

SUDAN: MENINGITIS OUTBREAK

**appeal no: 07/99
1 March 1999**

***THIS APPEAL SEEKS CHF 998,000
IN CASH, KIND AND SERVICES
TO ASSIST 1,330,500 BENEFICIARIES FOR 3 MONTHS***

Summary

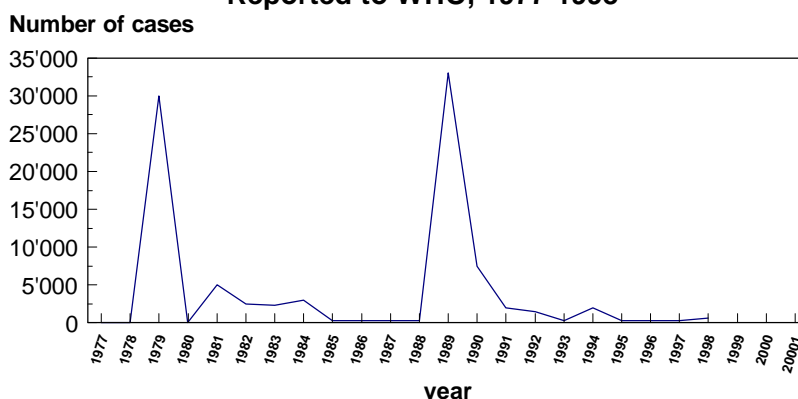
For the first time since 1989, an alarming increase of meningitis has been reported from several states in Sudan in early 1999. With a resulting high rate of mortality, the International Federation of Red Cross and Red Crescent Societies has combined forces with the Sudanese Red Crescent (SRC), International NGO's, and UN Organisations including the International Coordinating Group (ICG) on Meningitis to promote a 3-month intervention programme focusing on vaccinations, assistance for treatment in hospitals and health centres, a community education and awareness campaign, and health education for SRC volunteers. This Appeal seeks urgently needed support for this programme in an effort to mitigate the effects of the current meningitis outbreak and to prevent the outbreak from progressing into the large epidemics previously experienced in 1979 and 1989. An immediate and aggressive vaccination campaign has the potential to eliminate another major epidemic year in 1999.

The Disaster

Over the last several years the largest epidemics of meningococcal meningitis have affected large areas of sub-Saharan Africa (the meningitis belt) with shorter intervals (years) between major epidemics. Epidemics occur in the dry season. While the highest disease rates are found in young children, during epidemics older children, teenagers and young adults are also affected. Typically a large widespread epidemic can follow on from a localised outbreak the previous year and incidence rates remain elevated during the following 1-2 years unless the appropriate control measures including mass immunisation are instituted. *Neisseria meningitidis*, a Gram-negative bacterium is the causal agent. Serogroup A and C meningococci are the main causes of epidemic meningitis.

While Sudan has experienced only modest numbers of cases since the last big epidemics of 1979 and 1989 (typical ten year cycle), current surveillance indicates that Sudan is at the threshold of another major epidemic which epidemiologists have tentatively predicted for 1999. (see epidemic curve below).

Cases of Meningococcal Meningitis, Sudan Reported to WHO, 1977-1998

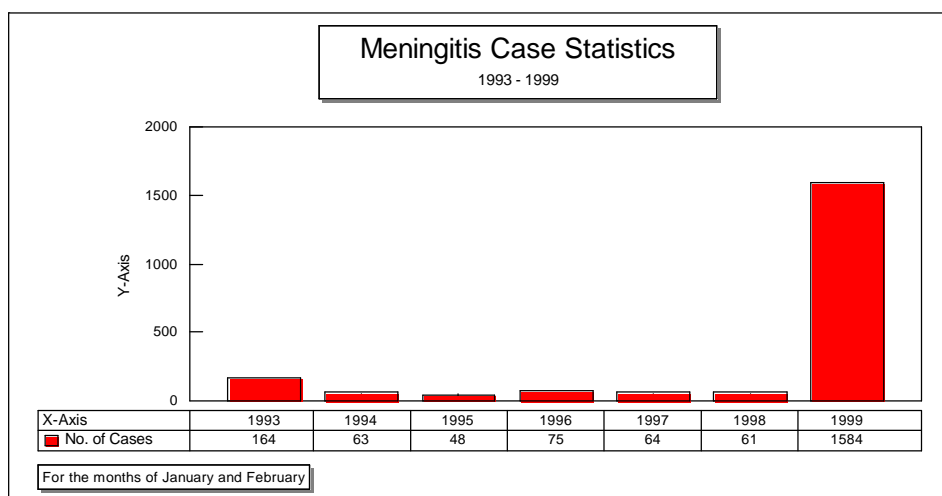


On 12 December, 1998, 25 cases of cerebrospinal meningitis were reported in North Darfur State, reaching 190 cases within a one month period. The mortality rate among those affected was very high. A series of meetings and a field visit to North Darfur State were organised by the Federal Ministry of Health (FMOH) and the State Ministry of Health (SMOH), after which a plan was developed to vaccinate 622,400 people in order to control the outbreak of the disease and to prevent it spreading to neighbouring states.

Since the beginning of February 1999, there have been reports of an epidemic outbreak in South and West Darfur, South and West Kordofan, and Sennar States. The total number of cases reported in the affected states increased from 461 to 1,156 between 8-23 February, 1999. Other States, including Khartoum, Gezira, White Nile, Blue Nile, Kassala, Gedaref, and Red Sea have also reported cases of the epidemic. The epidemic will continue to spread if vaccination programmes are not undertaken immediately.

Following the 1988/1989 outbreak which took 7'500 lives, an annual vaccination programme to contain and prevent the epidemic proved to be very effective until financial constraints in the last four years made it difficult to continue on the same scale.

The graph below shows the average number of cases reported during the months of January and February since 1993 :



The Response so far

Government Action w

In response to the outbreak of cerebrospinal meningitis in Northern Darfur a co-ordination group composed of representatives from the FMOH and the SMOH, as well as WHO, UNICEF, SRC/IFRC, MSF France, and MSF Holland was formed. The group produced a plan of action based on three different scenarios: the *first scenario* assumes an epidemic situation limited to North Darfur state; the *second scenario* assumes the spread of the disease into neighbouring states; the *third scenario* assumes an outbreak in states other than those planned for in the former scenarios, and which are geographically more distant. Each phase assumes an increase in the affected population by three to four fold within a fixed period of time.

In the meeting held at the FMOH on 11 February, 1999, a decision was taken based on the escalating number of reported cases to move from scenario one to scenario two. The second scenario assumes that twelve states (with a total population of 4,620,671 primarily in the 2-30 year age group) are at high risk. As an immediate response the FMOH has made one million doses of vaccines available to start the vaccination campaigns in the states with high case rates. The Ministry of Health will also provide transportation for the vaccines and the vaccination teams and will carry out the co-ordination of the campaign at state level.

Red Cross/Red Crescent Action w

The IFRC Health Delegate and the SRCS Health Co-ordinator attended meetings at the FMOH and participated in planning the response to the expected outbreak of cerebrospinal meningitis. SRCS branches in the affected States and those at high risk are continuously being informed of developments, and have been provided with training and awareness material. All SRCS branches have been prepared to assist with case findings and vaccination campaigns.

Other Agencies' Action w

MSF France has made an assessment visit to West and South Darfur and MSF-Holland visited Sennar State to assess the situation. Both agencies are ready to provide immediate vaccines and treatment as well as expatriate staff to assist in the campaign. UNICEF and WHO are also willing to provide vaccinations and treatment.

Co-ordination w

The MOH (at both the Federal and State levels) is responsible for the overall co-ordination of the campaign. Assistance will be provided by the meningitis control co-ordination group.

Vaccines and technical support are available from the WHO-initiated International Coordinating Group (ICG) on Meningitis. The ICG (IFRC, MSF, UNICEF, WHO) has been successful in improving international coordination and under the leadership of national health authorities, improved local coordination with all partners working together is improving practices, identification of contingency stocks of vaccine and injections materials, and contingency planning and surveillance.

The Intended Operation

Assessment of Needs w

Several meetings at the FMOH were conducted to assess the needs of the twelve States considered at high risk. The overall population and the target population (of the 2-30 year age group) were calculated, as well as the needs of vaccination and treatment.

Vaccinations should start immediately in the regions where cases are reported to have reached epidemic levels. Only those persons between the age of 2 and 30 and located in urban localities should be vaccinated.

Immediate Needs w

{ Vaccines, and auto-destruct 20ml syringes and needles.

- { Training of SRCS volunteers to up-grade vaccination techniques.
- { Ambulances for referral of cases identified to hospitals or treatment centres.
- { Community awareness campaign.

Anticipated Later Needs w

If the epidemic is not contained at the end of the programme, scenario 3 could be activated to vaccinate the remaining population of the affected states.

Red Crescent/Red Cross Objectives w

The overall objective is to assist in the cerebrospinal meningitis campaign in White Nile, Gezira, Sennar, Kassala, Gedaref, and Red Sea States in order to lower the morbidity and mortality rate and to control the spread of the disease by providing vaccines, treatment, and manpower using trained SRCS volunteers. More specifically, for the target population of 1,330,403 located in the urban areas in these six states, the Red Crescent will:

- { Provide the vaccine and to participate actively in the vaccination campaign
- { Provide treatment to hospitals and treatment centres
- { Raise awareness of the causes and impact of an epidemic outbreak of cerebrospinal meningitis.
- { Participate in community mobilisation to support vaccination, case identification and referral to hospitals or treatment centres.
- { Provide health education to SRCS volunteers and the affected communities.

National Society/Federation Plan of Action

Emergency Phase: March - April 1999 w

- { Vaccinate and provide treatment.
- { Assist in case identification and transferral to hospitals and treatment centres by using SRCS volunteers and ambulance vehicles.
- { Initiate a Training of Trainers (ToT) course for senior SRCS volunteers and trainers on prevention of meningitis and case identification.
- { Provide health education for the community by SRCS volunteers.
- { Produce health education material.

Phase Two: May 1999 w

- { Provide health education on prevention of infectious diseases and hygiene.
- { Provide training to SRC volunteers.
- { Evaluate the situation and the success or otherwise of the vaccination campaign.

Capacity of the National Society w

The SRCS can mobilise some 420 health volunteers through their branches to participate in the vaccination, health education, and community awareness campaigns in the Red Sea, Gezira, Sennar, White Nile, Gedaref and Kassala States.

Present Capacity of the Federation in Sudan w

The delegation currently has three expatriate staff (one of which is a Health Delegate), as well as a Finance Officer, a Logistics Officer, and a Reporting Officer. However, 2 technical staff will be required to assist in the implementation of the programme.

The delegation currently has one vehicle which will be used to assist in logistics and in monitoring.

Evaluation w

Evaluation of the programme will be carried out by the national co-ordination group, which both the IFRC and SRCS are part of. However, throughout the programme continuous monitoring will take place and monthly progress reports will be made.

Budget summary

See Annex 1 for details.

Conclusion

The scope of the recent outbreak of meningitis in Sudan has exhausted the existing response capacities of the National Society. In order to diminish the impact of the meningitis outbreak on the affected population, immediate contributions (in kind, services, and cash) are required.

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