

MORTALITY IN DARFUR

SECOND MORTALITY SURVEY

Greater Darfur Region, Sudan

Preliminary Results

Khartoum, July 2005



Survey Objectives

- ✓ To estimate the mortality among the crisis-affected populations in the of Greater Darfur Region
- ✓ Analyze differences between different groups
- ✓ Analyze differences with the previous survey
- ✓ Identify major causes of strengthen health and surveillance systems



Survey Plan and Methods

- ✓ Two stage cluster survey (West and North 90 clusters, South Darfur 63 clusters)
- ✓ Basic unit – Household
- ✓ Randomly selected clusters for each State
- ✓ Probability proportional to size
- ✓ Separate estimates for Camp IDP, Non-Camp IDP, Resident,
- ✓ Trained interviewers, total survey staff



Survey background

- ✓ Commissioned by Humanitarian Coordinator
- ✓ Undertaken with Fed. Ministry of Health
- ✓ Survey period: May 29 – June 21, 2005
- ✓ Recall period: Mid November, 2004 – June 5, 2005 (North), Mid Nov – June 9 (West), Mid November – June? (South)
- ✓ Survey area Greater Darfur (North, West, South)



Survey Staff

National Supervisors	18
National Co-coordinators	3
International Supervisors	10
International Co-coordinators	6
Interviewers	40
TOTAL	77



Mortality in Darfur by population group, age and State

Age Groups	North Darfur			West Darfur			South
	IDPs camps	IDPs outside	Resid.	IDPs camps	IDPs outside	Resid.	IDPs camps
All ages	0.8 (0.5-1.0)	0.9 (0.6-1.3)	0.8 (0.5-1.1)	0.8 (0.5-1.2)	0.5 (0.4-0.8)	0.4 (0.3-06)	0.9 (0.6-1.3)
Under 5 years	1.5 (0.9-2.4)	1.8 (0.8-3.4)	1.1 (0.7-1.7)	1.0 (0.5-1.7)	0.8 (0.5-1.4)	0.7 (0.2-1.4)	2.6 (1.5-4.1)

Mortality rate is calculated per 10 000/day, 95% confidence limit.



Cause of Death; Comments

- ✓ Meningitis outbreak in North and West Darfur
- ✓ Diarrhea disease main cause in West and South Darfur
- ✓ Injuries main cause in North Darfur
- ✓ Malnutrition not a major issue at this time

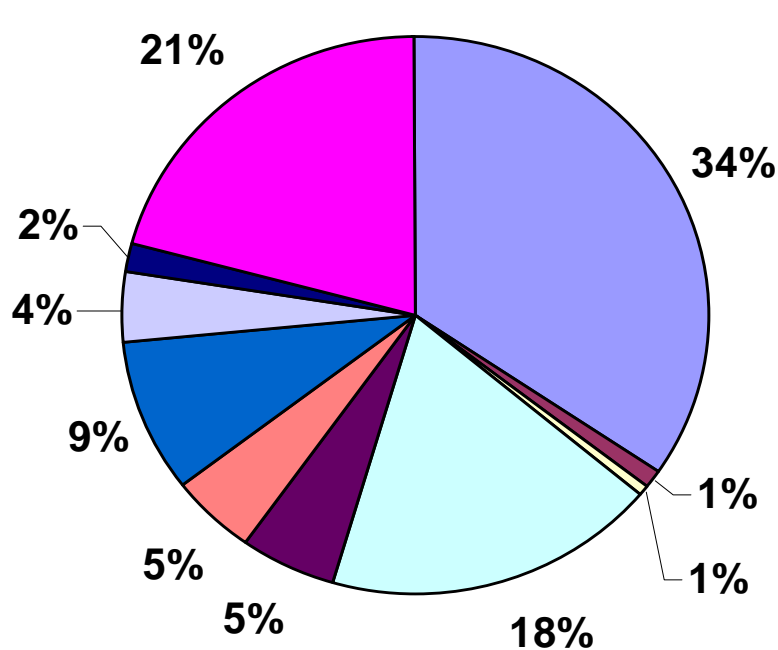


U5 CMR; Comments

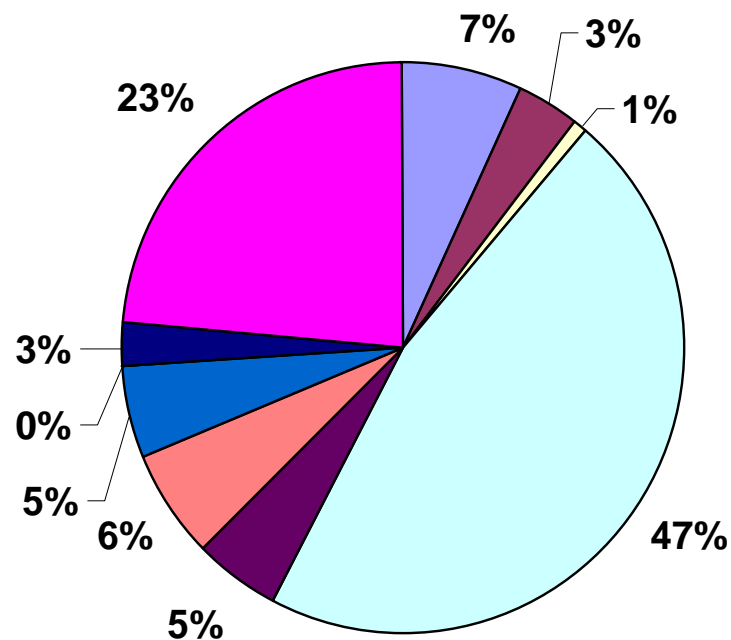
- ✓ North Darfur usual pattern of double of CMR
- ✓ West Darfur vary. Survival bias? Under reporting in high mortality conditions? Needs to be explored



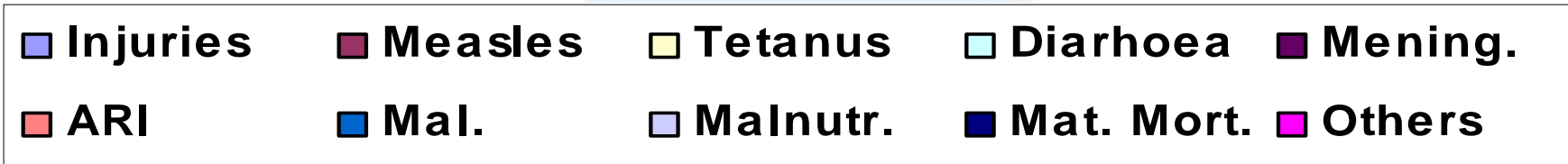
Cause of death in North and West Darfur



North Darfur



West Darfur

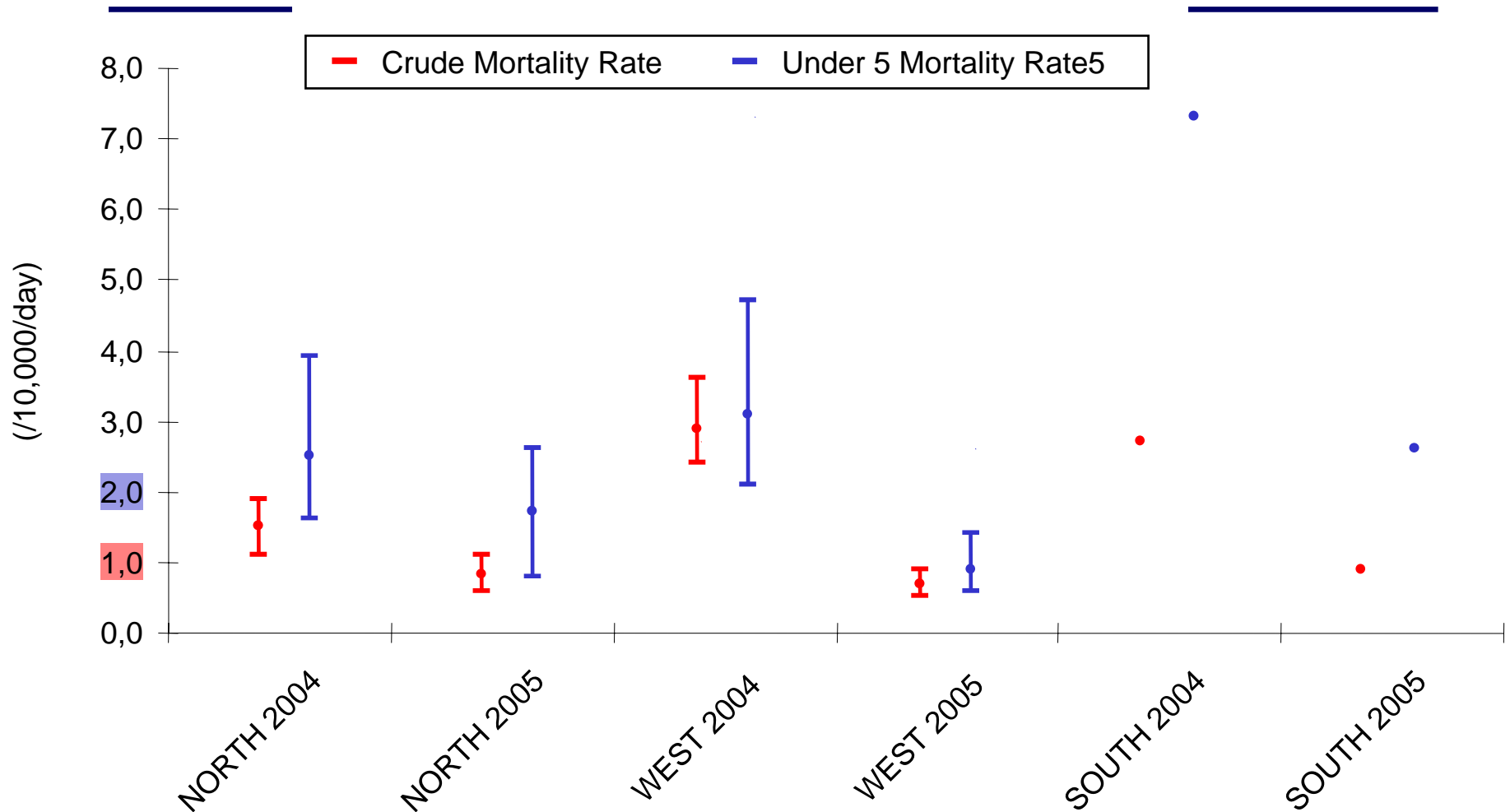


Mortality by state and age group, 2004 and 2005, IDPs only

Age groups	North		West		South*	
	2004	2005	2004	2005	2004	2005
All ages	1.5 (1.1-1.9)	0.8	2.9 (2.4-3.6)	0.7	2.7	0.9
Under 5	2.5 (1.6-3.9)	1.7	3.1 (2.1-4.7)	0.9	7.3	2.6
* only IDPs in camps, preliminary analysis on 25 clusters						



Mortality by state and age group, 2004 and 2005, IDPs only



How do the two surveys compare?

- ✓ First WHO survey on newly displaced population who display peak mortality rate
- ✓ Could explain dip in children 1 – 2 years in second survey
- ✓ First survey aggregated all IDPs
- ✓ South Darfur was not covered in 1st survey



Main Conclusions I

- ✓ Mortality overall has declined substantially since the first WHO survey in all three states however health status in Darfur extremely fragile
- 1. CMR is similar in all three States and is less than crises levels
- 2. Main cause of death vary between States and should be considered in health planning
- 3. Worst health status: in camp IDPs in West Darfur, non-camp IDPs in North Darfur;
- 4. Meningitis outbreak contributed significantly to mortality in North and West Darfur



Main Conclusions II

- ✓ Mortality overall has declined substantially since the first WHO survey in all three states however health status in Darfur extremely fragile
- 5. About half the mortality in West Darfur IDPs were due to diarrhoea
- 6. Food rations coverage was lowest for residents in West Darfur (36%)
- 7. Birth rates are on the increase in North but less in the South with implications for Mother Child Health
- 8. IDPs in camps are worst off in South and West Darfur



Overall Recommendations

- ✓ IDPs should be given special health consideration
- ✓ EWARS should be brought in line with a regular surveillance system. Survey results should be used to fine tune EWARS and put in place frame for the regular surveillance
- ✓ Survey of non-camp populations in South Darfur should be completed.



State wise Recommendations

- ✓ North Darfur - Special attention to prevent and control deaths due to injuries and trauma
- ✓ West Darfur – Special attention to disease control among children especially diarrhea disease
- ✓ South Darfur: Strengthen efforts to monitor mortality and morbidity among non-camp populations, mobile health services
- ✓ High child mortality in South Darfur IDP camps indicates urgent need for reinforcement of quality of care



Limitations

- ✓ Seasonality factor needs to be taken into account. Mortality may rise in the rainy season.
- ✓ Estimates from South Darfur cover only IDPs and needs to be completed for the other groups for better picture.
- ✓ Replacement of clusters could introduce bias in results (!) but may not have significant effect on overall estimates.



Finally.....

- ✓ Humanitarian situation of Darfur is extremely fragile.
- ✓ Progress has been made and should not be lost.
- ✓ Downsizing aid will lead to severe humanitarian crisis.

