

Izmir Ozel Turk College Model United Nations
Conference 2025

World Health Organization
(WHO)

Study Guide

Agenda Item: Addressing the Prevention of Misuse and
Overdose of Pharmaceuticals and Their Adverse
Effects

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1. Letter from the Secretary-General

2. Letter from the Under Secretary-General

Honorable participants,

As the Under Secretary-General responsible for the **WHO**, it is a great pleasure and honor of mine to welcome you all to the committee and ***Izmir Ozel Turk Koleji United Nations Conference 2025***.

I am ***Elis FUNDA***, a senior at *Izmir Guzelbahce Oguzhan Ozkaya Yelki Science High School*. I have been attending conferences since late 2022, and I am looking forward to achieving the best Model United Nations experience with the contribution of all of you.

This study guide is designed to give you an insight into the topic discussed. Nevertheless, it is of critical importance to emphasise that it serves as a basis, which you will need to complement with your own research and consequently stance. Although more research does not always equal more success in committee proceedings, I have one piece of advice to give you - know your committee. In your research, dedicate some time for other members of the committee to presume and adapt more quickly to the dynamics, giving you an advantage in shaping the debate and the ability to steer discussions in your favour.

The agenda item I selected for the committee is both interesting and contemporary. I hope to ignite discussions, heated debates and exciting negotiations. I look forward to the enriching discussions that will develop during our time together. If you have any inquiries, please do not hesitate to reach out to me.

Sincerely,

Elis Funda

Under Secretary-General responsible for the World Health Organization

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1. Introduction to the Committee : WHO

World Health Organization (WHO), a specialized agency of the United Nations dedicated to international public health. The World Health Organization (WHO) was founded in 1948 and is headquartered in Geneva, Switzerland. It is managed by a variety of committees that support its main objective. The functions, responsibilities, and actions of the committees within the World Health Organization (WHO) are diverse and geared towards addressing a wide range of global health challenges.

These committees play a crucial role in shaping policies, providing expertise, and coordinating

international efforts to promote public health. WHO is the directing and coordinating authority for health within the United Nations system. It is responsible for providing leadership on global health matters, shaping the health research agenda, setting norms and standards, articulating evidence-based policy options, providing technical support to countries and monitoring and assessing health trends.

WHO fulfills its objectives through its six core functions:

- Providing leadership on matters critical to health and engaging in partnerships where joint action is needed;
- Shaping the research agenda and stimulating the generation, translation and dissemination of valuable knowledge;
- Setting norms and standards and promoting and monitoring their implementation;
- Articulating ethical and evidence-based policy options;
- Providing technical support, catalyzing change, and building sustainable institutional capacity;
- Monitoring the health situation and assessing health trends

The governing forum of WHO is the World Health Assembly (WHA). The WHA is composed of the health ministers of all 194 member states of WHO, and is the world's highest health policy setting body.



2. Introduction to the Agenda Item: Addressing the Prevention of Misuse and Overdose of Pharmaceuticals and Their Adverse Effects

a. Misuse and Overdose of Pharmaceuticals

Misuse and Overdose of Pharmaceuticals can lead to bad outcomes. The use of prescription pharmaceuticals prescribed by doctors or over-the-counter medicines outside the recommended periods, the use of other people's prescription medicines are all forms of misuse of medicines, which can lead to addiction and health problems. In addition to the misuse of medicines, overdose is a separate issue in its own right. Overdose is taking more than the recommended amount of a medication and as a result causes chronic diseases, psychological problems and social pressures. Looking at these issues in detail, *the reasons for misuse of Pharmaceuticals are as follows:*

- Taking a medication outside of the doctor's instructions or taking it outside of the recommended dosage and duration of use;
- Using other people's prescription pharmaceuticals;
- The use of medicines for different purposes

The use of medicines for other purposes are as follows:

- Using Prescription Pharmaceuticals for Recreational Purposes
- Use of Pharmaceuticals for Performance Purposes
- Using Pharmaceuticals for Weight Loss
- Use of Sedatives or Sleep Aids for Other Purposes
- Use of Pharmaceuticals for Self-Treatment of Mental Health Problems
- Use Under Pressure from the Social Environment

Using Prescription Pharmaceuticals for Recreational Purposes

People may take medicines such as painkillers, benzodiazepines or some antidepressants for pleasure or relaxation, even though these medicines are prescribed for specific medical conditions. For example, the painkillers oxycodone or hydrocodone may provide sedative effects or feelings of pleasure rather than pain relief.

Use of Pharmaceuticals for Performance Purposes

Some people may abuse pharmaceuticals such as stimulants (e.g. Adderall or Ritalin) used to treat ADHD to improve concentration, alertness or academic or work performance. Athletes or bodybuilders may abuse anabolic steroids prescribed for certain medical conditions to increase muscle mass and improve physical performance.

Use Of Sedatives or Sleep Aids for Other Purposes

Pharmaceuticals such as benzodiazepines (e.g. Valium or Xanax) or over-the-counter sleeping pills (e.g. diphenhydramine) can be used to induce relaxation or fall asleep without medical necessity.

The reasons for Pharmaceuticals overdose are as follows:

- Accidental or incorrect dosage of pharmaceuticals.
- Use for suicide or self-harm
- Overdose by individuals who want to increase the effect of the Pharmaceuticals
- Inadequate knowledge about the use of the Pharmaceuticals

The symptoms of an overdose are as follows:

- General health problems such as dizziness, nausea, vomiting, weakness.
- Slowing down or stopping breathing.
- Irregular heartbeat, low or high blood pressure.
- Loss of consciousness or a coma.
- Convulsions, severe headache, tremors.

The pharmaceuticals that are most commonly overdosed with their use are as follows:

- Painkillers
- Benzodiazepines
- Antidepressants
- Nonsteroidal Anti-inflammatory Drugs (NSAIDs) and Pain Relievers
- Antihypertensive Medications (Blood Pressure Medications)
- Diabetes Medications

- Stimulants (ADHD Medications)
- Antipsychotics
- Laxatives

b. Health Effects

There are many reasons for pharmaceutical misuse and overdose, as well as many adverse effects on human health, these are 5 different reasons for pharmaceutical overdose; Physical, Mental, Neurological, Psychological and Long Term Effects.

The abuse of medicines is analyzed in 3 different reasons; ***Physical, Mental Health Effects and Behavioral changes.***

If the effects of an overdose are analyzed;

Physical Effects

Overdose can overload the body and cause irreversible damage to organs such as the liver, kidneys, lungs and brain. Long-term damage can lead to organ failure and the need for transplantation. Cardiovascularly, however, overdoses of opioids, stimulants and alcohol can lead to severe heart problems, arrhythmias, heart attacks and cardiac arrest. Overdoses of opioids and benzodiazepines can cause respiratory depression and breathing arrest, which can be fatal if left untreated. Overdose of Pharmaceuticals such as acetaminophen can cause liver toxicity, while other Pharmaceuticals can cause stomach bleeding, ulcers or intestinal perforation.

Mental and Neurological Effects

High doses of certain drugs (e.g. opioids or tranquilizers) can lead to loss of consciousness or a comatose state, in which the person stops breathing and is unable to respond to external stimuli, especially stimulants or antidepressants, which can lead to seizures. If left untreated, seizures can lead to permanent brain damage. Long-term overdoses can lead to permanent brain damage, which can lead to loss of cognitive function, motor dysfunction and memory loss.

Psychological Effects

Overdoses, especially of stimulants or hallucinogens, can lead to severe states of psychosis, hallucinations and delirium, which may require psychiatric intervention. It can lead to long-term mental health problems such as depression, anxiety and cognitive disorders.

Long-Term Effects

People who survive an overdose may be more prone to drug dependence and may tend to use more drugs after an overdose. It can lead to chronic conditions such as liver disease, heart disease or kidney damage, which may require ongoing medical care.

These are the consequences of an overdose of pharmaceuticals. Furthermore, if the consequences of misuse of medicines are examined

Physical Effects

Abuse of opioids, alcohol and prescription pharmaceuticals can cause damage to organs such as the liver, kidneys and heart over time, while ADHD medications can cause high blood pressure, heart attack, vomiting, gastrointestinal bleeding, stroke and arrhythmias. Opioid abuse, including abuse of benzodiazepines, can cause respiratory depression (slowing or stopping breathing), which can be life-threatening.

Mental Health Effects

Many pharmaceuticals, especially opioids, benzodiazepines and stimulants, can lead to physical and psychological dependence, making it difficult for a person to function normally without taking the pharmaceuticals, while long-term abuse can cause depression, anxiety, paranoia and severe mood swings. It can also lead to memory loss, poor judgment and impairments in cognitive function. This can also affect a person's ability to focus and think clearly.

Effects and Behavioral changes

Abuse of pharmaceuticals can interfere with motor skills, coordination and decision-making, which can lead to falls, car accidents and other serious injuries. and Abuse increases the risk of overdose and can be fatal if left untreated.

The consequences of misuse of Pharmaceuticals are presented in these three sub-headings.

c. How to prevent?

As many problems as misuse of pharmaceuticals and overdose can cause, some steps can be taken to prevent them. And these steps are common to both. An important solution to prevent misuse of pharmaceuticals is to take the correct dosage of medicines. For this, medicines should be used in the smallest package size and the correct dosage should be used. Pharmaceuticals should be used for as short a time as necessary, and if long-term medication is to be used, this should be planned together with doctors and specialists. Apart from teaching people how to use pharmaceuticals, health professionals should also be taught how to use them. Doctors and especially pharmacists could be given lectures so that they can learn and remember the correct use of medicines and the potential health problems that can arise if something goes wrong. After doctors and pharmacists have been informed about the use of medicines, awareness should be raised in the community. By disseminating the right information, the consequences of overdose and misuse of medicines can be shown to the public and awareness can be raised.

Just as important as the misuse of medicines is the deliberate misprescribing of prescriptions or the incorrect prescription of the wrong medicine and its instructions for use. For these reasons, prescriptions should be more closely monitored and controlled. In order to do so, the principle of rational use of pharmaceuticals should be followed. Rational use of pharmaceuticals means making the correct diagnosis, selecting the appropriate treatment, providing clear and unambiguous information to the patient. should include the process of prescribing, monitoring and evaluating the treatment.

Not all people can be prevented from misusing or overdosing, but steps can be taken to prevent it from going too far. Establishing rehabilitation centers specifically for those people, contracting with psychological counseling companies to make them feel comfortable so that they can explain themselves, will at least stop their process and they can be brought back to the public again.

The future and the first education of a human being always starts from the family. If there are cases of pharmaceutical misuse or overdose in the family or if there is a lack of knowledge about these issues, educational support can be provided to them. In this way, families will be better informed and will not pass on misinformation to their children. In order to accelerate this path, they can be asked to establish a volunteer community or grouping on behalf of the families so that the education process will be accelerated. These ways and the common solutions to misuse of pharmaceuticals and overdose accelerate the treatment process of people.

MEDICATIONS FOR OPIOID OVERDOSE, WITHDRAWAL, & ADDICTION

Medications for opioid overdose, withdrawal, and addiction are safe, effective and save lives.

The National Institute on Drug Abuse supports research to develop new medicines and delivery systems to treat opioid use disorder and other substance use disorders, as well as other complications of substance use (including withdrawal and overdose), to help people choose treatments that are right for them.

FDA-approved medications for opioid addiction, overdose, and withdrawal work in various ways.

- ➔ Opioid Receptor Agonist**
 Medications attach to opioid receptors in the brain to block withdrawal symptoms and cravings.
- ➔ Opioid Receptor Partial Agonist**
 Medications attach to and partially activate opioid receptors in the brain to ease withdrawal symptoms and cravings.
- ➔ Opioid Receptor Antagonist**
 Medications block activity of opioid receptors in the brain to prevent euphoric effects (the high) of opioids and alcohol and help reduce cravings.
- ➔ Adrenergic Receptor Agonist**
 A medication that attaches to and activates adrenergic receptors in the brain and helps alleviate withdrawal symptoms.

REDUCES OPIOID USE AND CRAVINGS

Methadone Daily liquid or tablet Dolophine®, Methadose® Generics available	Naltrexone Monthly Injection Vivitrol®
Buprenorphine Daily tablet Monthly injection Sublocade® Generic tablets available	Buprenorphine/Naloxone Daily film under the tongue or tablet Zubsolv®, Suboxone® Generics available

TREATS WITHDRAWAL SYMPTOMS

Lofexidine
 As-needed tablet

 Lucemyra®

REVERSES OVERDOSE

Naloxone
 Emergency nasal spray or injection

 Kloxxodo®, Narcan®, Zimhi™
 Generics available

NIH National Institute on Drug Abuse

nida.nih.gov

d. Past actions

Pharmaceutical misuse and overdose pose serious risks to both individual and public health. Various efforts have been undertaken in the past to prevent these problems. In addition to these efforts, there have been some crises and there are methods used to solve these crises.

Education and Awareness Programs

Education on the correct use of pharmaceuticals has been organized for health professionals and the general public. These programs aimed to highlight the negative health impacts of misuse of pharmaceuticals.

Inspection of Prescription Pharmaceuticals:

Red and green prescription medicines were introduced to prevent the abuse of prescription medicines. These regulations have led to stricter control of pharmaceuticals that pose a risk of addiction.

Pharmaceutical Safety Guidelines and Protocols

Guidelines and protocols have been established to minimize medication errors in healthcare institutions. These documents aim to inform healthcare professionals about the correct use of medicines and the prevention of potential errors.

Addiction Counseling and Treatment Centers

Specific rehabilitation centers were established for individuals suffering from pharmaceuticals addiction. In these centers, treatment processes were supported with methods such as withdrawal therapy and psychotherapy.

Pharmaceutical Interactions and Dosage Information:

Trainings were provided for health professionals on pharmaceutical interactions and correct dosage use to reduce the risk of overdose. These trainings aimed to promote the safe use of medicines.

Proper Storage and Access Control of Medicines

Safe storage and controlled access to medicines was ensured to prevent accidental or intentional overdose of medicines. These measures were particularly aimed at protecting children and individuals at risk.

Improving Emergency Response and Treatment Protocols

Specific protocols have been established in emergency departments for rapid and effective intervention in case of overdose. These protocols guide healthcare professionals in managing overdose cases.

Community Based Awareness Programs

Various training and information programs have been organized to raise awareness about the risks and prevention of overdose in the community. These programs aimed to make individuals more aware of the use of medicines.

These sub-headings are actions that have been taken in the past and are still being used but are insufficient. In addition, these actions have been guided by the crises and their solutions,

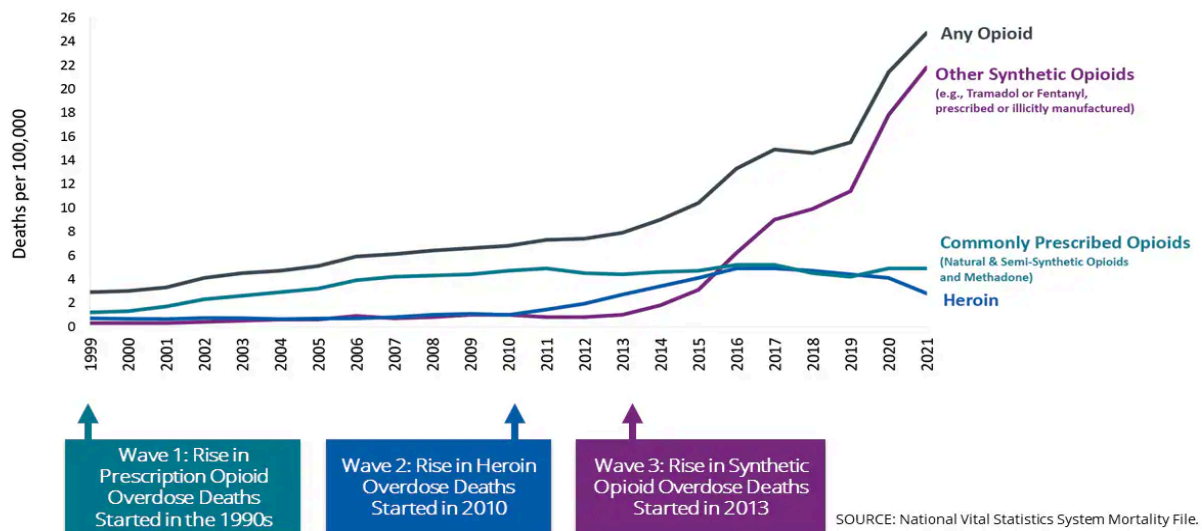
Opiate Crisis in the United States of America

In the United States of America, there has been a serious crisis in recent years due to the misuse and overdose of opioid (opium-derived) pharmaceuticals. This crisis has had a profound impact on both individual and public health. From 1999 to 2016, approximately 453,300 people in the US died from causes related to opioid use. During this period, over-prescription, abuse and addiction rates of opioids were the main causes of the crisis. Especially in the 1990s, the effectiveness of opioids in pain management was emphasized and prescribing of these pharmaceuticals was encouraged. However, the addictive properties of these pharmaceuticals were ignored. As a result, the abuse and overdose of opioids increased rapidly.

As a solution, health authorities have established guidelines for stricter supervision of opioid prescriptions and for prescribing them only when necessary. This aims to prevent unnecessary opioid use. And there have been legal actions and lawsuits against opioid

manufacturers and distributors. For example, Purdue Pharma pleaded guilty to charges and agreed to pay over \$8 billion in fines for the addictive effects of the pharmaceuticals OxyContin. In addition, Addiction and Rehabilitation Centers have been established and educational awareness programs have been carried out, and a new application has been developed. pharmaceuticals such as naloxone (Narcan) against overdoses have been made available in emergency services and in the community. These pharmaceuticals reduce the risk of death by reversing the effects of opioids.

Three Waves of Opioid Overdose Deaths



Benzodiazepine Addiction in Turkey (1990s)

In the 1990s, benzodiazepine abuse and addiction became a major health problem in Turkey. Benzodiazepines are widely prescribed pharmaceuticals for the treatment of anxiety, insomnia and other psychiatric disorders. However, long-term and uncontrolled use of these pharmaceuticals increases the risk of addiction. In the 1990s, the use of sedative pharmaceuticals was found to be as high as 15%, especially among university students in Istanbul. This shows how widespread the abuse of benzodiazepines has become among young people.

Training has been organized for health professionals and the public on the risks and safe use of benzodiazepines. These programs contribute to the prevention of addiction and overdose.

Prescribing and dispensing of benzodiazepines was more strictly regulated. In this way, it is aimed to prevent unnecessary and prolonged use. Special rehabilitation centers have been established for individuals suffering from benzodiazepine addiction. In these centers, treatment processes of individuals are supported and their reintegration into society is ensured.

Psychotherapy methods and support groups play an important role in the treatment of benzodiazepine addiction. Individual and group therapies are used effectively in the treatment processes of addicted individuals.

With these two crises, health organizations around the world have developed solution methods, but they are still inadequately implemented in countries.

5. Further Reading

This part includes further documents, information and video links to help you to understand the agenda item fully. Good luck!

[How can prescription drug misuse be prevented? | National Institute on Drug Abuse \(NIDA\) Overdose Prevention Strategy](#)

[Prevention and Intervention Strategies to Decrease Misuse of Prescription Pain Medication Preventing Opioid Overdose](#)


[Existing and emerging mitigation strategies for the prevention of accidental overdose from oral pharmaceutical products - ScienceDirect](#)

[Reducing the adverse health and social consequences of drug abuse: A comprehensive approach Opioids and Drug Overdose Prevention Program](#)

[Prevent Opioid Misuse and Overdose with These Safety Tips | Health.mil](#)

 Risk Reduction: Overdose Prevention and Management of Misuse/Risky Use of Opioids

 CDC Overdose Prevention: Supporting State and Local Data and Expertise

 Addiction I Full Documentary I NOVA I PBS

6. Questions to Ponder

1. What are the primary causes of pharmaceutical misuse and overdose, and how do they vary between developed and developing nations?
2. How do over-the-counter (OTC) medications contribute to misuse and overdose compared to prescription drugs?
3. What role do pharmaceutical companies play in ensuring responsible medication distribution, and how can they be held accountable?
4. How effective are current international regulations and national policies in controlling the misuse of pharmaceuticals?
5. Should governments implement stricter prescription regulations, and if so, how can they balance accessibility with safety?
6. How can the WHO collaborate with governments to enhance drug monitoring systems and prevent the illegal distribution of pharmaceuticals?
7. What public health campaigns or education programs have been effective in raising awareness about the risks of pharmaceutical misuse?
8. How can healthcare professionals be trained to recognize signs of prescription drug abuse and prevent overdoses?
9. What role do rehabilitation and harm reduction strategies (such as supervised drug consumption sites or naloxone distribution) play in addressing overdose cases?
10. How can AI and digital tracking systems be leveraged to monitor prescription drug distribution and prevent overprescription?
11. How can international law be strengthened to combat the trafficking of counterfeit or illegally obtained pharmaceuticals?
12. What frameworks should be in place for international cooperation to prevent and respond to pharmaceutical crises, such as opioid epidemics or mass counterfeit drug distribution?

7. Bibliography

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[Bagimlilikla Mucadele Yasam Becerileri Egitim Programi.pdf](#)

[Understanding the Opioid Overdose Epidemic | Overdose Prevention | CDC](#)

[Opioid epidemic in the United States](#)

[Prescription Drug Abuse – Causes, Symptoms and Treatment - Apollo Hospitals](#)

[Medical drug abuse and dependency | gesund.bund.de](#)

[Drug overdose -](#)

[Fazla ilaç kullanmanın vücuda etkileri](#)

[Misuse of pharmaceuticals — Päihdelinkki](#)

[Pharmaceutical drug misuse.pdf](#)

[Opioids | National Institute on Drug Abuse \(NIDA\)](#)

[Prescription Drug Misuse - Community Health](#)