



Dear Delegates and Faculty Advisors,

It is my distinct pleasure to welcome you to The Ivy League Model United Nations Conference India 2016 hosted by the International Affairs Association of the University of Pennsylvania, an Ivy League institution.

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Andre Na Under-Secretary-General Administration The Ivy League Model United Nations Conference is one of the most reputed high school conferences in the United States bringing together over 3000 delegates from across the globe in an unique academic, social and cultural experience. We are incredibly excited to bring this experience to India this year in what will be one of the largest and most academically, professionally and socially enriching Model United Nations symposiums.

A large part of what makes ILMUNC India so incredible is the commitment of its amazing staff, as well as the immense preparation that goes into making this conference the phenomenal experience that it is. Our staffers are all leaders at the prestigious University of Pennsylvania, who come from a diverse range of majors, interests, classes, and schools – from Finance at the Wharton School of Business to Computer Science and Nanotechnology at the School of Engineering. At ILMUNC India, this academic excellence and personal passions that chairs bring truly bring a professional collegiate environment and distinct enriching experience to our high school delegates, both within and outside the committee room.

The Secretariat is working hard to ensure that the quality of the conference is unparalleled. This year will bring together close to 1000 delegates in 8 distinct committees. The topics we are discussing are pertinent issues in today's world and we are excited to witness the unique and diverse solutions that our delegates will bring to the table. The ILMUNC India team is continuously searching for ways to make the conference better and more engaging for our delegates. We are proud to announce technological advancement in the Model United Nations circuit including a groundbreaking mobile application that will soon be released.

Our delegates' experiences outside of committee are just as vital as their experiences within committee. At ILMUNC India we ensure that our delegates take away memories and experiences that will better them personally and professionally. Outside of the invaluable Model United Nations experience, we host numerous college and career fairs, personal mentoring sessions with current students and alumni, keynote speeches from prominent members of society and, of course, enthralling social events.

Our delegates are the most integral part of our story and I'd like to once again thank you for choosing to be a part of our next chapter of ILMUNC India 2016. We are certain that you will walk away from this conference with memories that you will cherish for a long time to come. Welcome to ILMUNC India 2016!

Sincerely,

Ana Rancic Secretary-General ILMUNC India 2016



WORLD HEALTH ORGANIZATION

Introduction to the Body

The earliest conceptions of the World Health Organization (WHO) occurred during the 1945 United Nations Conference on International Organization by delegates from China, Norway, and Brazil. One year later in July of 1946, the constitution of the WHO was signed by all 51 member States of the United Nations as well as by ten additional non-member States. Thus, it carries the distinction of being the first specialized agency of the UN to which every member has subscribed. The inaugural World Health Day – April 7, 1948 – marks the date on which its constitution came into being.

According to this constitution, the mission of the WHO is "the attainment by all people of the highest possible level of health," with health being defined as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." This has been accomplished by working both unilaterally and bilaterally to take action on critical health issues, monitoring and assessing health care systems and trends; influencing the research agenda, formulating, encouraging, and monitoring the actualization of health standards and norms, providing technical support for capacity-building, and providing a forum for policy dialogue, with a focus on ethics and evidence.

WHO also seeks to further its mission by focusing on six topic areas within the realm of international health. Those six areas are: health systems, non-communicable diseases, promoting health through the life-course, communicable diseases, preparedness, surveillance and response, and corporate services. WHO works with key stakeholders to work closer towards the goal of universal health coverage. WHO is headquartered in Geneva, Switzerland, operates in more than 150 countries, and employs more than 7,000 people.⁵

TOPIC A: ATTACKS ON HEALTHCARE

Statement of the Issue

In times and places of conflict, healthcare services are extremely vulnerable to attacks in spite of their high demand. Doctors, nurses, ambulance drivers, paramedics, hospitals, health centers, and even patients have fallen victim to the casualties of war, either as collateral damage or due to targeted attacks. This violence can and often does disrupt healthcare systems, as entire communities are prevented from receiving vital services. Sometimes the disruption is so severe that the entire healthcare infrastructure collapses. Thus, violence against healthcare workers is a humanitarian issue with widespread and long-term effects that requires international action. These long-lasting, profound effects include the loss of life, human suffering, and setbacks for further health development. This



targeted violence also weakens the ability of health systems to deliver essential life-saving services to those in need.



Figure 1: Medics search for survivors following an air strike on the Syrian city Aleppo.⁶

The International Committee of the Red Cross (ICRC) is a key proponent of providing medical aid to individuals regardless of the politics of the situation, as their mandate and mission is to "ensure humanitarian protection and assistance for victims of armed conflict and other situations of violence." According to the ICRC, the main issue areas within this topic are: the vulnerability of healthcare facilities to attacks and looting, the number of attacks on local healthcare providers (which accounts for over 90% of incidents recorded by the ICRC), and the frequent violation of ethical principles of medical staff, in particular medical confidentiality and non-discrimination between patients.

International humanitarian law (IHL) is the branch of international law that is responsible for regulating the conduct of war. It seeks to limit the effects of armed conflict by protecting civilians, i.e. those who are not participating in hostilities. Thus,

IHL offers a baseline legal framework for ensuring protection and respect for medical personnel, facilities, and the wounded and sick in international and non-international armed conflicts. Though the system is able to provide relatively robust protection for healthcare services, it still contains gaps. Historically, there have been issues with enforcement, as impunity for attacks on healthcare workers has often been the norm. Moreover, IHL, by definition, is not applicable to situations absent of an armed conflict, requiring a different set of solutions for such situations.

Over the past several years, there has been growing recognition that attacks on and interfering with healthcare workers violates the right to healthcare services. As described in Article 25 of the United Nations' Universal Declaration of Human Rights⁹, Article 12 of the International Covenant on Economic, Social and Cultural Rights¹⁰, General Comment 14¹¹, and the WHO Constitution¹², "the highest attainable standard of health" is a fundamental right of every human being, and this right to health includes access to timely, acceptable, and affordable healthcare of appropriate quality. Thus, it is the responsibility of the international community to ensure that this fundamental and essential right is not violated by safeguarding healthcare infrastructure in times and places of conflict.

History

Violence against non-combatants, including medical personnel and patients, has always existed



in human history and conflict, but attempts to minimize these types of casualties only began developing in the nineteenth century. States began to develop a new perspective on warfare, specifically the purpose of warfare, and focused on the ability to overcome the enemy state by disabling enemy combatants. This principle serves as the foundation for some of the pillars of modern humanitarian law, such as distinguishing between combatants and civilians, requiring that wounded and captured enemy combatants must be treated humanely, and providing quarter.¹³

The Geneva Conventions are the most authoritative codification of IHL that exists today. They were developed over the course of several iterations and stages between 1864 and 1949 and are now composed of four treaties and three additional protocols. The Conventions establish the international standard of conduct for the humanitarian treatment of war and focus on the protection of civilians and those who are rendered hors de combat, or incapable of fighting. The conventions are rendered hors de combat, or incapable of fighting.

The ICRC derives its legal mandate from the Geneva Conventions and from its own Statutes. Furthermore, it is the only institution explicitly named by the Conventions, and thus IHL, as an authoritative body. The organization's founding originated from a similar ideal to that of IHL as a whole: the principle of providing medical assistance to wounded persons, regardless of the side on which they fought. In June of 1859, a Swiss businessman Henry Dunant witnessed the aftermath of the battlefield in Solferino, Italy (during Napoléon

Bonaparte's campaign in Italy). Horrified at the suffering, he purportedly mobilized the local townsfolk to help the injured, regardless of whether they were from the Austrian or the French side.¹⁷ With the sentiment of tutti fratelli – all are brothers – the forty-thousand soldiers who lay wounded or dying were offered common decency as human beings.¹⁸

To ensure the right of combatants and civilians alike to be spared from further suffering during armed conflict and receive proper medical attention, health care facilities, personnel, and medical vehicles had to be protected, international health care authorities state that attacks upon the wounded are forbidden as long as they retain a neutral function and treat all patients equally, irrespective of political, religious, or ethnic affiliation. Protective symbols, such as the red cross, red crescent, and red crystal were introduced to clearly identify medical installations, vehicles, and personnel as protected entities. These provisions, enshrined in the four Geneva Conventions of 1949 and their Additional Protocols and in customary international law, match the right to receive health care with an obligation on all parties to a conflict to search for and collect the wounded after battle, and to facilitate access to health-care facilities. Human rights law protects health care at all times, including during internal disturbances. These laws are binding on all States and parties to conflicts around the world. But they are not always respected.

Despite these prevailing legal norms, attacks on healthcare workers have continued to take place.



Statistics on the volume and nature of these attacks has only begun to be compiled by organizations such WHO and the ICRC in the past decade. According to data compiled by the WHO, the year 2014 saw 1,000 workers injured and over six-hundred killed due to conflict in 32 different countries. According to the ICRC, 2,398 incidents of violence against healthcare workers were recorded from various sources in 11 countries over the course of three years (2012 to 2014). Examples of incidents that have taken place include deliberate targeting of healthcare workers in war-torn regions such as Syria, Gaza, and the Central African Republic.

Relevant International Action

In 2008, the ICRC launched a study on the issue of violence against healthcare workers. The study looked into incidents of violence against patients, healthcare workers and facilities, and medical transport in sixteen countries. The goal was to better understand the threats and vulnerabilities the healthcare community faced during armed conflict or other emergencies. In attempting to better understand the problem, authorities hoped to craft better preventive measures. The study report, "Health Care in Danger: A Sixteen-Country Study" was published in July 2011.21 It highlighted the multifaceted nature of the violence and the need for a collective response to effectively prevent it and mitigate its effects.²² In December 2011, the report was presented to the 31st International Conference of the Red Cross and Red Crescent (International Conference). There, representatives from 180 States, the ICRC, the International Federation of Red Cross and Red Crescent Societies (the

Federation) and National Societies used the report's findings as a basis for Resolution 5, "Health Care in Danger: Respecting and protecting health care". The resolution called upon the Movement to identify ways of strengthening the protection of healthcare.²³



Figure 2: ICRC van pelted with bullet holes following an attack.²⁴

The passing of Resolution 5 was the launching point for "Health Care in Danger," a global initiative designed by the International Red Cross and the Red Crescent Movement. The initiative is divided into three distinct areas: 1) a public awareness campaign, 2) the mobilization of a broad community of concern, 3) and the consolidation and improvement of field practices and national responses to violence. The public awareness campaign seeks to broaden public understanding of and support for international and national initiatives for their protection. The community of concern seeks to support, at the local level, the implementation of recommendations and measures to protect health care. It is made up of health professionals, governments, weapon bearers, civil society representatives, NGOs, international organizations, and more. Finally, the HCID project supports the implementation of concrete, practical measures and operational responses at national



and local levels to prevent violence and safeguard health care in armed conflict and other emergencies. The goal is to ensure that governments strengthen domestic law on this issue and that these measures become standard practice for all concerned.

In December of 2014, the United Nations General Assembly passed Resolution 69/35: global health and foreign policy during its sixty-ninth session.²⁵ The resolution aimed to reinforce and strengthen norms against attacks on health services, founded both on international humanitarian law and the human right to the highest attainable standard of physical and mental health. The resolution urged states to take specific actions to prevent attacks.

The UN resolution recognized that attacks on health care can "result in long-lasting impacts including the loss of life and human suffering, weaken the ability of health systems to deliver essential life-saving services, and produce setbacks for health development." It urged "Member States in accordance with obligations under relevant provisions of international human rights law, including the right to the enjoyment of the highest attainable standard of physical and mental health, to promote equal access to health services and to respect and protect medical and health personnel from obstruction, threats and physical attacks." This includes actions by states and other stakeholders "to respect the integrity of medical and health personnel in carrying out their duties in line with their respective professional codes of ethics and scope of practice."

The resolution calls upon states to take specific preventive measures to enhance and promote the safety and protection of medical and health personnel and promote respect for their respective professional codes of ethics, including those designed to end impunity. These measures include:

- Clear and universally recognized definitions and norms for identifying and marking medical and health personnel, transports, and installations;
- Specific and appropriate educational measures for medical and health personnel, state employees, and the general population;
- Appropriate measures for physically protecting medical and health personnel, transports, and installations;
- Appropriate other measures, such as national legal frameworks where warranted, to effectively address violence against medical and health personnel;
- Collecting data on obstruction, threats, and physical attacks on health workers

The resolution also reaffirms the need for the WHO to fulfill its mandate to provide global leadership in developing methods for collecting and disseminating data on attacks on health services in emergencies. These are important signs of progress, but nearly every day there are reports of attacks and indications that more needs to be done, and faster. The entire global health community should mobilize to support and implement these recommendations, and promote accountability for those who perpetrate attacks on health care.

Current Situation

Attacks on healthcare personnel and facilities continue to persist as a problem today. Three countries in particular – Afghanistan, Iraq, and Syria – are largely seen by the international community as presenting the highest level of risk for these types of attacks.²⁶

Afghanistan

Though considerable progress has been made in Afghanistan in the past few years towards rebuilding the country's health system, the year 2014 saw a nineteen percent increase in civilian casualties, while conflict and attacks on health in large areas of the country impeded access to care.²⁷ According to the Agency Coordinating Body of Afghan Relief & Development (ACBAR), at least 58 districts were unable to access care in 2014, either permanently or temporarily, due to violent conflict nearby.²⁸ Similarly, in February of 2014, MSF characterized access to safe and secure healthcare in Afghanistan as an "ongoing struggle."29 Following a survey of more than 800 patients and health workers attending MSF hospitals in the provinces of Helmand, Kabul, Khost, and Kunduz, MSF concluded that violent attacks obstructing healthcare delivery are still prominent, including "the occupation of health facilities by armed groups, deliberate delays and harassment at checkpoints, and attacks on medical vehicles and personnel."

In addition to difficulty in accessing healthcare, Afghanistan also continues to face threats of violence and direct attacks against hospitals, health workers, and patients. For example, before the April 5 presidential elections, the Taliban issued a statement vowing to use force to "stop the process of elections from taking place in mosques, clinics, schools, madrassas and other public places." Between January 1 and August 15, 2014, the UN Secretary-General reported 41 incidents, primarily in eastern and central Afghanistan, where hospitals, clinics, and health personnel were attacked. On April 24, 2014, three foreign health workers were killed and two others wounded during a lone gunman's attack on an international NGO hospital specializing in children and maternal health services in Kabul. 22



Figure 3: Doctors without Borders (MSF) staff conducting surgery procedure in Afghanistan after a US airstrike that left 9 MSF staff wounded.³³

Iraq

Aerial assaults and shelling repeatedly and indiscriminately hit hospitals and clinics throughout Iraq in 2014, killing and injuring health workers and patients, and disrupting medical services for tens of thousands of civilians. These attacks have devastated a health system and population already plagued by large numbers of internally displaced persons, poor infrastructure, extensive migration



of health workers, the threat of extremist group Islamic State (ISIS), and the flight of financial and human resources.

In the first six months of 2014, Iraqi government forces repeatedly hit Fallujah General Hospital and other munitions while battling armed groups in Anbar province.³⁴ The hospital sustained structural damage and at least seven health workers and an unknown number of patients were injured in the attacks. In September, the same hospital was attacked again, seriously injuring at least one health worker.³⁵ The hospital is now believed to be under the control of ISIS.



Figure 4: The Fallujah General Hospital in Iraq was critically attacked by U.S. air forces in 2014, and is now believed to be under the control of terrorist organization ISIS.³⁶

In June, a Médecins Sans Frontières (MSF) clinic and the main hospital in Tikrit were targeted. Shelling severely damaged the clinic, and two weeks later a targeted airstrike hit the main hospital. A helicopter dropped a bomb that destroyed the emergency room and ground floor of the hospital. ³⁷ One person was killed, and another injured, causing medical workers to flee. One month later, on July

20, Shirqat hospital was bombed and health workers were forced to evacuate and transfer patients to facilities in other towns.³⁸

On September 7, the Iraqi Air Force struck an ISIS-controlled hospital near Kirkuk, killing seven patients and wounding 22, including children.³⁹ Despite Prime Minister Haider al-Abadi's orders to the Iraqi army to cease attacks in ISIS-controlled civilian areas, shelling hit another hospital in Fallujah a day later, seriously injuring a medical staff member. British aerial bombings in the Iraqi border town of Rabia on October 1 struck another ISIS-controlled hospital.⁴⁰

Syria

Since the beginning of the Syrian War in 2011, there have been repeated, systematic attacks on health personnel, supplies, and facilities in Syria. Government forces detained doctors for treating protesters and shot medical personnel providing first aid in the field. Access to health care has been blocked for hundreds of thousands of people. Figures on the number of health facilities attacked, the number of health personnel killed, and the impact of the lack of access to care may be understated due to the difficulty of reporting and the fact that many field hospitals are hidden.⁴¹

The UN Independent International Commission on the Syrian Arab Republic has reported that Syrian security forces have systematically targeted hospitals in opposition-controlled areas. The commission also noted that government forces targeted ambulances, killing paramedics as well as wounded. It found that



the pattern of attacks "indicates that government forces deliberately target hospitals and medical units to gain military advantage by depriving antigovernment armed groups and their perceived supporters of medical assistance."⁴²



Figure 5: A Syrian healthcare professional treating a victim of the Syrian War. One study from the Johns Hopkins Bloomberg School of Public Health states that Syria is the "most dangerous place in the world to be a doctor."

The commission also found that Syrian government forces have arrested and detained wounded persons seeking treatment, claiming that bullet or shrapnel wounds were evidence of participation in opposition activities. Further, it found that doctors and nurses have been forced to withhold treatment under violent threat. Further, the commission reported that the sick and wounded have been targeted with sniper fire and during military assaults on medical facilities. According to the commission, health care has been so militarized that many in need forgo medical assistance in hospitals for fear of arrest, detention, torture, or death.

According to data collected by Physicians for Human Rights, between January 1, 2014 and March 31, 2015, 194 medical personnel were killed

and there were 104 documented attacks on medical facilities. Among those killed, 78 were killed in attacks on medical facilities or while providing first aid in the field, and all but two were reportedly killed by government forces. Of the attacks on facilities, 88 were reported committed by government forces, predominantly through rockets and missiles (47 percent of incidents) and barrel bombs (39 percent of incidents).⁴⁴

Human Rights Watch and the Violations Documentation Center (VDC), independent civil nonprofit non-governmental organizations (NGOs). have also documented targeted and indiscriminate bombing that have killed or injured people near or on medical facilities. 45 According to witnesses and a VDC report, a government air strike with targeted missiles destroyed al-Rodwan Hospital in Jassem, Dara'a governorate on May 15, 2014.46 Human Rights Watch reviewed a video posted on YouTube appearing to show the aftermath of the aerial attack on the hospital, and satellite imagery confirmed the video's location and damage to the facility.⁴⁷ According to data collected by Physicians for Human Rights, a doctor, nurse, radiologist, lab technician, and two children were killed in the attack.48

Human Rights Watch has also documented a series of barrel bomb attacks on medical facilities in Aleppo city. A doctor with the Aleppo City Medical Council, an independent non-profit organization, told Human Rights Watch that government forces began repeatedly bombing the city's hospitals around January 2014 and struck hospitals that were



not being used for military purposes in Hanano, al-Sukair, al-Sakhour, and al-Shaar neighborhoods.⁴⁹ The doctor also said that barrel bombs hit two well-marked hospitals in al-Shaar and Hanano neighborhoods of Aleppo on April 13 and 21, 2014 respectively. According to Physicians for Human Rights data, government forces aerially bombarded eight medical facilities in 15 separate attacks in eastern Aleppo city between January and July 2014. Thirteen of the attacks were with barrel bombs, the other two with guided rockets and missiles. None of the facilities were on the front line.⁵⁰

In November 2014, an ISIS suicide truck bomb reportedly struck and damaged a field hospital in Kobani, a Syrian city on the Turkish border. News reports indicate that indiscriminate attacks on the city and targeted attacks by ISIS against medical facilities forced doctors to relocate underground improvised hospitals very few weeks. Due to increased violence in late 2014, many health professionals fled Kobani and reports indicate that only one field hospital with just a few staff members remained.



Figure 6: The above picture depicts the effects of the Syrian war on Kobani before and after the war.⁵²

In response to persistent attacks and threats

against health professionals and facilities, most health professionals fled opposition-controlled areas of Syria, resulting in severe shortages of skilled health workers.⁵³ Since the beginning of the civil conflict in Syria, the WHO has reported a major deterioration in the quality of the country's public health facilities, with almost 55 percent of public hospitals reported to be either only partially functioning or closed.⁵⁴

Analysis

IHL has provided a framework for assuring protection and respect for medical personnel, medical facilities, and ambulances, as well as the wounded and sick, in international and non-international armed conflicts. Over the 150 years since the original 1864 Geneva Convention, these protections have become more extensive and detailed, for example, by prohibiting interference with practices required by medical ethics. Nevertheless, the legal framework for protection under IHL does not comprehensively address the problem of attacks or interference with health services. In some circumstances of political volatility or violence, attacks on health care providers, facilities, transports, and patients take place, but IHL does not apply at all, because no armed conflict exists. For example, during political protests in the Kingdom of Bahrain in 2011, state forces responded by obstructing the capital's main hospital, and arresting, torturing, and prosecuting doctors and nurses for allegedly using their medical roles to commit hostile acts against the state.55 In Syria, before the threshold of a non-international armed conflict was reached⁵⁶, attacks on patients,



the medical community, and medical institutions by state forces created a climate of fear in which patients would not attend hospitals, leading instead to an underground network of makeshift clinics that could not replace the sophisticated medical services needed.⁵⁷ In volatile regions of Nigeria, vaccination workers have been attacked and killed, severely disrupting vaccination programs.⁵⁸



Figure 7: Political protests in Bahrain call for a new leader and political reform. In response, the government restricted access to the main hospital.⁵⁹

Even in armed conflict, IHL does not fully address needs for the availability of and access to health services for civilian populations. In Iraq, for example, the killing and kidnapping of doctors committed during the period of armed conflict⁶⁰ clearly violated IHL, to the extent that these acts were committed as part of the armed conflict. However, these acts also contributed to the emigration of health professionals in the period 2004-2007, leading to the further deterioration of access to health care services and maintenance of an adequate workforce. The state's responsibility to assure protection of health workers and to provide for adequate health professional coverage to meet

the health needs of the population may not have been fully covered by IHL.

It is rather difficult to generalize specific trends behind all of these distinct attacks, considering the extremely diverse range of perpetrators, targets, motives, and contexts for which these attacks take place. Additionally, data has only been started to be compiled within the last decade. Attacks are either the result of indiscriminate or targeted attacks, the former being akin to "collateral damage" and the latter have strategic significance and premeditation. The latter is usually the result of governments or armed groups seeking to punish health workers for providing impartial care.

In addition to addressing the reasons for why this violence occurs in the first place, the committee ought to also consider the many effects that need to be confronted and mitigated. Active fighting in the vicinity of healthcare facilities prevents access to the facilities by the wounded and the sick, health care staff, and vehicles carrying essential medicines and medical equipment to re-supply these facilities. Fighting can also disrupt the flow of water and electricity, as well as fuel supplies for back-up generators. Furthermore, violence can set off the displacement of civilians, including health care personnel and their families, to safer areas, leaving hospitals critically understaffed. The shortage of personnel not only affects those wounded in the fighting but also those suffering from chronic illnesses that require regular care. Ultimately in the long term, violence hampers the implementation of important preventive health care programs,



such as vaccination campaigns, which might have implications later in the future.

Possible Solutions

Developing a Global Reporting System

There is no global system for reporting attacks, and interference with health care means that the precise number of attacks; trends in particular countries, regions or globally. Furthermore, the international community's current understanding of the most common factors associated with attacks is uncertain. Similarly, this report, based upon media reports and accounts by international humanitarian agencies, cannot be considered comprehensive. Nevertheless, it demonstrates an alarming number of attacks, which are geographically dispersed and varied in form. For example, the World Health Organization (WHO) is testing a method for collecting data on attacks on health workers, health facilities, transports, and patients in complex emergencies.61

Mobilizing Civil Society and Religious Leaders

Another alternative may be to develop a local effort from the ground up. In building up mutual trust in local communities and calling upon town and religious leaders, the international healthcare community can expect better cooperation from locals residing high-conflict regions. This alternative, if successful, can prove highly effective in anticipating and preventing attacks on healthcare workers. However, properly executing this outcome is difficult and complicated. High-target regions

are, in their very nature, difficult to navigate. Locals are often hesitant to accept aid from foreign forces – thus, the real challenge here will be to craft strong, reliable, and long-lasting relationships with the local community.

Bloc Positions

United States & Europe

Attacks on healthcare workers often target Westerners. Thus, the U.S., Canada, and countries in the European Union place especial emphasis on protecting their healthcare workers. One statistic reports that nearly 80,000 U.S. healthcare workers are assaulted each year.62 Delegations from this bloc are mostly worried about the well-being of their workers. If a high conflict region proves too dangerous, this bloc will consider not sending its workers to the area. Another point that is oft ignored is that the U.S. if often the perpetrator of violent conflict in Middle East regions – the U.S. military is often responsible (though perhaps not intentionally) for the deaths of healthcare professionals working in the field. This is a result of the U.S.'s interventionist policies especially in the Middle East.



Figure 8: 43rd President George W. Bush of the United States declares a War on Terror, a statement that prompts years of U.S. military intervention in Iraq and Afghanistan.⁶³



South America and Asia

South America and Asia are primarily developing regions that have a high demand for healthcare workers, but unlike higher-conflict regions like Africa and the Middle East, do not have an extreme problem with attacks on healthcare workers. Even so, delegations from this bloc would highly benefit from measures taken to address the issue, so that healthcare workers feel more assured and safe when traveling abroad to work.

Africa & Middle East

The African continent and Middle East region are often the target regions of attacks on healthcare workers. And yet, while these places are the most dangerous for healthcare workers, it is also where healthcare workers are in greatest demand. It is especially important to the delegations of this bloc that healthcare workers stay in those regions to support the weak and diseased. Delegations from this bloc should treat their relationship with the West cautiously; alienating that bloc could jeopardize the availability of healthcare workers in the region.

Questions A Resolution Must Answer

- How can the rights and responsibilities of healthcare personnel be clearly enumerated and protected?
- In what ways can armed groups be engaged to safeguard health care services?
- When attacks on healthcare violate IHL and considering the prevailing norm of impunity for such attacks, how can a system of accountability be enforced?
- Should all countries pursue a unilateral solution

- to the issue? Should developed and developing countries approach the issue differently?
- What are some solutions that serve as after-thefact methods to deal with healthcare workers who have already been attacked? What are some preventive measures the international community can take?
- How can developing countries become more self-reliant on their own healthcare workers rather than those of developed countries?
- Who are the main perpetrators of these attacks?What are their motives?
- Who are the other players with whom the WHO must cooperate so that state governments will comply with suggested measures?
- If a government cannot adequately protect its healthcare workers or provide decent healthcare to its citizens, do other nations have the responsibility to intervene?
- In the event of a violent conflict, should healthcare workers flee to protect themselves or stay in the area of conflict to serve locals in need?

Conclusion

The issue of violence against healthcare workers has widespread causes and effects on local communities that are already highly unstable due to political and military conflict. The medical services that are provided by these personnel and facilities are integral to protecting the fundamental human right to health. A strong understanding of international humanitarian law is necessary to understand this issue in the context of armed conflict and thus properly formulate concrete solutions to change



the status quo of impunity that currently exists. Furthermore, there is great demand for creative solutions that can deal with violence against health care in the absence of armed conflict. As these attacks overwhelmingly take place in developing countries, there is an acute need for solutions to protect the health care infrastructure in these high-risk areas for the long-term development of their economies and societies.

TOPIC B: POLLUTION IN THE DEVELOPING WORLD

Statement of the Issue

The issue of pollution is manifold. Its implications include global warming, rising oceans, air quality, and loss of scarce resources. In context of this committee, however, it makes itself manifest in global public health. The issue is not just grave, but also complicated, as it is difficult to create a uniform response plan. Pollution is a collective action problem: everyone is incentivized not to do anything about it and free-ride off of others' actions in the hope of investing no capital but retaining the benefits. Different countries feel the effects of pollution more strongly than others, and some countries justify their pollution levels through historic or economic arguments.

The World Health Organization has identified specific areas around which revolve the most harmful pollution issues: water quality, availability and cleanliness; infectious diseases; poor air quality, both indoor and outdoor; exposure to toxic substances;

and climate change, or global warming.⁶⁴ The study of this issue, and an ensuing resolution, is especially vital for developing countries, where the effects of pollution on the environment are devastating. The World Health Organization estimates that the resulting impact of environmental hazards serves as a root cause of 25% of deaths and disease globally, and, staggeringly, the cause of 35% of deaths and disease in regions with scarce resources and poor local public health infrastructure, like sub-Saharan Africa.⁶⁵

There is no single exhaustive definition used to determine whether a country is "developing" or "developed." For the purpose of this committee, we shall use a convention employed by the Organization for Economic Cooperation and Development (OECD), which is based on a statistical categorization performed by the United Nations. Australia, Canada, European countries (excluding Russia and former Soviet republics), Israel, Japan, New Zealand and the United States are considered developed countries.⁶⁶

History

The questions of pollution, global warming, and health – along with their histories – are inextricably linked. Throughout human history, diseases have ravaged populations across the globe. Yet it was not until the 1800s that scientists theorized about the relationship between clean water and sanitary living conditions, and the spread of communicable diseases.⁶⁷

Industrialization, which swept across Western



countries in the 18th and 19th centuries, gave rise to a new form of pollution: waste and emissions that infected the air and water supplies. Evidence that carbon dioxide emissions affected the environment was actually uncovered as early as 1859.⁶⁸ John Tyndall, a British scientist, discovered that CO2 trapped infrared radiation, thereby raising the temperature of the room ever so slightly.⁶⁹ In contemporary times, scientists have reached the broad consensus that global warming is the result of human activity through greenhouse gas emissions.

Problems arising from human activity have been offered human solutions. In 1850, increasing complaints over the toxicity of water encouraged the city of Chicago to build the first major sewage system in the United States.⁷⁰ Many Western countries followed suit, encouraging mass migration to urban areas, which further fueled the pollutionrife Industrial Revolution. More recently, developed countries around the world have established environmental agencies whose duty is to oversee and combat pollution levels at the national level. The Department of the Environment, Canadian Council of Ministers of the Environment (CCME), European Environment Agency (EEA), and the Environmental Protection Agency (EPA) were all founded in advanced, industrialized countries in the late 20th century.^{71 72} In addition, there are several important international institutions, like the United Nations Environment Programme (UNEP) and the Intergovernmental Panel on Climate Change (IPCC) that focus on the scientific and research aspects of pollution. Countless non-governmental organizations (NGOs) also offer programs for

victims of pollution, as well as oversight of large agencies. Evidently and historically, pollution and its effects on the environment have only recently been perceived as falling under the responsibility of the state.

Some of these agencies have enjoyed moderate success. In the 1970s, scientists linked the acidification of water, and the subsequent fall of acid rain, to the emission of sulfur dioxide, SO2. The Canadian Council of Ministers of the Environment recognized that pollutant emissions could not be cut unilaterally, and established an air quality control regime immediately, ratifying several regional and international treaties and conventions.73 Additionally, Germany and the Netherlands won a legislative battle in 1989 with the support of the now-defunct European Environmental Bureau to tighten the regulation of car emissions. Despite the fact that many automobile companies complained that there would be an increase in production cost, the European Community decided to implement strict standards for all of its members, a rule that is still in place today.⁷⁴

We can think of the problem of pollution in three broad ways:

- Point-source pollution: instances in which there is a single, identifiable cause, such as an oil spill or a leak of toxic chemical substances into a body of water.
- Indoor (household) and outdoor (ambient) air quality: the quality of the air is directly linked to the level of pollution and emissions.
- Global warming: rising sea levels and higher



temperatures are just some of the effects of decades of environmental neglect.

Each of these paradigms have had dramatic effects on global health, and will continue to present challenges long into the future. The purpose of this committee is to examine the issue of pollution in the developing world. In developing countries, issues of pollution are often exacerbated, because the countries do not have the resources necessary to invest in long-term environmental regulations, or even the proper infrastructure to deal with a sudden crisis. Let us consider several instances of each category, which created international crises.



Figure 7: Aerial view of the spill off the coast of Kuwait in 1991.⁷⁵

The Gulf War Oil Spill

After the Iraqi invasion of Kuwait, and the ensuing Gulf War, an estimated 1.5 billion kilograms of crude oil spilled into the waters in January,1991.⁷⁶ The spill occurred initially on the coastal lines of Iraq, Iran and Kuwait, before spreading down the Persian Gulf and into the Arabian Sea, on the coast of Saudi Arabia. This environmental catastrophe was the result of both wartime attacks, and a strategic move by Iraqi forces, who had intentionally opened the valves of an oil terminal and allowed several million barrels of oil to spill into the Gulf.⁷⁷ The

incident has been cited by some experts as the first "environmental war crime." This spill was more than an environmental catastrophe, however; the Gulf countries also control an overwhelming majority of the world's crude oil supply, and are the main exporters to developed countries such as the United States. Thus, a regional spill quickly expanded into an international crisis. In fact, the Gulf War Oil Spill remains the largest oil spill in human history by a wide margin.⁷⁹

Response efforts were frustrated by ongoing regional conflict. The Kingdom of Saudi Arabia immediately sought international assistance for a coordinated response. The United States and Japan promptly responded and provided technical assistance. According to Saudi Arabia's Meteorology and Environmental Protection Administration, \$340 million were spent on protecting Saudi Arabian infrastructure within 18 months of the spill. UNEP, the European Community (EC) and the International Maritime Organization (IMO) were effectively present throughout the crisis, and played a key role in delivering resources to neighboring states with fewer resources than Saudi Arabia.

The spill is a perfect representation of point-source pollution. A clear cause was easily determined, and its effects threatened to endanger regular citizens that were not involved in the ongoing conflict. Several Gulf countries reported fears that their desalination and water treatment facilities might be jeopardized by the oil spill; in a geographic region with such arid climate, poor access to clean fresh water would have devastating effects on neighboring populations.⁸²



Fortunately, meteorological conditions prevented the spill from having major effects on the air quality for Gulf countries. Nonetheless, the effects on the ecological systems were dramatic and indeed, are still recuperating today.⁸³



Figure 9: Air pollution on the highways near Beijing, a city that is notoriously known for its high levels of carbon emissions and city smog.⁸⁴

Air pollution in heavily industrializing developing states

The quality of air has quickly become a serious issue for countries that have many highly polluting industries. Air pollution has significant negative externalities, in the form of social costs of healthcare and decreased worker productivity. In 2005, the World Health Organization published a report that outlined "air pollution guidelines," to indicate the upper limit for how much particulate matter, ozone, nitrogen dioxide and sulfur dioxide air could contain before being deemed a serious health risk.⁸⁵

The first crises relating to air pollution date from the early 20th century, when states were undergoing heavy industrialization in preparation for the World Wars. Instances of "smog", or air that is densely concentrated with toxic substances, resulted in the deaths of thousands. Recently, health risks relating to air pollution have become dire in large developing countries, like China and Mexico. Poor air quality has been tangibly linked to heart disease, cancer, and strokes among others. Moreover, it is estimated that air pollution was the cause of an astounding 3.7 million premature deaths worldwide in 2012. These countries have generally attributed the issue to unregulated industry emissions, along with car emissions. Many cars in both China and Mexico are not subject to strict environmental regulations like the ones in the United States or the European Union. As a result, both countries both implemented driving restrictions to combat this increasingly visible issue.

In Mexico and China, similar regulations were implemented to restrict the amount of cars on the road in 1989 and 2015, respectively. The governments decided to prohibit people from driving on one day of the week based on the last digit of the license plate. In Mexico, this program was known as "Hoy No Circula," and in China it is colloquially known as "OneDay." The regulations seemed promising, but extensive studies demonstrated that despite initial, short-term success, pollution levels actually returned to original levels; in the case of Mexico, air pollution actually increased as a result of the driving restrictions. 88 The increase in pollution occurred due to a variety of factors, the most significant being that people were incentivized to purchase older, more polluting second-hand cars with different license plate numbers.89

The lessons of these failed policies highlight



the need for international forums for discussion, like the World Health Organization. States must be able to share best practices, and conduct effective costbenefit analyses before implementing restrictions that might have adverse effects. Air pollution may begin as a domestic issue in large states like China, but eventually the spillover effects are not containable. Discussion over both multilateral efforts to reduce air pollution, along with recommendations for domestic policies that are acceptable and realistic, would greatly benefit the health of the millions of people affected by abuses of dangerous emissions.

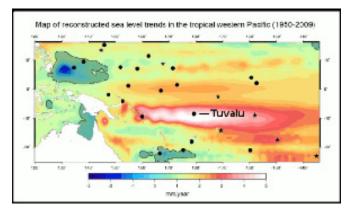


Figure 10: This map, depicting the increasing seal level trend, highlights regions of the world that are most at risk of flooding and submersion in the future.⁹⁰

The Danger of Rising Sea Levels for Island Nations

Figure 9 illustrates a worrying trend that is the direct cause of global warming. As greenhouse gases are emitted, the temperature of the atmosphere increases. Glaciers and ice caps, particularly in the Arctic region, melt and cause seal levels to rise. However, as observed in Figure 9, this increase is hardly uniformly distributed. Parts of the Caribbean,

the Southeastern Latin American coast, and the Northern and Southern Pacific Oceans are the areas most at risk. These regions are home to dozens of island-nations, whose people are endangered by flood and threats to the marine life which serves as an important food source.⁹¹

Small island-nations, like the Maldives, are very militant about combatting climate change, because they witness the results of global warming instantly. As the flattest country on earth, with its highest point of elevation at three meters above sea level, the Maldives is extremely vulnerable to oceanic change. In the last few decades, rising sea levels have increased the risk of flood, and have caused severe erosion.⁹²

Similarly, Pacific isles like Tuvalu are confronted with existential threats, as a direct cause of the pollution of larger countries. There are fears that the country, one of the smallest of the world, will disappear under water within a few decades. These fears are based primarily on the dramatic increase in the number of inundations and deadly storms. Former Prime Minister of Tuvalu Saufatu Sapo'aga threatened to sue the United States and Australia for excessive greenhouse gas emissions in 2002 – the two countries with the highest greenhouse gas emissions per capita. A year later, he told the United Nations in a speech that the threat of global warming was no different than a slow and insidious act of terrorism against us." Sieve a direct cause



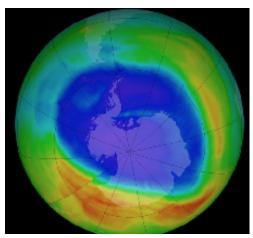


Figure 11: The hole in the ozone layer is growing larger and larger as state governments, including the U.S., continue to neglect compliance agreements to effectively address climate change.⁹⁶

The Ozone Crisis: A Success Story of International Cooperation

Despite all the challenges this committee faces, we can draw inspiration from successes in the realm of international cooperation. The best embodiment of the positive impact of multilateral action is the international response to the ozone crisis. Ozone is the principle molecule of a layer of the Earth's atmosphere that protects it from harmful ultraviolet rays. In the early 1970s began to suspect that the supply of ozone was being depleted by the use of certain common household gases, chlorofluorocarbons (CFCs).97 UNEP set up a working group of scientists that remained divided, along with a negotiating forum in 1982.98 Initially, there were strong differences between bloc positions. The United States, Canada, and the Scandinavian countries were in favor of freezing production of CFCs. European Community members and some developing countries claimed

that there wasn't enough scientific evidence to justify to cost. Generally, the least developed Southern states reasoned that since countries in the Northern hemisphere were causing the problem, they should accept the full costs of fixing it. The 1985 Vienna Convention provided a nonbinding framework.⁹⁹

But less than two years later, every bloc changed their opinion and ratified a new deal with binding restrictions. This occurred after the discovery of the hole in the ozone layer in 1985 provided a "smoking gun." Moreover, there were simple substitutes for CFCs, that would facilitate the transition. A deal was struck between Northern, industrialized countries and less developed countries, the Montreal Protocol of 1987. CFC emissions were to be gradually phased out by developed countries, whereas developing countries could continue to produce CFCs for a decade, so long as they agreed not to export any products containing CFCs. Additionally, financial aid was offered to countries to incentivize them to switch to CFC-free products.

The response to the ozone crisis was the single greatest success in the realm of environmental pollution reduction efforts. This committee should draw inspiration from the manner in which industrialized countries were able to cooperate and offer incentives to developing countries, in order to facilitate and expedite change. Naturally, certain circumstances makes this crisis unique, notably the easy availability of substitutes for CFCs. We must attempt to identify the basis for this successful negotiation, and apply it to other areas that would so greatly benefit from increased multilateral action.



Historical Tensions

Northern countries, which tend to be developed, and southern countries, which tend to be developing, enjoy historically strained relationships dating back to the Middle Ages. Nowadays, the once simple geographic divide separating developed from developing has somewhat eroded. Issues relating to climate change and pollution often diverge from traditional international relations and geopolitics, focusing more on domestic political economies. For instance, the United States is currently simultaneously one of the biggest proponents of pollution regulation, but also the least likely to sign on to a binding agreement. Due to the nature of United States politics, foreign leaders fear entering into a treaty with the U.S. because of the possibility of total upheaval of the established order with the simple accession of a new president. In particular, many are worried that the next American president will not be as sympathetic towards climate change as Barack Obama was as a lame duck president. This diminishes the credibility of long-term U.S. promises, and creates tensions between the United States and its allies that are dependent on incoming foreign aid.

Difficulties in negotiating long-term agreements between developed countries and highly polluting developing countries such as China actually stem from historiographical differences. Developed and developing states view history and their corresponding actions in different lights, which frustrates dialogue between the two.

Regional tensions have also slowed

advancement in this area. India and China, the world's two most populated countries have historically engaged in very tense relations. Similarly, Middle Eastern countries have not cooperated on any binding multilateral action to prevent pollution, like oil spills, due to religious and political differences.

Relevant International Interaction



Figure 12: President Obama discusses climate change action with European leaders in Copenhagen. 102

The Long Road to Paris

The United Nations established the Framework Convention for Climate Change in 1994 as a forum for discussion on the ever-worrying topic of global warming and greenhouse gas emissions. The FCCC recognized the problem of climate change, which was remarkable for the time period given the lack of extensive scientific evidence.

The Kyoto Protocol was adopted on December 11th, 1997 and committed states to binding targets. It also formally recognized that advanced industrialized countries were the principal perpetrators, thus allowing developing nations to merely make a



formal promise to reduce emission levels, as opposed to a quantifiable target.¹⁰⁴ It entered into force in 2005. However, the United States, one of the world's greatest polluting countries, did not ratify the protocol, thus rendering its effectiveness quite limited.¹⁰⁵

As the Kyoto Protocol was set to expire in 2013, world leaders met for a summit on climate change in Copenhagen in 2009. Despite the fact that member states decided to extend Kyoto to 2020, more defections made the treaty seem even more loose: Canada, New Zealand, Russia and Japan abandoned the protocol. 106 The result of the summit in 2009 was the Copenhagen Accords, a non-binding document that focused on "soft-law" promises of remaining politically conscious of the problems of climate change. In particular, developed countries promised to fund actions limiting greenhouse gas emissions in developing nations, committing to a total of \$100 billion a year by 2020. 107

Kyoto and Copenhagen both set the stage for a follow-up conference in Paris. The muchanticipated meeting reached an agreement, which was essentially a continuation of the Copenhagen practices, with two notable changes. First, each country would be responsible for setting its own terms of participation, in the form of "Nationally Determined Contributions." Secondly, all parties would commit to peer reviews and regular, transparent reporting to ensure accountability and compliance. According to the UN FCCC, 17 out of 197 parties have ratified the agreement, constituting 0.04% of total global greenhouse gas

emissions.¹⁰⁹ The treaty has not yet been ratified by a single main polluting country; its future is at this point unclear, as it will go into effect only when 55 countries comprising of 55% of global emissions ratify it.

One year ago, on May 26th, 2015, the World Health Organization adopted a landmark resolution on air pollution – the first time the topic was discussed in this body. The main focus of the resolution was raising awareness, with an emphasis on the involvement of national health authorities. It urged members to create monitoring systems for pollution levels, and encourage citizens to use non-pollutants for cooking and heating.

Bilateral Agreements

In 2009, China and India signed a pact, agreeing to coordinate their environmental policies, and conduct research on renewable energy and climate change.¹¹² This agreement came into force in the midst of a conflict between the two countries over a secretive dam; as of 2015, it appears that China has advanced further in its construction efforts, and India's attempts to establish ownership of the body of water have been futile.¹³

Despite increasing bilateral tension in Sino-American relations, climate change has proven itself to be the one issue on which remarkable progress has been made. The two biggest polluters discussed climate change extensively in a press conference after China's leader, Xi Jinping, visited the White House for the first time in September of 2015. Xi announces a new national cap-and-trade program,



as well as a \$3 billion fund for developing countries to combat climate change. 114

Current Situation

Different categories of pollution present varying challenges:

Household air pollution

Indoor air quality may seem trivial next to the vast global collective action problems of climate change. But around 3 billion people, mostly in low- and middle-income countries, continue to use extremely polluting solid fuels to cook and heat their often poorly-ventilated homes. As a consequence, 4.3 million people die every year from indoor air pollution-related diseases. Exposure to the combustion of solid fuels greatly increases the risk of pneumonia, cardiovascular diseases, pulmonary diseases, lung cancer and strokes, especially in children.

Ambient air pollution

The World Health Organization's 2005 Guidelines for air quality have been used by countless governments and organizations to determine whether living conditions were safe. Air pollution can be measured in several different ways:

Particulate Matter (PM)

The most harmful of all pollutants, PM comprises of a mixture of solid and liquid particles in the air, that can lodge themselves in a lung and cause extensive damage, often leading to advanced forms of lung cancer and cardiovascular or respiratory diseases.¹¹⁶ The established guidelines

for PM are 10 μ g/m3 as annual mean and 25 μ g/m3 as a 24-hour mean for small particulates, and 20 μ g/m3 annual mean and 50 μ g/m3 24-hour mean for larger ones. The Guidelines estimated that cutting the concentration of PM (which is often 70 μ g/m3 in many developing cities) to the recommended level would reduce the global death toll caused by ambient pollution by 15%. The same annual mean and 25 μ g/m3 as annual mean and 25 μ g/m3 annual mean and 25 μ g/m3 as annual mean and 26 μ g/m3 annual mean and 20 μ g/m3 annual mean annual mean and 20 μ g/m3 annual mean annual mean and 20 μ g/m3 annual mean annua

Ozone

Not to be confused with the atmospheric ozone layer, ozone in the air most commonly occurs as the result of the reaction between sunlight and vehicle or industry emissions. When inhaled at unsafe levels, ozone can cause breathing difficulty and exacerbate the effects of asthma. Ozone is currently the pollutant of most concern in European countries.¹¹⁹

Nitrogen dioxide

Nitrogen dioxide usually comes from the combustion of solid fuels and vehicle emissions and has been scientifically linked to the development of bronchitis.

Sulfur dioxide

Sulfur dioxide is emitted as part of the combustion of fossil fuels. The effects of sulfur dioxide can be felt just after ten minutes of exposure, in the form of decreased respiratory capabilities. Moreover, when it combines with water, sulfur dioxide causes acid rain. 120

Accidental poisoning

The most easily avoidable deaths occur after exposure to dangerous toxic substances,



like chemicals and pesticides. It is estimated that 355,000 people die every year because of excessive exposure to these substances. Two-thirds of these deaths occur in developing countries. With lead poisoning, the death toll climbs to 585,000. 97% of lead poisoning deaths occur in developing countries. 122

Furthermore, many developing countries have no effective waste management system. Some estimates claim that between one-third and one-half of solid waste is not properly collected or disposed of; in the poorest parts of the world, this proportion climbs to 80-90%. The lack of waste disposal and sanitation of basic water supplies is one of the major causes of the spread of vector-borne diseases like malaria, which kills 1.2 million people every year, most of them African children under the age of five years old. 124

There are also tangible economic effects; the World Economic Forum estimated that a seemingly insignificant rise of 2 degrees Celsius would result in a 4-5% of African and South Asian GDP loss. 125 Moreover, the costs of pollution are expected to fall unevenly on developing nations, shouldering 75-80% of the costs. 126

World Health Organization Responses

The World Health Organization is the most frequently cited source for information on the health effects of pollution. As such, WHO maintains an extensive part of its budget towards research and studies, to provide the most accurate facts and figures. The Air Quality Guidelines are regularly

updated and published, to adapt to the changing environment. Additionally, the World Health Organization is pushing to include pollution levels and indices as an indicator for successful, positive development. It also encourages member states to share methods on assessing health effects of various programs or exposure to pollutants.¹²⁷

Analysis

The vast majority of pollution-related deaths in the developing world are caused by issues that have already been dealt with in the developed countries, like increasing the emission standards for cars sold in a certain country. But much of the developing world deals with internal strife, natural disasters, and famines on a regular basis; limiting pollution is hardly deemed a priority. Furthermore, there is global demand for unsustainable fuel, that inhibits low- and middle-income countries from investing in sustainable, renewable energy sources.

Outside of domestic issues, the greatest hurdle that stands before effective discussion and action regarding pollution is the enduring tension between developed and developing states. Figure 13 and Figure 14 succinctly illustrate the historiographical difference:



Cumulative GHG Emissions 1990-2011 (% of World Total)

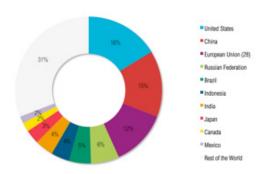


Figure 13: Pie chart illustrating cumulative greenhouse gas emissions in the last 21 years. 128



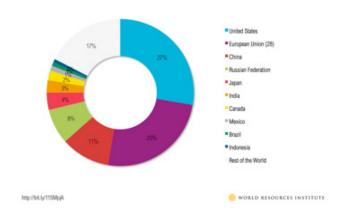


Figure 14: Depicts cumulative carbon dioxide emissions in the last 161 years. 129

Developed countries, especially the United States and the European Union states, focus on perspectives like that shone in Figure 13. The narrow timeframe, of only about 20 years, demonstrates an inclination towards contemporary data as a means to support arguments. As Figure 13 indicates, there is only a marginal difference between United States emissions, European emissions, and Chinese emissions; thus, developed countries surmise that China should exhibit the same level of commitment towards reducing greenhouse gas emissions as the

United States and the European Union. Regardless of the timeline of industrialization in developing states, outdated and heavily polluting industries should be eliminated, or at least regulated. To summarize, developed countries examine the present situation and believe that each country is responsible for its current share of emissions, and should do everything in its power to reduce that percentage.

By contrast, many developing countries, notably the G-77, disagree fundamentally with this approach. They tend to favor Figure 14, claiming it is a more accurate representation of the level of responsibility each state has. Figure 14 takes on a more historical perspective of emissions, dating back 160 years. The argument is that developed countries had the luxury of being able to industrialize without any regard for the environment, or any international obligations or criticism. To developing states, it is unfair to limit their industrialization process by enforcing constricting regulations, when developed countries were able to avoid these. Similarly, large economies like China and India have often protested that the burden of pollution should not fall on those who pollute the most today; rather, the burden should be placed on the countries who have historically polluted more, arguably contributing more to the current state of affairs. According to Figure 14, the United States and Europe have contributed over half of all carbon dioxide emissions since 1850, with China a distant third. To summarize, developing countries do not think treaties that are uniform or demand more from polluting developing countries like China or India are properly addressing the problem, and are a tool for developed countries to put



the blame of a very serious issue on industrializing countries.

Regime Complex

Another dimension of the problem of pollution is the fact that an expansive, nuanced regime complex has emerged. A regime complex refers to a situation in which there is no single supranational organization that has sole jurisdiction and authority to enforce any action to reduce pollution levels. Instead, there are a huge number of bilateral, regional and multilateral treaties, agreements, regulations, domestic legislation, contracts, and policies that are issued from a huge number of bodies. There is no single organization that deals with climate change; there are environmental NGOs, the World Health Organization, Intergovernmental Panel on Climate Change, domestic environmental protection agencies, United Nations Environment Programme, etc.

The lack of a centralized institution regarding climate change means that it is hard to determine who has the authority to enforce compliance of agreements. The regime complex of climate change makes it more difficult to achieve substantial change, since there is no clear passage for action.

Possible Solutions

The possibilities for action on pollution levels reduce every year. As the situation becomes increasingly dire, the need for dramatic change is all the more important. Here are two areas where reform might engender positive results.

Renewable Energy

Renewable, or sustainable, energy is becoming increasingly popular in developed countries, especially in Nordic European nations. Renewable energy accounts for almost 25% of energy production in the European Union, compared to 13% of total energy production in the United States. 130 131 In particular, two-thirds of this sustainable energy came from renewable waste. 132 In China, however, coal still constitutes a plurality of energy; however, renewable energy has been on the rise. It is vital, therefore, that parties to an agreement to reduce pollution assist developing states in enhancing their renewable energy sector. A dependence on fossil fuels may be deplorable for developed countries, but not a single developed country achieved full industrialization without the use of heavily polluting energy sources. Thus, generous subsidies and technological support should be offered for renewable energy industries in developing countries - particularly in densely populated ones, like China and India. Developed countries should understand that developing countries do not rely on fossil fuels for malicious purposes; sustainable energy must be made the more attractive option.

Decreasing reliance on pollutants as energy sources would have countless benefits. Air quality, according to World Health Organization standards would vastly improve, as there would be a noticeable decrease in sulfur dioxide, nitrogen dioxide and particulates from industrial work. In turn, the improved air quality would not only have incredible environmental effects, like reducing acid rain, but



would also save millions of human beings from premature death.

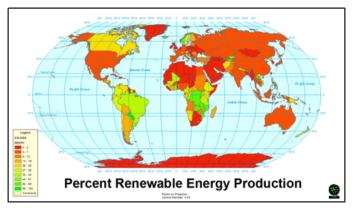


Figure 15: The above graphic shows each country's percent renewable energy production in 2012. Many large countries, like the U.S., China, and Russia, though claiming to make efforts to make progress in using renewable energy are among the countries with the smallest percent renewable energy.¹³³

Desalination and waste management

One of the major obstacles to general health is the contamination of water supplies, and the increasing rarity of freshwater, globally. Scientists all agree that as the temperature of the atmosphere increases, sea levels rise as the result of valuable glaciers melting - glaciers that contain most of the very small amount of freshwater on Earth. The process of desalination should not be so complicated or expensive. The technology exists, but has not been perfected so that it may be applied on a massive scale. When water supplies are contaminated by point-source pollution, like an oil spill or an accidental chemical spill, entire populations should not be ravaged. Similarly, waste management should be a focus of many developing countries, who do not have a proper sewage system

in place, and thus succumb most easily to vectorborne diseases. The improper collection of trash is a form of pollution that is very much a problem in many developing countries.

Bloc Positions

Africa

In several major African cities, transportation emissions are the main source of pollution. Acute Respiratory Illness (ARI) is one of the biggest causes of hospital visits, which is directly caused by unsustainable air pollution levels.¹³⁴ Due to unexpectedly high temperature rises, there has been a lot of climate change action at the regional level: the African Ministerial Conference on Environment (AMCEN), the Framework of Southern and Northern Africa Climate Change Programmes, and the East African Community Climate Change Policy. Additionally, several countries have outlined official action plans, strategies and frameworks to deal with climate change, including Kenya and South Africa. 135 The principal setback for action is the astounding lack of resources. Africa is home to many of the world's poorest, and most corrupt, countries. It is also the most vulnerable to the effects of climate change. Very few countries have the resources to deal effectively with pollution, let alone allocate those scarce resources efficiently. African countries would benefit the most from technological support, infrastructure, and humanitarian work.

Middle East

As described earlier in this guide, the Middle East has succumbed to several environmental



disasters, notably the Gulf War Oil Spill. However, an additional environmental issue of extreme salience for public health, is the water supply. Middle Eastern countries deal with a very arid climate that is already not ideal for clean water supplies. Pollution levels can have dangerous effects on water supplies, which are the scarcest in the world. Some regional efforts have been successful, like the Red Sea Strategic Action Program, Mediterranean Technical Assistance Program, and the proposed Gulf Environmental Partnership and Action Program (GEPAP) holds promise. 136 Obvious obstacles to successful action remain. Many Middle Eastern countries are on a constant collision course. Regional tensions have only been exacerbated by recent conflicts and the rise of ISIS. Many Middle Eastern countries resent the intrusion of developed countries like the United States, because of prior (and current) involvement in regional affairs.

Asia

It is very difficult to describe the position of "Asia" towards pollution, seeing as how there are so many divergent opinions. Japan is the only fully developed country in Asia. China and India, on the other hand, are among the biggest polluters in the world. Additionally, there are many developing countries in Asia that face similar problems to poor African nations; they do not have the correct resources or infrastructures to properly deal with the topic, and receive very little aid from their neighbors. Members of ASEAN have cooperated impressively; enacting a number of initiatives, like the Agreement on Transboundary Haze Pollution. The effectiveness of these measures has yet to be

determined.¹³⁷ Despite differences in resources, pollution levels, and development, there has been a commendable amount of cooperation between countries. China, South Korea and Japan recently announced a multilateral cooperation effort to deal with pollution.¹³⁸ Asia is home to the fastest growing countries, so pollution efforts should be closely monitored.

Europe

European countries have generally shown commitment to decreasing pollution. Renewable energy production has increased annually. Air pollution levels have decreased steadily over the years, and helped general health. The European Union has proven to be an effective agency for issues relating to climate change. It has passed a number of policies, including emission ceilings, strict emission standards, and long-term strategy for improving air quality.

United States

The United States is, as in most international crises, at the forefront of debate. There is a lot of frustration internationally for seeming hypocrisy in U.S. policy. Many developing countries resent the United States for prescribing policies and solutions, and denouncing all use of fossil fuels, when the United States itself does not have a proven track record of fossil fuel independence or dramatic emission decreases, or even recognition of the historic role it has played in climate change. Moreover, the United States failed to ratify the Kyoto protocol, among other agreements, thus reducing its potential for effectiveness. Nonetheless,



most international agreements that are in effect were passionately lobbied for by the United States, who succeeded in rallying many countries behind it. President Obama has pushed for a lot of action in his second term, culminating in the Paris Agreement, which the United States has yet to ratify. He has also announced in a joint press conference with Chinese president Xi Jinping, citing new efforts to reduce carbon emissions.

South America

Latin American countries suffer from some of the worst water pollution globally. Almost all South American nations have air pollution levels that far exceed the World Health Organization's guidelines.¹³⁹ Moreover, many of them are lagging in fuel regulation. Chile has pioneered these efforts, passing a new law on vehicle emissions. 140 Moreover, many countries are demonstrating progress through investing in renewable energy, with investments increasing every year in this region, despite global investment reduction.¹⁴¹ There is not much cooperation between countries, but it is generally domestic, unstable political conditions that slow progress. There is a huge dependence on fossil fuels as well, with Venezuela presiding over the largest known natural source for crude oil. Foreign direct investment and subsidies would probably have the greatest effect in this region.

Questions a Resolution Must Answer

- How can developed and developing countries effectively coordinate, and act in ways which both sides will find acceptable?
- How can we stimulate foreign investment in

- renewable energy, clean water, and reduced emissions?
- How can we cooperate despite regional tensions and military conflicts?
- How can we work to reduce premature deaths, especially in the world's poorest nations?
- How can we ensure that every human being has access to safe, clean water?
- How can we reduce the effects of heavy industrialization, and dependence on fossil fuels?
- How can we accommodate the fears and anxieties of every single nation, regardless of how developed?
- What are some short term and long term solutions to the issue?
- Which nations developed or developing deserve more attention and aid in their efforts to combat pollution and climate change?
- How can we better consolidate the international community's response to climate change issues?

Conclusion

Pollution is clearly an extremely complex and multifaceted issue. What is unique about the issue of pollution, is that it affects every single nation, and will affect our children for generations to come, regardless of our course of action. As the World Health Organization, our primary duty is to ensure that each human being is taken care of, and is not put in a dangerous situation because of a country's failure to enact proper pollution control regulations. Delegates should be prepared to engage with countries that do not share the same perspectives or



beliefs; delegates should recognize that pollution is an issue bigger than any single country.



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