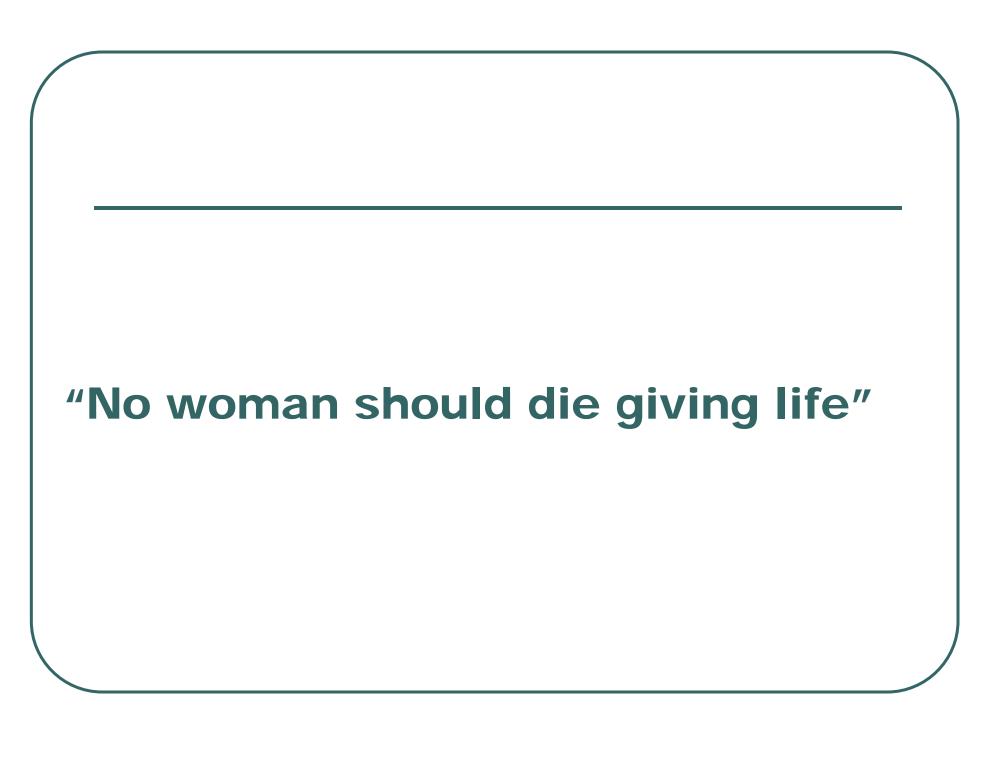
## Maternal Mortality in Central Haiti: Structural Solutions

Dr Maxi Raymonville, OBGYN
Partners In Health/Zanmi Lasante
APHA meeting
Washington, D.C
November 3-7, 2007



#### Maternal death in Haiti

- Between 1970 and 1975 the MMR in Haiti was estimated at 1,000 per 100,000 live births
- During the same period the MMR was 650 in Bolivia and 120 in Jamaica
- Currently in Haiti complications of pregnancy are the second leading cause of death among women 15- 49 after HIV/AIDS

#### Maternal death in Haiti

- Though the exact numbers are debated it is estimated that 1,700 to 2,900 Haitian women die each year following complications of pregnancy and childbirth
- 58,000 to 87,000 Haitian women and girls suffer disability resulting from complications of pregnancy and childbirth
- Maternal Mortality Ratio Haiti 680 maternal deaths per 100,000 live births (EMMUS 4 [DHS])

#### **Maternal Death in Haiti**



#### Zamni Lasante in the Central Plateau

- Plateau central (Population): 585,000
- Fertility rate: 4.4
- ZL catchment area: 240,000 in 6 communes (40,000 inhabitants)
- Population of reproductive age: 25 %

## **Integrated Expansion**

- Integration of HIV/AIDS programs provides funds to strengthen all health care delivery
- Renovation of physical and organizational infrastructures including:
  - Human Resources
  - Equipment and materials

#### **Boucan Carre**

2003 2005

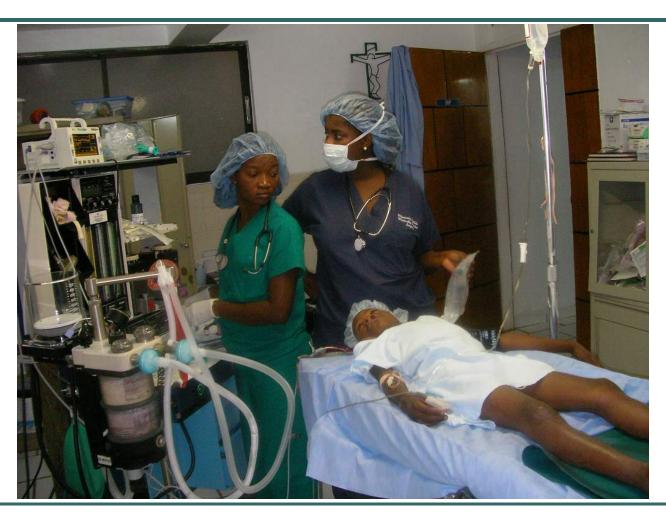




#### **Human resources**

- Nurse mid-wives (15)
- OBGYNs (5)
- Anesthetists (4)
- Training school of nurse-anesthetists with MSF; 6 ZL nurses are training and will be certified by the MSPP (MOH)

### **Human resources**



## **Equipment and materials**

- High speed satellite internet at all sites, including the most rural
- Email used as method of referral for urgent transfers
- Ambulance for transfers based at central site
- Cell phone service available at 5 out of 7 sites
- Pharmacy EMR system providing notification of shortages and prevention of stock-outs.

## **Equipment and materials**



Satellite communications



Drug procurement and storage

#### **Prenatal Care**

- Many patients attend 4 visits
- Routine labs at first visit; select labs performed again in 3<sup>rd</sup> trimester.
- Screening and treatment for STIs including partner notification and treatment
- Weight and nutritional supplementation closely monitored
- Tetanus toxoid
- HIV counseling and testing (opt-out) as well as PMTCT are fully integrated into standard prenatal care

#### **Prenatal Care**



## **Family Planning**

- Condoms, OCPs, Depo and Norplant are available at all sites; Depo is preferred method.
- IUDs sometimes available
- Tubal ligation offered at 3 sites;
   Vasectomy needs to be addressed
- Community health workers trained to provide counseling and distribution on OCPs and condoms

#### **Deliveries**

- Skilled birth attendants at all sites: nursemidwives, social service doctors, trained auxiliaries
- Institutional delivery rate approximately 30%;
   70% of deliveries at home
- Integration of traditional birth attendants (matrones) at each site; clean birth kits distributed, indications for referral taught

### **Matrons**



# **Emergency obstetrical complications**

- 3 sites regularly perform Cesarean Sections
- 1 site with 24/7 surgical coverage; centrally located no more than 2 hours from all other sites
- C-Sections 14% of institutional births
- Blood bank available
- Surgical equipment, supplies and medications provided through Boston

## **EmOC**



## **Community mobilization**

- Community mobilization and education by Ajan Fanm, Ajan Sante, NEC
- Mothers, Fathers, Family Planning, and PMTCT groups at sites; monthly meetings
- Monthly meetings of 60-80 matrones per month, per site
- Celebration of International Women's Day March 8<sup>th</sup> 2007, Mother's Day

## **Community mobilization**



#### Free care

- All care is free of charge
- Allowance for transport
- Preferential option for the poor

## Monitoring and evaluation

- Monthly reports by midwives all sites
- Monthly reports by Ajan Fanm and Ajan Sante (births, deaths, vaccinations, education)
- Monthly meeting of midwives and Women's Health Director
- Ongoing training data collection and EMR, skills (PMTCT), health education
- Protocols and treatment algorithms in all facilities

## Challenges

- Poverty
- Illiteracy
- Insufficient infrastructure
- Gender inequity
- Very mountainous region with low quality roads, lack of transportation options
- One ambulance for entire Plateau Central
- Illegal abortion by unskilled providers, traditional medicines, black market misoprostol

## **Looking forward**

- Waiting homes for high risk women, women living far away
- Incentives for matrones, fees for transport
- Reinforce quality of care
- Expand nurse-midwife involvement in the community
- Where do we find increased funding for maternal health?

#### Conclusion

Structural solutions for the improvement of maternal care involves:

- Investment in trained human resources, infrastructure and equipment for comprehensive emergency obstetric care
- Inclusion and education of TBAs
- Community mobilization
- Free services

## Thank you