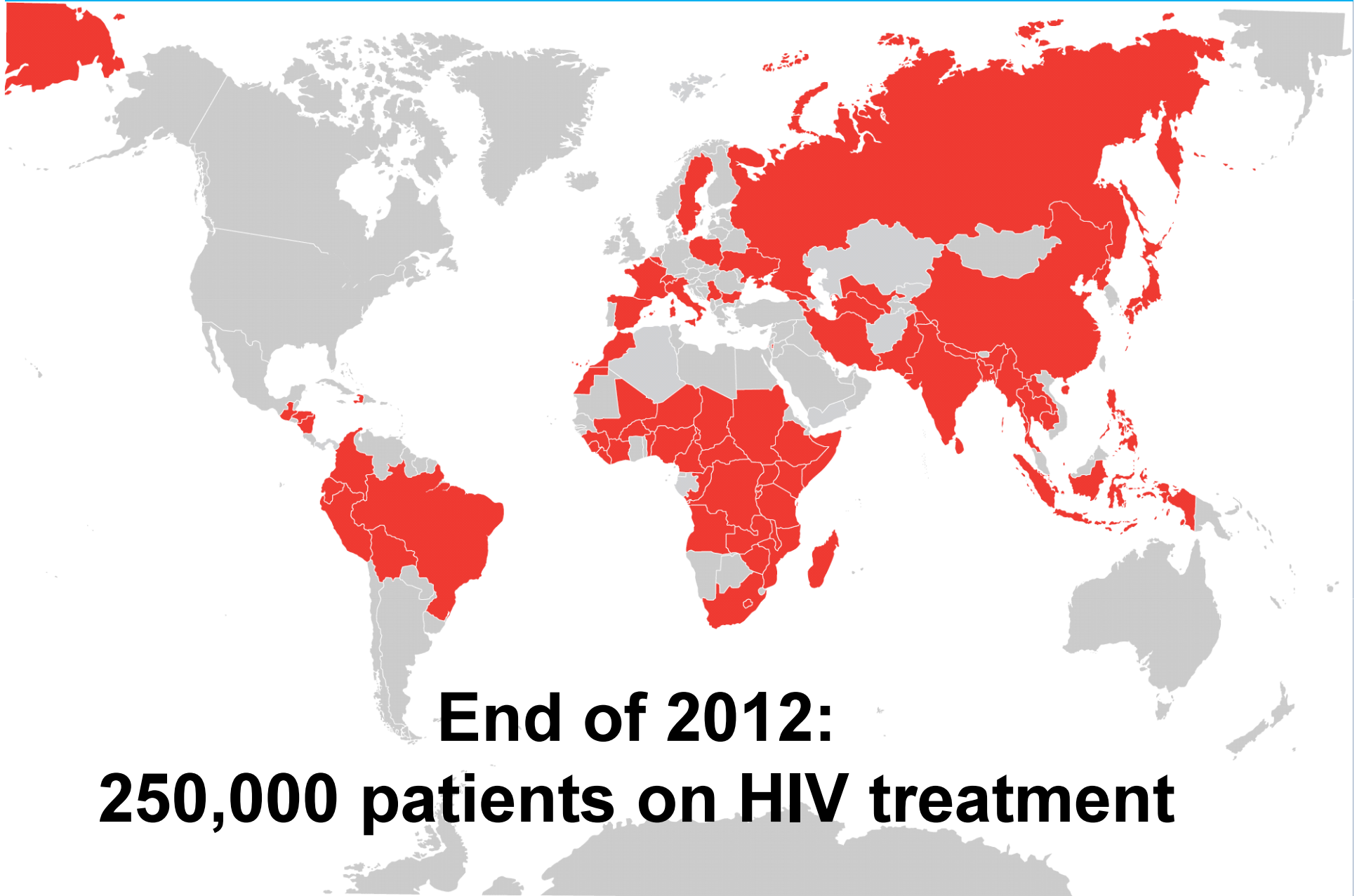
- Introduction
- Epidemiology
- Model of care (Decentralization and Task shifting)
- Nurses roles and responsibilities
- Programme Outcomes
- Challenges and Conclusion

MSF

- International Humanitarian organisation
- Traditionally involved in emergency response
- Been working on HIV since late 1990s
- MSF access campaign played big role in access to affordable generic ARVs



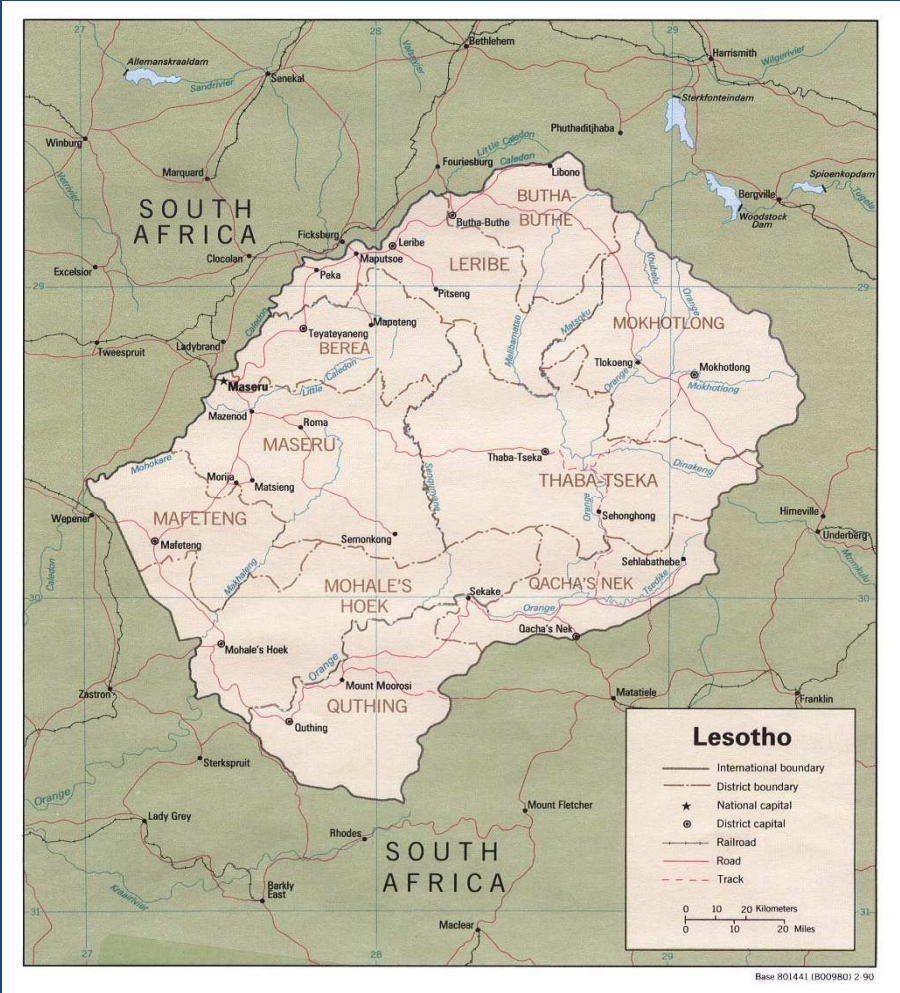
MSF around the world



**End of 2012:
250,000 patients on HIV treatment**

Lesotho: Background

- Lesotho: Small mountainous country, surrounded by South Africa
- Population 1.8m





Epidemiology

- 3rd highest HIV prevalence rate globally, (23%) among adults aged 15-49 yrs
- 289,841 PLWHIV, 55% eligible for ART
- 97,241 currently on ART
- 5th highest incidence of TB: 633/100 000 per year
- HIV/TB co-infection of 76.2%

MSF in Lesotho



How did nurses in Lesotho contribute to the massive scale up in access to ART ?



Decentralization
Simplification
Task shifting
Nurse Prescribing

Nurse-led model for provision of HIV/TB treatment within primary care



Services decentralized to the nurse led model

TESTING



ADULT CARE



PAEDIATRIC CARE



TB/HIV INTEGRATED CARE

ANC/PMTCT



Enablers for Provision Of ART by Nurses at primary care Level

Safer regimens started early

Implementing a Tenofovir-Based First-Line Regimen in Rural Lesotho: Clinical Outcomes and Toxicities After Two Years

Helen Bygrave, MBChB,* Nathan Ford, MPH, PhD,†‡ Gilles van Cutsem, MBChB, MPH,†‡ Katherine Hilderbrand, MSc,†‡ Guillaume Jouquet, MBA,* Eric Goemaere, MBChB, PhD,† Nathalie Vlahakis, MBChB,* Laura Triviño, MBChB,* Lipontso Makakole, MBChB,§ and Katharina Kranzer MBBS, MSc||

- D4T v TDF
- 6 times fewer toxicity driven switches with TDF

Bygrave et al, JAIDS 2011

Early initiation of antiretroviral therapy and associated reduction in mortality, morbidity and defaulting in a nurse-managed, community cohort in Lesotho

Nathan Ford^{a,b}, Katharina Kranzer^c, Katherine Hilderbrand^a, Guillaume Jouquet^d, Eric Goemaere^a, Nathalie Vlahakis^d, Laura Triviño^d, Lipontso Makakole^e and Helen Bygrave^d

- < 200 v ≥ 200
- 68% decrease mortality
- 63% decrease hospitalisations
- 39% decrease lost to follow up

Ford et al, AIDS 2010

Task-shifting



Task-shifting

Professional counsellors/ Lay counsellors/ Expert Patients

Nurses

Counselling ; Testing , pre ART, ART preparation and adherence

Testing

Pre ART

ART
INITIATION

ART
FOLLOW
up

Clinical assessment

Doctors

Nurse

Nurse/
Counsellor
Community

Training and Supervision

- Trainings on management of essential drugs and ARVs
- Mobile medical teams for clinical mentorship and supportive supervision in areas supported by MSF



The route to safe nurse prescribing

- ✓ The regulatory environment allowed all levels of nurses prescribing powers
- ✓ Task-shifting was embraced
- ✓ Empowerment of all nurses to provide HIV care including ART:
- ✓ Pre and in-service trainings on diagnosis and management of HIV-related conditions and ART
- ✓ Nurse-friendly clinical tools developed e.g. National guidelines, flow charts and flip charts

The route to safe nurse prescribing

- Assessment of ART eligibility
- Hx taking & physical exam for clinical staging, identification of TB, other OIs and STIs and management
- Baseline bloods taken in order to decide on safe regimen (FBC, Creatinine, LFTs)
- Refer to Lay Counsellors for ART preparation (adherence counselling)
- Ensure pts understand HIV/AIDS, ARVs, readiness and commitment
- Actual ART prescription (regimen) based on blood results and potential drug interactions (No NVP with rifampicin).

PMTCT

- Moving to option B+ - simplifies PMTCT – one regimen for all
- Safe use of EFV in pregnant , breastfeeding and women of child bearing age



Prescribing Paediatric ART

- Use of FDCs and not syrups has aided nurse prescribing
- Importance of mentorship and training
- Ensuring dose for weight correct and ensuring clinic has dosing charts available
- Family service (mum/ dad / child seen together)



Outcomes in the Nurse led clinic in Lesotho

Case study

Open Access

Antiretroviral treatment outcomes from a nurse-driven, community-supported HIV/AIDS treatment programme in rural Lesotho: observational cohort assessment at two years

Rachel Cohen^{*1}, Sharonann Lynch¹, Helen Bygrave¹, Evi Eggers¹, Natalie Vlahakis¹, Katherine Hilderbrand^{2,3}, Louise Knight², Prinitha Pillay¹, Peter Saranchuk¹, Eric Goemaere², Lipontso Makakole⁴ and Nathan Ford²

- Adults
 - 12 mths 83% RIC
 - 24 mths 76% RIC
- Paediatrics
 - 12mths 90% RIC
 - 24 mths 85% RIC

Challenges

- Poor clinical monitoring- side effects, OIs missed
- Poor documentation-BUT TOO MUCH PAPERWORK!!
- F/U blood tests not regularly done- frequent stock-outs of reagents, breaking of machines
- F/U bloods not done in accordance with regimen
- Family Planning not offered openly in Catholic facilities
- Viral load testing not routine
- Poor F/U system of linkage to care from community to facility
- Poor Pre-ART care at facility level
- Low ART coverage in children

Conclusions

- Adopting a nurse led model for provision of ART at primary care level has enabled scale up of ART in lesotho
- Outcomes compare favourably to doctor led services
- Less toxic regimens , use of FDCs and earlier initiation are all enablers for safe task shifting and nurse prescribing
- Countries where coverage remains low should consider decentralisation and legislation to allow nurse initiation and follow up of ART

Acknowledgements



Providing Nurse driven, community supported HIV/AIDS treatment in primary care in rural Lesotho

challenges 2009-2010



- The communities living with HIV
- Ministry of Health Lesotho
- MSF field teams in Lesotho
- Southern Africa Medical Unit

Thank you!

