



# Darfur Crisis – Impact on Health

DISASTER: RELIEF AND MANAGEMENT: INTERNATIONAL COOPERATION &  
ROLE OF ICT

ALEXANDRIA, EGYPT 14-17 APRIL 07

# Introduction



- ▶ North, South, and West Darfur
- ▶ 510,888 sq km
- ▶ Farmers and Nomads

# Estimated population, Darfur, 2006

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|              | <b>Total</b>     | <b>IDPs</b>      |
|--------------|------------------|------------------|
| North Darfur | 1,761,420        | 412,000          |
| South Darfur | 3,395,356        | 670,000          |
| West Darfur  | 1,816,783        | 716,000          |
| <b>Total</b> | <b>6,973,559</b> | <b>1,798,000</b> |

# HEALTH SITUATION AT A GLANCE

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- ▶ Almost a third of the population in Darfur are displaced
- ▶ Half of the population considered in need of humanitarian assistance
- ▶ Already among the poorest regions in the country before the crisis, the conflict has further disrupted economic activity and social services.
- ▶ Available data from Darfur point to a poor baseline for all health indicators related to the Millennium Development Goals (MDGs)

# HEALTH SITUATION AT A GLANCE

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- ▶ Before the crisis, access to basic health services in North Darfur was comparable to Northern Sudan averages, but was poorer in South and West Darfur
- ▶ Currently, the humanitarian operation has improved service utilization by IDPs in camps, but access has remained poor or deteriorated for other population groups

# HEALTH SITUATION – Main Indicators

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- ▶ Child health and nutrition
- ▶ Reproductive health and nutrition
- ▶ HIV/AIDS and tuberculosis
- ▶ Overall mortality

# Main Sources of Data

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- ▶ Safe Motherhood Survey - 1999
- ▶ Multiple Indicator Cluster Survey (MICS) – 2000
- ▶ Surveys by FMOH, WHO, UNICEF, WFP, and other partners (2003-2006)
- ▶ Records and Reports of the FMOH and WHO

# Darfur Crisis – Impact on Health

Child health and nutrition

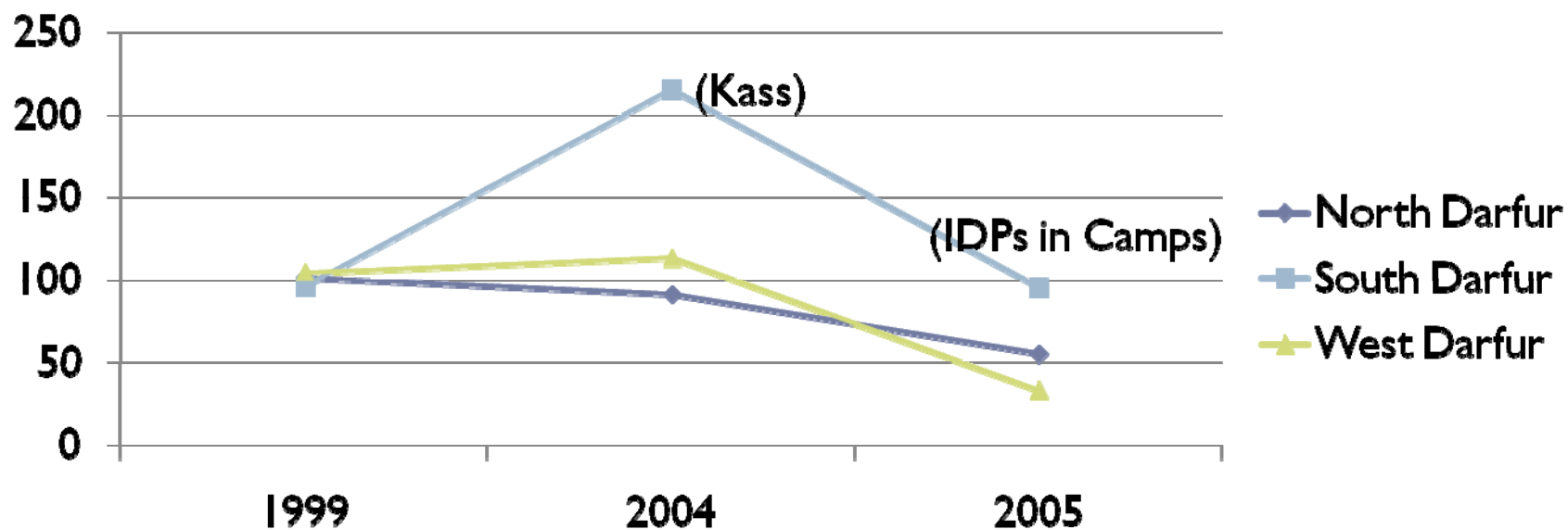
# Child health and nutrition

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- ▶ Pre-crisis estimates of child mortality in Darfur are comparable to or better than other states
- ▶ Since 2003, the crisis in Darfur caused child mortality to increase dramatically. Evidence points to a decrease from 2005
- ▶ Child malnutrition has increased with the crisis

# Under-5 Mortality (per 1000 per year)

|               | 1999 (SMS) | 2004       | 2005               |
|---------------|------------|------------|--------------------|
| North Darfur  | 101        | 91         | 55                 |
| South Darfur  | 96         | 215 (Kass) | 95 (IDPs in camps) |
| West Darfur   | 104        | 113        | 33                 |
| Khartoum      | 103        | -          |                    |
| Darfur Region | -          | <b>37</b>  |                    |

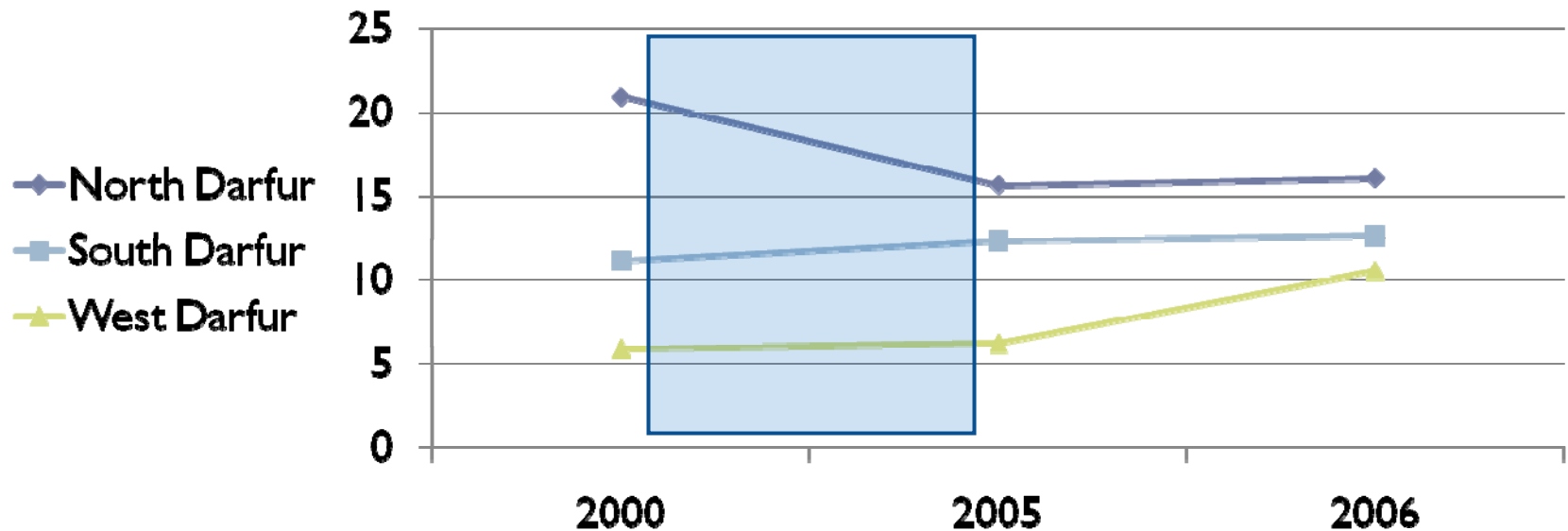


# Under-5 Mortality (per 1000 per year)

| Location | Year | Survey Conducted by | Crude U5 mortality (per 1000 per day) | Implied Crude U5 mortality (per 1000 per year) |
|----------|------|---------------------|---------------------------------------|------------------------------------------------|
| Kass     | 2004 | Epicentre, MSF      | 5.9                                   | 215                                            |
| Kalma    | 2004 | Epicentre, MSF      | 2.9                                   | 106                                            |
| Kalma    | 2004 | WHO, Epiet          | 11.7                                  | 427                                            |

# Prevalence of acute malnutrition, conflict-affected population, (children 6-59 months)

|              | 2000 (MICS) | 2005        | 2006        |
|--------------|-------------|-------------|-------------|
| North Darfur | 20.9        | 15.6        | 16.0        |
| South Darfur | 11.1        | 12.3        | 12.6        |
| West Darfur  | 5.9         | 6.2         | 10.5        |
| <b>Total</b> |             | <b>11.9</b> | <b>13.1</b> |



# Child health and nutrition services

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- ▶ Utilization of most basic child health services was low in Darfur before the crisis
- ▶ The humanitarian operation increased access to basic curative care for conflict-affected populations, while utilization of government hospitals and clinics remains low
- ▶ Humanitarian programs may have increased access to basic preventive and household-level interventions, but coverage remains low

|                              | 2000 | 2005                         | 2006 |
|------------------------------|------|------------------------------|------|
| Measles Immunization         | 40.7 | 69.2                         | 67.3 |
| Vitamin A supplement         | 31.8 | 39.2                         | 37.1 |
| Households with iodized salt | 1.6% | 73.1%<br>(conflict affected) | -    |

# Darfur Crisis – Impact on Health

Reproductive health and nutrition

# Reproductive health and nutrition (SMS)

|                    | Total fertility rate | Average age of marriage for women | Average household size |
|--------------------|----------------------|-----------------------------------|------------------------|
| North Darfur       | 7.2                  | 19.1                              | 5.6                    |
| South Darfur       | 7.2                  | 17.1                              | 6.0                    |
| West Darfur        | 6.5                  | 17.3                              | 5.2                    |
| <b>North Sudan</b> | <b>5.2</b>           | <b>19.2</b>                       | <b>6.4</b>             |

## ▶ Maternal Mortality:

- ▶ Darfur: 524 per 100,000 births
- ▶ Northern Sudan: 509 per 100,000 births

# Reproductive health and nutrition

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- ▶ A significant proportion of mothers are malnourished: The 2005 nutrition survey of conflict-affected populations found that 6.4% of mothers with children aged 6-49 months were malnourished
- ▶ Current levels of maternal mortality are thought to be extremely high
- ▶ Utilization of antenatal care has been very low, although humanitarian programs have increased access for IDPs

# Reproductive health and nutrition services

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- ▶ The quality of antenatal care has been poor
- ▶ Delivery in a health facility has been rare, as many deliveries are attended at home by untrained or low-trained providers
- ▶ Access to postnatal care has been poor
- ▶ Access to Comprehensive Emergency Obstetric Care (EmOC) is for the most part limited to the main hospitals, where care is adequate but requires quality improvements

# Darfur Crisis – Impact on Health

HIV/AIDS and tuberculosis

# HIV/AIDS and tuberculosis

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- ▶ Although there are no data on population prevalence of HIV in Darfur, the conflict has exacerbated and introduced a number of risk factors for spread of the disease:
  - ▶ economic and social disruption,
  - ▶ increase in poverty,
  - ▶ population movements and displacement,
  - ▶ violence,
  - ▶ and presence of soldiers and armed groups.

# Prevalence

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- ▶ Estimate of adult prevalence for Sudan as a whole is 1.6%
- ▶ In 2004, 1.3% of tuberculosis patients in South Darfur were infected with HIV
- ▶ Test results from blood bank donors in the three tertiary hospitals in the three Darfur states have found prevalence of between 0.5 and 3.3%

# Services

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- ▶ Health services and activities related to HIV/AIDS in general are weak if not absent from Darfur, and are generally not perceived as a high priority

# Darfur Crisis – Impact on Health

Overall mortality

# Overall Mortality

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- ▶ The crisis has caused an increase in overall mortality in Darfur
- ▶ A large number of surveys have been done in Darfur during the crisis since 2003
- ▶ Surveys arrived at daily crude mortality rates among all ages ranging from 0.7 to 5.6 per 10,000 per day
- ▶ Although differing methodologies make comparison questionable, these studies nevertheless suggest that mortality increased in 2003-04 and then decreased in 2005.
- ▶ All of these rates, however, can be considered high

# Overall Mortality

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- ▶ Overall crude mortality rate
  - ▶ 2004: 0.7 per 10,000 per day
  - ▶ 2005: 0.46 per 10,000 per day
  - ▶ 2006: 0.36 per 10,000 per day

# The bright side of it

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- ▶ EWARS – Early Warning and Response System
  - ▶ Prevention of serious epidemics
- ▶ Information sharing with partners
- ▶ Joint surveys (e.g. FMOH, WFP, UNICEF, FAO, and NGOs)



## What Next?

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- ▶ Promote Information sharing and coordination
- ▶ Set, adapt, and adopt guidelines and standards
- ▶ Use health as a bridge for peace
- ▶ Remember that behind every silent figure is a serious, living reality

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Thank You