FEDERATION OF AFRICAN MEDICAL STUDENTS' ASSOCIATIONS
(FAMSA)

MEDICAL NEWS
AND
TRENDS

JUNE 2023 EDITION
Sudan Conflict: Combating Disease Threats

"I was so scared because of the loud sound of guns that engulfed our neighbourhood; we could see soldiers running all over." - Anonymous

Over 528,500 people have fled Sudan and crossed the border into neighbouring countries. Of these, about 113,000 have sought refuge in South Sudan ever since the start of the war in Sudan in 2023.

This massive influx and overcrowding of people at the transit sites serve as a risk factor for disease outbreaks, therefore putting tens of thousands of lives at risk. In South Sudan, for example, where just about 41% of health facilities are fully functioning, national health authorities are dealing with a surge in malaria, hepatitis E, measles, cholera, and growing malnutrition cases.

The South Sudan government, alongside the WHO, however, has responded promptly to this ever-increasing influx of refugees and returnees by dispatching healthcare experts to provide and strengthen the humanitarian needs (these include emergency care and psychosocial support) of those arriving.

Combating Plastic Pollution in Africa

With over 400 million tons of plastic produced yearly around the globe, about 19 - 23 million tons end up in lakes, rivers, and seas. Less than 10% ends up being recycled.

In Africa, the growing population and urbanisation are becoming the major drivers for an increased use of single-use plastic, therefore heightening the level of environmental pollution and health threats.

Impacts of plastic pollution on health
1. Contamination of rivers, lakes, and groundwater.
2. Consumption of microplastics by marine organisms.
3. Release of toxic chemicals into the environment rom toxin-containing plastics.
4. The above can, in turn, impair human health when contaminated water/marine foods are consumed. Hence, leading to the disruption in endocrine function and increased cancer risks.
Ameliorating the situation
This requires comprehensive and interdisciplinary measures, including:
1. Public awareness campaigns
2. Improved management practices designed around the reduction of plastic use, reuse, and recycling initiatives.
3. Policy intervention, i.e., banning single-use plastic bags.

Healthcare Bolstering in Madagascar

The advent of Batsirai and Emnati cyclones, in February 2022, left the Vatovavy region and neighbouring environs of Madagascar devastated. With an estimated number of deaths towering to 300, alongside the destruction of over 150 healthcare structures and the spread of water-related diseases, over 800,000 residents were left devoid of basic health services. However, with funding from the United Nations Central Emergency Response Fund, mobile clinics were made available and accessible to individuals, likewise the restoration of healthcare services and strengthening of epidemiological surveillance and vaccination of children.

In addition, the WHO provided storage warehouses for medical materials, health kits with medicines, and deployed epidemiologists in the 23 regions of the country and set up a system to monitor and collect data on the epidemic potential of devastating diseases.

Today, following this catastrophe, doctors and laboratory technicians, mostly from the affected regions, have been trained to better manage emergencies and any unforeseen events that may arise. Also, the digitization of the reporting system on diseases has enabled real-time monitoring of the health situation in the regions, hence helping health authorities respond quickly to any situation. This act has today saved the regions from the effects of Cyclone Freddy, which occurred in February 2023. Despite the torrential rains in these regions, no cases of diseases such as cholera were reported.
**Liberia's Genomic Sequencing Capacity for COVID-19 and Other Priority Diseases**

In the context of infectious diseases, genomic sequencing plays a crucial role in identifying and tracking pathogen variants, such as viruses or bacteria. By sequencing the genomes of these pathogens, researchers can understand their genetic makeup, track their spread, and identify any changes or mutations that might affect their transmissibility, virulence, and response to treatments and vaccines.

In early 2021, Liberia sent COVID-19 samples to a research institute in Ghana for sequencing, which revealed the presence of the Alpha variant. Subsequent sequencing identified the Delta variant, followed by the Omicron variant. However, the turnaround time for results was lengthy, hampering surveillance and decision-making efforts. In response, Liberia sought support from the World Health Organization (WHO) and partners to establish local genomic sequencing capabilities.

With support from WHO and the United States Agency for International Development (USAID), Liberia's National Reference Laboratory received training, equipment, and infrastructure for genomic sequencing. This included the installation of a high-tetra computer, a sequencing machine, and reinforced security measures. The establishment of in-country sequencing capabilities not only enabled the detection and response to SARS-CoV-2 variants but also expanded the country's capacity for other epidemic-prone diseases like Influenza, Lassa fever, and Ebola.

The collaboration between WHO and USAID in empowering Liberia's sequencing capabilities exemplifies efforts across Africa, with 41 establishing laboratories for pathogen surveillance via genome sequencing. The case of Liberia serves as a hopeful example of building local capacity to address global health challenges.
1. Although extreme cases have been known to attack other organs such as liver and skin, Berger’s disease is a disease that chiefly affects what organ of the body?

2. Which medical term that starts with N refers to a hard bump under the skin (usually less than 1 centimetre) that can be cancerous or benign, and cystic if it's filled with fluid?

3. Azoles, like clotrimazole, ketoconazole, and voriconazoles, are compounds typically used to combat what general type of infection?

This Publication is brought to you by Federation of African Medical Students' Associations (FAMSA) through the efforts of three Standing Committees:

- Standing Committee on Health and Environment (SCOHE)
- Standing Committee on Publications (SCOPUB)
- Standing Committee on Medical Education and Research (SCOMER)

To answer our Trivia questions, please use the comment section of our post on any of our social media platforms below:

@official_famsa

www.famsanet.org