Darfur Crisis – Impact on Health

DISASTER: RELIEF AND MANAGEMENT: INTERNATIONAL COOPERATION & ROLE OF ICT
ALEXANDRIA, EGYPT 14-17 APRIL 07

1 Emergency and Humanitarian Action - Federal Ministry of Health - Sudan
Introduction

- North, South, and West Darfur
- 510,888 sq km
- Farmers and Nomads
## Estimated population, Darfur, 2006

<table>
<thead>
<tr>
<th>Region</th>
<th>Total</th>
<th>IDPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Darfur</td>
<td>1,761,420</td>
<td>412,000</td>
</tr>
<tr>
<td>South Darfur</td>
<td>3,395,356</td>
<td>670,000</td>
</tr>
<tr>
<td>West Darfur</td>
<td>1,816,783</td>
<td>716,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6,973,559</strong></td>
<td><strong>1,798,000</strong></td>
</tr>
</tbody>
</table>
HEALTH SITUATION AT A GLANCE

- 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

- 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

- Child health and nutrition
- Reproductive health and nutrition
- HIV/AIDS and tuberculosis
- Overall mortality
Main Sources of Data

- Safe Motherhood Survey - 1999
- Multiple Indicator Cluster Survey (MICS) – 2000
- Records and Reports of the FMOH and WHO
Darfur Crisis – Impact on Health

Child health and nutrition
Child health and nutrition

- 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)

<table>
<thead>
<tr>
<th>Region</th>
<th>1999 (SMS)</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Darfur</td>
<td>101</td>
<td>91</td>
<td>55</td>
</tr>
<tr>
<td>South Darfur</td>
<td>96</td>
<td>215 (Kass)</td>
<td>95 (IDPs in camps)</td>
</tr>
<tr>
<td>West Darfur</td>
<td>104</td>
<td>113</td>
<td>33</td>
</tr>
<tr>
<td>Khartoum</td>
<td>103</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Darfur Region</td>
<td>-</td>
<td>37</td>
<td>-</td>
</tr>
</tbody>
</table>

![Graph showing under-5 mortality trends from 1999 to 2005 in different regions of Sudan.](chart.png)
## Under-5 Mortality (per 1000 per year)

<table>
<thead>
<tr>
<th>Location</th>
<th>Year</th>
<th>Survey Conducted by</th>
<th>Crude U5 mortality (per 10000 per day)</th>
<th>Implied Crude U5 mortality (per 1000 per year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kass</td>
<td>2004</td>
<td>Epicentre, MSF</td>
<td>5.9</td>
<td>215</td>
</tr>
<tr>
<td>Kalma</td>
<td>2004</td>
<td>Epicentre, MSF</td>
<td>2.9</td>
<td>106</td>
</tr>
<tr>
<td>Kalma</td>
<td>2004</td>
<td>WHO, Epiet</td>
<td>11.7</td>
<td>427</td>
</tr>
</tbody>
</table>
Prevalence of acute malnutrition, conflict-affected population, (children 6-59 months)

<table>
<thead>
<tr>
<th></th>
<th>2000 (MICS)</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Darfur</td>
<td>20.9</td>
<td>15.6</td>
<td>16.0</td>
</tr>
<tr>
<td>South Darfur</td>
<td>11.1</td>
<td>12.3</td>
<td>12.6</td>
</tr>
<tr>
<td>West Darfur</td>
<td>5.9</td>
<td>6.2</td>
<td>10.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11.9</strong></td>
<td><strong>13.1</strong></td>
<td></td>
</tr>
</tbody>
</table>

![Graph showing the prevalence of acute malnutrition over the years.]
Child health and nutrition services

- 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.

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measles Immunization</td>
<td>40.7</td>
<td>69.2</td>
<td>67.3</td>
</tr>
<tr>
<td>Vitamin A supplement</td>
<td>31.8</td>
<td>39.2</td>
<td>37.1</td>
</tr>
<tr>
<td>Households with iodized salt</td>
<td>1.6%</td>
<td>73.1% (conflict affected)</td>
<td>-</td>
</tr>
</tbody>
</table>
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Reproductive health and nutrition
## Reproductive health and nutrition (SMS)

<table>
<thead>
<tr>
<th></th>
<th>Total fertility rate</th>
<th>Average age of marriage for women</th>
<th>Average household size</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Darfur</td>
<td>7.2</td>
<td>19.1</td>
<td>5.6</td>
</tr>
<tr>
<td>South Darfur</td>
<td>7.2</td>
<td>17.1</td>
<td>6.0</td>
</tr>
<tr>
<td>West Darfur</td>
<td>6.5</td>
<td>17.3</td>
<td>5.2</td>
</tr>
<tr>
<td><strong>North Sudan</strong></td>
<td><strong>5.2</strong></td>
<td><strong>19.2</strong></td>
<td><strong>6.4</strong></td>
</tr>
</tbody>
</table>

- **Maternal Mortality:**
  - Darfur: 524 per 100,000 births
  - Northern Sudan: 509 per 100,000 births
Reproductive health and nutrition

- 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

- 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

- 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

- 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

- 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

- 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

- 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

- 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?

- 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
Thank You