BVBARRMUN 2018

WORLD HEALTH ORGANISATION

BACKROUND GUIDE

Letter From the Executive Board

Dear Delegates,

Welcome to the World Health Organisation committee at BVBARR-MUN 2018.

Health is the most important aspect of life, of which nature is the harbinger. But at times, the harsh climatic conditions and unprecedented geography changes, alter human course of life adversely. A sound plan to reduce the impact these problems have on health has been the key research area for several policy makers and doctors. As the bright students of this day and age, it is your responsibility to continue this long-hauled battle against the fierce force of mother nature. As the WHO, you are expected to present creative and feasible ideas which could be adopted in the long run.

We hope you will find this Background Guide useful as it serves to introduce you to the agenda for this committee. It is not meant to replace further research and we highly encourage you explore countries' policies in- depth. Furthermore, a good researcher always believes in learning from the mistakes made by his fellow researchers. So, don't set out to reinvent the wheel but build atop existing scaffoldings.
Whether you are a first-time delegate, or an experienced one, we can assure you that this will be a memorable experience for you to showcase your diplomacy, debating skills, leadership, and have an incredibly fun time! :) If you have any questions concerning the study guide, individual preparation, the topic or any other thing you think we might help you with, do not hesitate to email us.

With that we wish you all the best for your preparation, and very excited to see what you have in store for us.

Regards,
Revannth, Abhipriti, Srija,
Executive Board, WHO, BVBARRMUN 2018.

Index

Overview

Committee history

The World Health Organization was established on April 7th, 1948 as a specialized agency under the United Nations principal organ of the Economic and Social Council (ECOSOC). Its headquarters is located in Geneva, Switzerland but operates fully in 150 countries. The WHO acts as an advisor on matters of public health as well as a research facility that collaborates with other UN related agencies, NGOs such as MSF (Doctors without borders), and prestigious medical research facilities.

Committee Mandate

The WHO is often confused with Doctors Without Borders and other such NGO's Contrary to popular belief, the main role of the WHO is to provide expertise for health related issues. Recently, the WHO is widely known for their key role in the fight against ebola and Non-Communicable Diseases (NCDs). The organization has also been a key player in combating the spread of HIV/AIDS, establishing UNAIDS in 1996. The WHO has many projects focusing on a wide variety of health-related areas including

-Establishing research agendas of centres all around the world
-Preparation of emergency capacities in developing and third world countries
-Preventing and treating communicable and noncommunicable diseases
-Publicizing major risks to public health and raising awareness about public health issues

Recently, the WHO has been shifting some of their attention towards mental health issues. The World Health Organization is currently compiling detailed reports and studies on mental health issues and disorders more than ever before.

Major achievements

The WHO plays an instrumental role in the eradication of diseases, most notably smallpox in 1977, as well as almost having completely eliminated diseases such as polio and leprosy. The containment of SARS in 2003 and Ebola in 2014, are just two success stories of their many achievements in the world of public health.

Introduction

Every year natural disasters kill around 90 000 people and affect close to 160 million people worldwide. Natural disasters include earthquakes, tsunamis, volcanic eruptions, landslides, hurricanes, floods, wildfires, heat waves and droughts. They have an immediate impact on human lives and often result in the destruction of the physical, biological and social environment of the affected people, thereby having a longer-term impact on their health, well-being and survival.During the past 2 decades, natural disasters have killed millions of people, adversely affected the lives of at least 1 billion more people, and resulted in substantial economic damages. Developing countries are disproportionately affected because they lack resources, infrastructure, and disaster-preparedness systems.

Even if the population has been evacuated in time and there were no (or very few) casualties, the effects of a disaster ripple long after the actual event – many people lose their homes and need to live in emergency camps for months, or even years; the road infrastructure is damaged; there is insufficiency of healthcare resources; etc. All these factors cause great economic problems and severe health issues in disaster ridden communities.

From outbreaks of communicable diseases to various safety hazards within the home, natural disasters may have harmful, long-term consequences to the health and well-being of the people in the affected areas.

Some of the causes for these health issues include but are not limited to:

>The shortage of fresh food, typical for post-disaster periods, results in malnutrition that weakens the immune systems of the people in the affected area;

>The limited access to safe water and lack of proper sanitation pose a risk of infections and gastrointestinal problems (diarrhea, hepatitis, and various other bacterial diseases can be transmitted by direct contact with contaminated water);

>The crowded living conditions and poor hygiene levels in emergency camps facilitate the transmission of infectious diseases;

>The structural damage done to the hospitals and health facilities in the region and the loss of medical equipment and medicines prevent adequate health care.

Disaster risk reduction is a part of sustainable development, so it must involve every part of society, government, non-governmental organizations and the professional and private sector. Therefore the need of the hour is a people-centred and multi-sector approach to reduce the health risks arising from the aftermath of the natural disasters, which is the agenda for the committee.

Lessons History taught us

An Overview of one of the worst Natural Disasters
In the early hours of the morning of Sunday 26 December 2004 a massive earthquake measuring 9.0 on the Richter scale struck the west of northern Sumatra. The quake triggered a powerful tsunami that swept the coasts of neighboring countries and causing serious damage and loss of life. At least five million people were affected in Indonesia, Sri Lanka, Maldives, India, Thailand, Seychelles, Myanmar. The death toll exceeded 280,000 people, and more than one million persons were displaced as a result of the destruction.

Many hospitals and health centres were destroyed or damaged with health workers among the victims. In some places, water supplies were disrupted and contaminated, making clean drinking water difficult to obtain. Sanitation facilities and sewage treatment works were damaged. All of this contributed to a diarrhoeal disease outbreak and a rampant spread of several diseases, especially in temporary camps. What surprises health experts till date was the inability of the affected nations to take action immediately after the conflict.A monitoring station that could have provided early warning of the devastating Indian Ocean tsunamis lacked the telephone connection needed to relay news of the impending disaster. This directly leads us to the first major lesson:

Lesson 1 : The necessity to develop reliant Early Warning Systems and preemptive protocols to combat potential health hazards.

Tsunami waves imposed dynamic water pressures on coastal structures as well as buildings and bridges near the coastline, inducing serious damage to the entire surrounding infrastructure located up to approximately 4 km inland. The resulting impulsive pressures of

breaking waves and hydro-dynamic pressures associated with water velocity, inflicted partial and full collapses of non-structural and structural components. The damage observed in Thailand was almost entirely due to water pressures that varied from impulsive pressures of breaking waves at the shore, to reduced dynamic pressures inland as water velocity decreased due to surface friction. There was some impact loading generated by the floating debris, though this was most pronounced in Banda Aceh, where large objects were observed to have impacted on structures. Both Thailand and Indonesia coastal towns had a large number of low-rise timber frame buildings. These buildings had timber columns and beams, supporting timber joist floor systems. The roofs either had light corrugated tin coverage or clay roofing tiles. These infrastructures were susceptible to the destructive waves and collapsed instantly

Lesson 2 : The need to develop geography based infrastructure and evacuation systems

Immediately after the disaster, symptoms of post-traumatic stress reactivity (PTSR) were highest among those who had been living at the time of the tsunami in heavily damaged communities, but were elevated among respondents from other communities as well. PTSR was higher among individuals who experienced traumatic events, but being from a badly damaged community also resulted in higher PTSR, net of individual experiences. Over time, symptoms diminished, with the fastest pace of recovery among those from heavily damaged communities. By 2007, average levels of post-traumatic stress reactivity did not differ by location of residence at the time of the tsunami. While levels of PTSR immediately after the tsunami are unrelated to education, the better educated recovered faster leading us to the final lesson:

Lesson 3 : Post Disaster Analysis to mitigate health issues.

What happened on the 29th of September 2018?

When an earthquake measuring 7.2 on the Richter scale struck off the coast of Aceh in North West Sumatra on Sunday 9 May, most people in Indonesia feared a repeat of the 2004 tsunami that devastated the same area five years ago. Fortunately, the earthquake triggered an early warning system that saved the lives of thousands. What follows is a detailed account of the steps taken within minutes of the Earthquake warning. Use this to understand the pace

of the events while drawing a parallel between the actions taken during the 2004 natural disaster.

12:59 (local time)
An earthquake measuring 7.2 on the Richter scale occurs 66 kilometres west of Meulaboh, Aceh Barat, at a depth of 30 kilometres. Shortly after the shock, the Indonesian meteorological, climatological, and geophysical agency (BMKG) issues a tsunami warning for the west coast of Aceh.

13:05
Little more than five minutes after the earthquake, the national headquarters of the Indonesian Red Cross Society establishes contact with their local branch in Aceh Barat.
Red Cross branches in Calang and Melaboh in the coastal areas of Aceh Jaya district mobilize 40 Satgana (disaster response team) members along with more than 30 community-based action team volunteers. They activate hand held sirens and help several communities to evacuate to higher and safer ground. They also monitor any unusual changes in sea levels. There are no immediate reports of any damaged buildings in Calang.The Red Cross operations centre in Jakarta establishes contact with their branch on Simeulue Island using HF radio.

13:10
Almost 10 minutes after the tremor, local and international media start calling the International Federation delegation in Jakarta for information. The Indonesian Red Cross files its first earthquake update report on the Federation's disaster management information system (DMIS).

13:15
Communication is fully established between the Indonesian Red Cross headquarters, Aceh chapter and branches and the Federation. The latest updates are shared. Red Cross branches in Nagan Raya and Aceh Barat exchange information on any impact from the earthquake in their respective areas.

13:30
The Red Cross Calang branch reports that the local community has been evacuated to safer locations in the area. No reports of any damages.

13:40
The Red Cross Nagan Raya branch reports that Satgana members have been deployed to the field to help organize and reassure the community as many people are still in a state of panic. Villagers continue to monitor the coast for a potential tsunami.

13:55

The Red Cross Simeulue branch shares their latest update with their headquarters. There are no reports of casualties or damage in Simeulue city and other sub-districts

14:00

Several National Red Cross Societies offer assistance. The International Federation delegation in Jakarta updates the Federation Asia Pacific zone office about the current situation.

14:04

The chairman of Red Cross Aceh Barat branch reports that all volunteers and Satgana members from Suak Ribee and Pang Gong villages have been deployed to the field to help people. Sea levels continue to be monitored. No injuries or damage are reported in this area.

14:56

An Indonesian Red Cross volunteer and Federation field officer in Aceh report that only a few accidents have occurred in the streets caused by people who panicked. There was no damage to buildings. The sea level rises slightly by about 20 centimetres, but only for a brief period.

15: 20

Communities from seven villages have been evacuated to the head of district's office, mosque, and fields on higher ground. Everyone will return after the tsunami warning has been lifted. All Red Cross teams remain in the field to monitor the situation and provide help to communities. The Red Cross uses three ambulances and two operational cars to support the evacuation process. Many people have been moved to higher ground in Mata Ie.

15:30

The authorities lift the tsunami warning. Some minor damage is reported in Banda Aceh (Ulee Lheu, Lambaro, Simpang Dodik and Lamprit). A few people suffer minor injuries. People start returning to their homes.

Current Situation

A 6.4 magnitude earthquake has struck off Lombok, province of West Nusa Tenggara, Indonesia, at 05:47 local time, on 29 July 2018, followed by 66 aftershocks with the highest of those with a recorded magnitude of 5.7. The earthquake affected the three districts of North Lombok, East Lombok and West Lombok.

According to the US Geological Survey (USGS), the quake was centered 50 kilometers northeast of the city Mataram on the northern part of Lombok Island; with a depth of 10 km. Indonesia's agency for meteorology climatology and geophysics (BMKG) indicated that there was no risk of a tsunami. The quake also impacted Mount Rinjani national park, a popular trekking destination. Access to the climbing routes are temporarily closed due to reports of a landslide around the mountain. The West Nusa Tenggara administration declared a seven-day state of emergency. The earthquake has claimed at least 17 lives.

As of 1 August, the National Disaster and Mitigation Agency (BNPB) had recorded 10,062 displaced people and 5,448 destroyed houses across Lombok, most of which are located in East Lombok regency.

More than 90 people have been killed and hundreds more have been injured in a magnitude 7.0 earthquake that took place in Lombok, Indonesia on the evening of 5 August. This second earthquake followed the 6.4 magnitude quake that struck the same area on 29 July.

As of 12 August 2018 (17.30 hrs UTC+7), National Disaster Management Authority (BNPB) and Command Post for Lombok Earthquake have verified an overall fatalities number of 392, 1,353 people injured (all levels of injuries), and 387,067 people displaced. In addition, a total of 67,875 houses damaged, along with 6 bridges, 606 schools, 3 hospitals, and 20 office buildings.

As of 15 August, the series of earthquakes and aftershocks in Lombok Island have caused 460 deaths, 7,733 injured and 417,259 displaced people, according to the National Disaster Management Authority (BNPB). An initial damage assessment to infrastructure reports over 72,000 houses damaged, as well as 52 health facilities, 128 religious facilities and 6 bridges damaged.

On 19 August, a 7M earthquake struck Lombok. It was preceded by a 6.3M earthquake and was followed by a number of aftershocks. The epicenter was 30km northeast of East Lombok, and was 20 km deep. As of 20 August, ten people are known to have died and 24 people have been injured. More than 150 houses have been damaged and widespread power outages have been reported. The earthquake caused a number of landslides and was felt across East Lombok, North Lombok, West Sumbawa, Sumbawa Besar, West Lombok and Mataram City, as well as Bali, East Java and Makassar. Aircraft carrying relief from Jakarta

and Malang have been dispatched. Lombok has been rocked by a number of significant earthquake since the 7M quake on 5 August which killed 460 people and displaced hundreds of thousands of people.

As of 24 August, more than 390,500 people remain displaced as a result of the earthquakes. Following the earthquakes, 555 people are known to have died. More than 805000 houses have been damaged, while six hospitals, more than 170 health centres and 859 schools have been affected. The emergency response phase ended on 25 August, with the response transitioning to the recovery phase with the aim to restore vital infrastructure and facilities, and stimulate community-level socio-economic activities. 390,500 people displaced.

As of 1 October, according to BNPB, the four quakes during July and August killed more than 510 people, injured at least 7,100 others, and displaced more than 431,000 people with 88,740 houses and 798 public and social facilities (community health centres, mosques and schools) destroyed or damaged. In mid-September, the provincial authorities announced a six-month period of transitioning from emergency to recovery.

Health Issues:

People's knowledge and awareness to the health risk also determined the occurrence of infectious diseases after those eight major natural disasters in Indonesia. For example, people have remained unaware of the importance of wearing personal protection to prevent tetanus infection. Some also devote less attention to the vaccination and did not receive adequate health information, which caused vaccine program dropping out. The government has made substantial gains in the integration of Disaster Risk Reduction into the education sector. The challenge is continuity and program sustainability. For that reason, the program should be scaled up to become more comprehensive, particularly because health risks threaten people after natural disaster. Raising the curiosity of students about health risks is important to minimize the effects of infectious diseases emergence following natural disasters. A lack of awareness of health risks is a crucial point that must be addressed. A possible workaround is to integrate health education and promotion in Disaster Risk Reduction planning in schools and communities.

Another example of natural disaster related to health problem is sudden flood. It may cause much death caused by trauma, and it also leaves some severe injury. Hypothermia and respiratory infection were usual but not epidemics. There are also problems in providing clean water supply leading to deterioration of sanitation causing an increase of enteric and other water related diseases, like common diarrhea. In term of Indonesia experience when natural disasters happen, the primary problem is the need to rehabilitate the health services and facilities, intensify epidemiological surveillance and vector control, and increase the public awareness on the true danger of the situation. Based on those experiences, it is important to a high standard, and mitigation measures program in hospitals are vital for avoiding loss of patients and staff, ensuring that facilities and health services will function properly after disaster, and made victims always far away from the area of disaster.

Response to disasters in Indonesia:
After the Indian Ocean tsunami of 2004, the government of Indonesia established a temporary post-disaster surveillance system in collaboration with the Ministry of Health and the Communicable Diseases Department of the WHO and Global Outbreak Alert and Response Network (GOARN), called the Early Warning and Response (EWARN) system for rapid response to acute phase emergencies including infectious disease outbreak. The system has a mobile concept that includes active surveillance, aimed at detecting risks of infectious diseases and controlling outbreak management. A weekly epidemiological report will be released including updates about recent cases of infectious disease.

In the case of the Yogyakarta and Central Java earthquake that occurred in an urban area, the government reacted quickly in collaboration with civil organizations to provide relief and to distribute health supplies and staff. However, a few outbreaks occurred because the cases were not properly controlled. In other major natural disasters, cooperation between the government and WHO, especially of provincial health offices, was conducted to monitor the cluster of infectious events, as well as other health issues.

Ministry of Health took measures to prevent the post-disaster outbreak, and in some case, the action demonstrated the effectiveness of control and prevention of outbreaks.
After a crisis, changes in human conditions, in the ecosystem of pathogens, and in the environment promote a higher rate of transmission of infectious diseases, which threaten human life. Key elements in humanitarian interventions in outbreaks are case management and surveillance. In response to this, the Ministry of Health undertook several actions such as formulation of humanitarian response plans in coordination with United Nations as well as work on health crisis management to prevent future situations. For example, they inaugurated Pemuda Siaga Peduli Bencana (DASIPENA) or the Youth Preparedness for Disasters as one of the first medical teams to be mobilized during the emergency response period. DASIPENA will support local health services in the handling of victim corpses quickly and adequately.

In response to disaster management, Indonesia has at least two important potential bodies: the Indonesian National Board for Disaster Management (Indonesian: Badan Nasional Penanggulangan Bencana, BNPB) and Center for Health Crisis Management, Ministry of Health Republic of Indonesia.
The BNPB is responsible for providing guidance and direction related to disaster management efforts that include disaster prevention, emergency response, rehabilitation, and reconstruction in a fair and equitable manner. Also BNPB became a spearhead for the formulation and establishment of disaster management policies and handling of International development programs to act quickly, appropriately, effectively and efficiently, creating comprehensive implementation of disaster management. The Center for Health Crisis Management plays a role in providing assistance and in reducing risks of health crises by conducting health crisis risk programs. They specifically examine facilitation of districts or

cities that become targets in planning the preparedness of disaster threats in the form of a response map. Both BNPB and the Center for Health Crisis Management will support community empowerment by implementing integrated health education and promotion in Disaster Risk Reduction plans. Developing the assessment of community empowerment and documenting its development over time will support evaluation of health education interventions.

UN Actions:

In addition to national search and rescue teams now in Sulawesi, the relief effort includes the armed forces, police and government officials, the UN Office for the Coordination of Humanitarian Affairs (OCHA) said.

The UN agency added that the Government of Indonesia "welcomed specific offers" of international assistance that are in line with current needs, which according to the national disaster management agency (BNPB), include food, shelter materials, fuel and generators, clean water and medical assistance.

According to the UN Office for Disaster Risk Reduction, UNISDR, Indonesia has suffered more deaths from tsunamis than any other country. This is the sixth fatal tsunami to strike the country since the huge 2004 Indian Ocean tsunami claimed approximately 226,000 lives across 12 countries, the vast majority in Indonesia. Earthquakes and tsunamis are responsible for more deaths than extreme weather events, having claimed an estimated 747,234 lives over the last 20 years, according to a new UNISDR report.

The search operation is over, but attention is shifting to the massive clean up and relief mission to assist survivors.The UN has sought $50.5 million for urgent relief to assist survivors in need. Indonesia initially refused international help but four days after the disaster President Joko Widodo reluctantly agreed to allow in overseas aid.

Getting vital supplies to affected areas has proved challenging as flights into Palu remain limited by its small airport, and overland travel is slow. Aid organisations say a dearth of clean drinking water and medical supplies remains a very real concern in the coastal city of 350,000. Nearly 90,000 people were displaced by the quake, forcing them into evacuation centres across the rubble-strewn city.

Questions to Ponder

1. What could have Indonesia done better in curbing the health issues post the disaster?
2. How did WHO's involvement affect the situation?
3. What were the reasons for the massive loss of life even in the presence of an early warning system?
4. How to preempt/control disease outbreaks post the tsunami?

5. What are the long term plans to restore the health of Indonesia?
6. Throw light on the short term implications of this disaster over the mental wellness of the people.
7. Come up with an action plan to mitigate the current situation without compromising the development of future health programs.
8. Draw a contrast between health issues seen in conflict prone areas and health issues observed in disaster prone regions.

References

[1] Health Workforce Development in Post Conflict Environments
http://www.who.int/hac/techguidance/tools/guide%20to%20health%20workforce%20development.pdf

[2] Tsunami Report 2004
http://www.who.int/hac/crises/international/asia_tsunami/3months/report/en/

[3] Epidemics after Natural Disasters
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2725828/

[4] Effects of the 2004 Tsunami
http://home.iitk.ac.in/~vinaykg/Iset457.pdf

[5] Resilience and Recovery of the 2004 Tsunami
https://blogs.worldbank.org/impactevaluations/resilience-and-recovery-ten-years-after-2004-indian-ocean-tsunami-summary-results-star-project

[6] Basic tsunami information
https://www.who.int/hac/techguidance/ems/tsunamis/en/

[7] Health in Emergencies and disasters - A practical guide
http://apps.who.int/iris/bitstream/handle/10665/42561/9241545410_eng.pdf;jsessionid=2E98CBA6F52CB2FC50605C0D502D7A7E?sequence=1

[8] Disaster risk reduction
https://www.preventionweb.net/risk/drr-drm

[9] UN Action
https://www.unocha.org/

[10] UN support
https://news.un.org/en/story/2018/10/1021882

[11] Aftermath of the Disaster
https://reliefweb.int/disaster/eq-2018-000122-idn

[12] Current Situation
https://www.sciencedirect.com/science/article/pii/S2212420917301383

Additional Reads:

[1] Social Determinants of Health in countries in conflict
http://applications.emro.who.int/dsaf/dsa955.pdf