

SUDAN: MENINGITIS OUTBREAK

7 May, 1999

Appeal no. 07/99 (Budget Revision)

Situation Report no. 2

Period covered: April, 1999

Immediate donor support for the Appeal launched on 1 March, 1999 enabled the Sudanese Red Crescent (SRC) and the Federation to mount a timely and effective meningitis vaccination and health awareness campaign, slowing the spread of the disease and diminishing the loss of life. However, a greater effort is needed to mitigate the effects of the epidemic, and the government of Sudan, in collaboration with the World Health Programme (WHO) have appealed for an additional 6 million doses of the vaccine. In the seven states where the SRC/Federation is operating, these needs amount to 1.79 million doses. Of this quantity, the Sudan Ministry of Health (MoH) plan to provide half, and the remainder of 900,000 doses as well as the related costs require a revised Appeal budget, with an increase from CHF 998,000 to CHF 1,497,000.

The context

Sudan, one of the countries in the sub-Saharan meningitis belt, is in the middle of a serious meningitis outbreak. The disease usually occurs on a cyclical basis (every 10 years or so). The current outbreak began in North Darfour State during the month of December 1998 and within two months had spread to 12 neighbouring States along the main road and rail transport route. A total of 19 States have been affected. To date the disease has afflicted a total of 16,591 persons, mainly children and young adults, with 1,236 deaths. In the six States where the SRC/Federation operations are being implemented, 3,156 people have been afflicted, with 207 deaths (*see Table 1*).

Despite an effective response on the part of authorities, the Red Cross, and other agencies, the disease is still on the increase. The Sudanese government, in co-ordination with the international agencies, is making every effort to contain the outbreak.

Latest events

Control measures, including vaccination of the target populations (age 2-30) in the urban localities, standardisation of case management, provision of medical supplies, strengthening of disease surveillance, and public health awareness efforts are underway. The Meningitis Task Force, composed of the Ministry of Health (MoH), WHO, UNICEF, SRC/Federation and MSF, as well as other international and national agencies, has reviewed the epidemic situation and has decided to intensify the activities, with a particular focus on the vaccination campaign to densely populated areas irrespective of urban or rural localities. The International Co-ordination Group on Meningococcal Vaccine Provision (ICG), at a meeting in Khartoum on 22 April 1999, has provided the donors with an update on the situation and has appealed for further funds to meet the outstanding needs.

In order to identify further needs, the Task force is undertaking joint assessments in those States most at risk. Following a two-day workshop in Khartoum, the training on surveillance has started in the States. This training aims to strengthen the surveillance system and improve case management. Lastly, the ICG sub-group on Public Health Education (co-ordinated by SRC/Federation) has produced posters and leaflets for distribution.

The agreed view among the members of the national task force is that the population most at risk needs to be vaccinated during the next few weeks, and the recommended drug is Oily Chloramphenicol which needs to be made available at all peripheral facilities. WHO has responded by arranging an extra 1 million doses of vaccine.

Red Cross/Red Crescent action

The Sudanese Red Crescent is co-ordinating the operation to contain the outbreak in seven States in the east of the country (White Nile, Gezira, Sennar, Kassala, Gedaref, Blue Nile and Red Sea States). The operation involves vaccination, distribution of Oily Chloramphenicol, syringes and needles, and a public awareness campaign. At the State level, SRC branches have engaged a large number of volunteers who are working closely with the State divisions of the Ministry of Health. Two Federation health delegates are providing support to the SRC.

Table 1. Meningitis outbreak situation in the above mentioned States

SRC Operational in States: Reported total cases and deaths as of 27 April 1999 (from 3 December 1998)*				
States	Total Population	Cases	Deaths	Case Fatality Rate
Gezira	3,081,108	1,401	70	5
White Nile	1,518,351	532	47	8.8
Sennar	698,836	418	23	5.5
Gedaref	1,385,524	439	34	7.7
Kassala	1,627,444	26	2	7.7
B. Nile	609,500	318	30	9.4
Red Sea	772,643	22	1	4.5
Total	9,693,406	3,156	207	6.5

Comments:
The meningitis surveillance, data collection, and transmission of information systems are under development and need to be improved. It is probable that a lack of standard case management and increased public concern about the situation has influenced the data. However, the data specified above presents an accurate picture of the trend.

* Data source: Meningitis Task Force/FMOH, Sudan.

Vaccination

The vaccination campaign has been completed in most of the states (*see table 2 below*), in large measure due to the hard work of the SRC. The data on the total number of people vaccinated is pending.

2. SRC Vaccination Campaign on Meningitis

STATE	Total Population (1)	Priority Population (2)	Target Population (3)	No of Doses (6)			Vaccine Campaign
				SRC	MoH (4)	Total	
Gezira	3,280,000	464,123	371,299	350,000	250,000	600,000	finished
White Nile	1,441,000	445,039	356,031	300,000	55,000	355,000	finished
Sennar	1,145,000	290,134	232,107	150,000	142,500	192,500	finished
Gedaref	1,420,000	331,960	265,568	260,000	50,000	310,000	finished
Kassala	1,435,000	675,797	540,638	350,000	50,000	400,000	near finish
Blue Nile	618,000	118,617	112,494	80,000	50,000	130,000	continues
Red Sea	717,000	466,399	373,119	300,000	50,000	350,000	started (5)
Total	10,056,000	2,792,069	2,251,256	1,790,000	647,500	2,337,500	

Note:

(1) The data above was available from the MoH at the time that the Appeal was launched. The variance in the total population figures shown in Tables 1,2 and 3 is the result of data collected by the Meningitis Task Force/MoH acquired in each state during periodic meningitis surveillance activities.

(2) The priority population has been calculated from the urban densely populated localities only.

(3) The target population is the 2 to 30 year age group.

(4) The MoH includes both Federal and State Ministry of Health.

(5) Distribution for the Red Sea State has been delayed due to transport difficulties.

(6) The data on the number of people vaccinated is being prepared at branch level.

Case management

The vaccine recommended by WHO has been distributed to the seven states identified above. During monitoring visits by the SRC/Federation it was revealed that doctors in many facilities are reluctant to use the drug due to a lack of information and technical knowledge. A one page Information Sheet on Oily Chloramphenicol has been prepared by the health delegate and has been distributed; also, scientific literature on the efficacy of the drug is now available to the doctors. The SRC/Federation team, during field visits, are discussing with the doctors in health facilities on the use of the drug.

Public health awareness

The SRC at branch level has been using various means (public gatherings, radio, television and leaflets) to increase public awareness of the outbreak, stressing the importance of vaccination, and advising on possible preventive measures. In addition, a poster and a leaflet have been prepared by a Task Force sub-group for distribution.

Outstanding needs

In March, the Federation was quick to intervene with vaccines and other medical supplies, and the SRC provided a large number of volunteers who implemented the task. However, it must be emphasised that the outbreak is not yet contained. Predictions have been made of the possible further spread of the epidemic. With the current dry season at its height, the conditions are optimal for a rapid spread of the disease.

In view of the present trend in the rise of cases, it is necessary to act quickly so that the outbreak does not exceed current control levels and threaten more lives. Health specialists advise an additional population of about 755,000 in the states where the SRC/Federation is operational (age group between 2-30 years) need to be vaccinated immediately, requiring an additional 900,000 doses of vaccines, as

well as syringes, waste containers and miscellaneous supplies. The calculations below (*Table 3 below*) have been based on the priority localities with higher prevalence and case fatality rates.

Table 3 . Additional needs following increased target population

State	Total Pop.	Priority Population	Target Population (80%)	Vaccine required (115%)	IFRC/SRC vaccine	MOH vaccine	Vaccine needed
Gezira	3,081,108	1,616,729	1,293,383	1,487,390	350,000	500,000	637,390
White Nile	1,518,351	714,813	571,850	657,627	300,000	315,000	75,598
Sennar	698,836	468,100	374,480	430,652	150,000	200,000	80,652
Gedaref	1,385,524	544,962	435,970	501,365	260,000	150,000	91,360
Kassala	1,627,444	426,725	341,380	392,587	350,000	50,000	0
Blue Nile	609,500	266,308	213,046	245,003	80,000	150,000	15,000
Red Sea	772,643	385,060	308,048	354,225	300,000	50,000	0
	9,693,406	4,422,697	3,538,157	4,068,849	1,790,000	1,415,000	900,000

The vaccinations already carried out during March-April have been considered in the calculation, and the amount has been deducted from the present total needs. Funds for a total of 6.3 million doses of vaccines (and 40,000 vials of chloramphenicol) have been requested in the Revised Appeal.

The revised budget (*see attached revised budget summary*) has been prepared on the basis of a one-month extension to the operation. Since this has been a major intervention for SRC to co-ordinate and implement, and there are important capacity-building lessons to absorb and carry forward into future operations, a significant training follow-up component at all levels (HQ, Branch, and volunteer) consisting of 10 consolidation courses for volunteers, Training of Trainers (ToT) courses, and a workshop on epidemic preparedness is therefore included in this proposed revised budget.

External relations - Government/UN/NGOs/Media

SRC/Federation actively participate in Task Force co-ordination meetings led by the MoH. Cooperation with the government and the partner agencies of ICG is well established. Joint assessment trips are now organised to visit the most at-risk states. At the branch level, the SRC is working closely with the MoH.

Contributions

See attached list of contributions.

Conclusion

The timely response has made this meningitis intervention a success, and while the epidemic has yet to be brought fully under control, the current priority is to increase the provision of vaccines and access to health education to achieve that objective.

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