

## **Descriptive title for the case**

A day in the life of the Medecins Sans Frontieres (MSF) healthcare worker team during an unprecedented outbreak of meningitis in Niamey and the ethical challenges they face.

## **Outline of the case**

Meningococcal meningitis is a serious infection of the thin lining that surrounds the brain and spinal cord; causing severe brain damage. It is transmitted through droplets of respiratory or throat secretions and is fatal in 50% of cases if left untreated. You are an MSF healthcare worker, working in a team with other MSF healthcare workers as well as local healthcare workers, in a hospital in Niamey in which the outbreak of meningitis has been rapidly growing. The outbreak is of high concern because it affects a densely populated urban area of one million people, creating a high risk of rapid spread. Other conditions such as the recent drought and dust storms, impoverished living conditions and large population displacements, all make the area ripe for the further spread of the disease. 8,344 cases of meningitis and 545 deaths have been reported. Suspected cases have been increasing very quickly, tripling over the last two weeks.

Your hospital has been particularly badly hit by the epidemic with close to 1,200 admissions in one week alone. The antibiotic supplies to treat the patients infected with meningitis are almost gone and it is not clear when new supplies will arrive. Appropriate antibiotic treatment must be started as soon as possible, ideally after a lumbar puncture has been carried out. If treatment is started prior to lumbar puncture it may be difficult to grow bacteria from the spinal fluid and confirm diagnosis. To receive results from the lumbar puncture takes 24 hours.

Today 180 patients with symptoms of meningitis arrive at your hospital to receive treatment but you only have enough supplies of antibiotics to treat 50 people. A local healthcare worker working with you asks you to treat her family now with the antibiotics because they have symptoms of meningitis. She says that she cannot perform her duties in the hospital and will not continue working in the hospital because she is feeling insecure about the safety of her family. She says that there is no time to wait the 24 hours for accurate diagnosis after lumbar puncture because the health of her family members is rapidly deteriorating. Not treating her children would lead to the loss of another staff member and each staff member is crucial as they are in short supply.

Over the past 40 years, serogroup C has caused only sporadic cases and a few localized outbreaks. Since this is the first large outbreak in Africa of meningitis caused by serogroup C, the vaccines are in short supply: able to treat only a small proportion of the population. The hospital you are working in has a small supply of vaccine. Everybody wants to get vaccinated and a lot of people from towns nearby have risked their lives travelling for days in harsh conditions to your hospital to be vaccinated and protected from the deadly disease. One of them is a mother that begs you to come to their village to give a vaccination to her child that is in a wheelchair and wasn't able to come. You also know that that village is a high risk group for infection.

## **Issues raised by the case**

1. If you were an MSF healthcare worker in the case what would you do and why?
2. Who will be treated first and/or vaccinated in case of the disease? Whom to prioritize treatment to?
3. Who will care for the sick if there are not enough healthcare workers?
4. What is more important: treatment or prevention?
5. What are healthcare workers' boundaries of his/her duty to care?
6. How to balance the rights of handicapped v able bodied people?

## **Potential learning outcomes**

Students at the end of the session should be able to:

1. Identify and consider ethical issues.
2. Understand how ethical issues may be anticipated and avoided.
3. Understand the different theories and way of addressing ethical issues and associated problems such as consequentialist, deontological or utilitarian way of thinking.
4. Discuss what can be learned to enhance future ethics training, for example, what preparations or resources would have been helpful.
5. Discuss the concepts of triage, rationing and resource allocation and how these can be perceived and dealt with differently if looking from a perspective of treatment or prevention.
6. Discuss if it is more important to treat or to prevent spread of disease during an emergency situation.
7. Describe a physician's professional/personal duties and his/her minimum obligations. Identify and explain how this could lead to conflict and to moral distress.

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## **Key words**

Meningitis, epidemic, vaccination, rationing, triage