

# JUNIOR DOCTORS NETWORK

*empowering young physicians to work together towards a healthier world through advocacy, education, and international collaboration*

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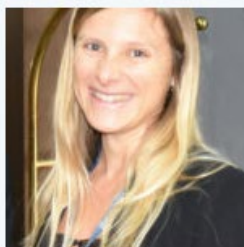
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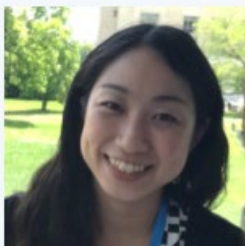
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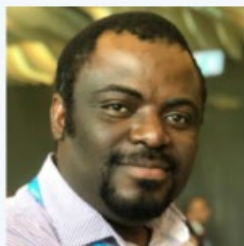
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## 01 Words from the Management Team

We are writing to you towards the end of the 2021-2022 JDN term. This year was an important transition year; we resumed in-person meetings after 2 years of only virtual activities. However, this did not stop us from reverting to comfortable old habits—we worked on making activities hybrid to make the best of the strides achieved during the pandemic. This was not without challenges; yet we hope that it will ensure that members from all regions of the world have a greater capacity to continue engaging.

The fully hybrid JDN Meeting in Paris in April 2022 allowed a greater number of participants to actively participate and a greater diversity of countries to be represented! The JDN organized the first hybrid delegation to an external event providing opportunities for members to remotely engage in critical global health advocacy during the 75th World Health Assembly.

Internally, the management team made progress on many important issues for the JDN: finalizing a new streamlined membership registration process, holding regular information sessions for new members, updating the JDN website, creating the first JDN handover manuals, and setting up a brand-new JDN archiving system for important documents.

As we close this term, many new exciting areas of engagement are upcoming for the JDN. The previously inactive Pandemic and the Antimicrobial Resistance Working Groups restarted their work this year. While the JDN Climate Change and Health Working Group made important contributions to the JDN over many years it will now be closed but work in this area will not stop as a new Planetary Health Working Group will build on it. With the opening of the LGBTQI+ Working Group, we hope to create a new space for members to discuss equity and representation for both healthcare workers as well as patients identifying with different genders and orientations. We encourage you to look at the working group reports on page 8-13 and contact the respective working group chair/s to join one that aligns with your interests.

The 2021-22 Management Team wishes the best of luck to the incoming management team, will support them as they start working and will also continue to remain available to JDN members for guidance.

Yassen Tcholakov,  
on behalf of the JDN Management Team 2021-2022

## 02 Words from the Publications Team and Director

Dear JDN,

We present to you the newsletter of 2021-22 after a very long delay. We apologize for the delay and hope that we have done justice to your trust in us. This newsletter is a culmination of the team's hard work over the last six months.

Thank you!

Publications Team of JDN WMA 2021-2022

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It has been an honor to be together with the JDN-WMA management team for the 2021-2022 period. It has also been a pleasure to collaborate with the JDN-WMA publication team for the same period, until finally being able to present this newsletter to all of you.

In this newsletter we try to read and listen to articles that come from various countries and are written by junior doctors from various scientific backgrounds. There are many kind, positive, and constructive messages that our colleagues are trying to convey. Hopefully, these messages will be an inspiration for the struggle to move forward and continue to grow for junior doctors in other parts of the world.

This newsletter is the result of the work of friends from the JDN-WMA publication team for the period 2021-2022. Hopefully good things can be continued in the future, and for things that have not been as expected, then I as Director of Publications express my deepest apologies from the bottom of my heart.

Best regards and hope for a good health for everyone.

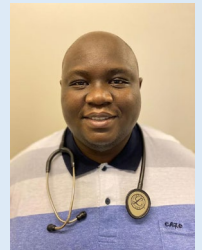
Andi Khomeini Takdir  
Director of Publication of JDN WMA 2021-2022



## 03 Medical Ethics working group

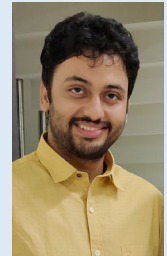
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### Executive Summary

Medical ethics are integral to global health and the medical profession. Health professionals have encouraged discussions on Medical Ethics topics such as clinical competencies and responsibilities, human and animal research, patient confidentiality, and end-of-life care. Junior doctors should be active leaders, encouraging global health workforce dialogue on these diverse themes. JDN formed the Medical Ethics Working Group on 22 June 2019 with the aim to strengthen a global network where JDN members can share information, resources, and activities on Medical Ethics. It continues to develop Medical Ethics activities and encourage Junior Doctors' participation in policy analysis, policy review, and research. The working group fosters collaborations that lead to Junior Doctors exchanging clinical and community experiences in Medical Ethics.

### Recent Activity Report

#### Medical Ethics in War

Junior doctors are affected by conflict environments and need medical ethics to face scenarios requiring complex decisions. The JDN Medical Ethics working group hosted a panel on Medical Ethics in War at the JDN Spring Hybrid Meeting during the WMA Council Session in Paris on April 6, 2022. Dr. Lwando Maki chaired with Dr. Wunna Tun and Dr. Shiv Joshi as moderators for the panel discussion at the office of French Medical Council. Junior doctors from all WMA regions and JDN partners attended.



## 03 Medical Ethics working group

### Launching of sister working group: The LGBTQIA+ Working Group

Junior Doctors Network emphasises non-discrimination, non-prejudice, and inclusion. This sister working group will create a global network for junior doctors interested in LGBTQIA+ issues to share and distribute professional development activities such as meetings, conferences, and workshops. The working group will conduct high-quality research and publish it in journals devoted to current and emerging LGBTQIA+ issues. The working group will commemorate international and regional diversity days, as well as advocate for LGBTQIA+ people at global health events and meetings.

### WMA Policy

Members of the working group reviewed WMA policy for contribution to JDN submissions.

### 2023 Plans:

- Social media campaign on medical ethics during war from medical ethics media sub-group
- Case discussion and Hot Seat series called 'EthiScan.' From working chairs
- Third edition for the Medical Ethics Special Edition from medical ethics papers sub-group
- Delegation to UNESCO Bioethics Conference from Medical Ethics Health deep dive sub-group
- "Beyond the comfort Zone": Arts and Ethics project from Medical Ethics Alive sub-group

*If you are interested in Medical Ethics and would like to participate with other JDN colleagues in numerous activities, please contact the co-chairs of the JDN Medical Ethics Working Group ([dr.lwando.maki@gmail.com](mailto:dr.lwando.maki@gmail.com) and [drshivjoshi93@gmail.com](mailto:drshivjoshi93@gmail.com)) . The Medical Ethics Work Group is the largest working group in JDN and has a vibrant and diverse membership, where members represent the majority of World Health Organization regions as well as various medical and surgical specialties.*

**Stay connected, and let your voice reach the world!**

## 04 WHO working group

[Laura C. Kalkman](#), MD

Chair, WHO Activities Working Group (2021-22), Junior Doctors Network, World Medical Association

The JDN Working Group on WHO Activities was established in September 2021 and was active for the first time the past year. The main goals of the working group on WHO activities are to streamline the participation of the JDN in WHO-related activities to build capacity among junior doctors and foster meaningful participation of young doctors in the global health arena. The Working Group on WHO activities aims to inspire more junior doctors to engage in global health and high-level global health diplomacy, involve them in relevant policy issues and add to the JDN by reflecting the opinion and interests of junior doctors.

To this end, the working group has organized capacity-building events for members. These include the intervention writing workshop, where members learned how to write an official statement representing the vision of WMA on WHO policies. Workshop members could participate in writing these actual documents for the WHO Executive Board Meeting and World Health Assembly during the workshop. The Working group members also envisioned an advocacy strategy around global health themes, including Universal Health Coverage, the social determinants of health and the COVID-19 pandemic. Moreover, the best advocacy practices of youth-led organizations in the field of global health were shared during an online webinar. The Working Group also initiated watch parties for important WHO meetings and shared updates of these events with JDN members.

After an evaluation, the Working Group decided to continue its work in the upcoming year and hopes to closely collaborate with other working groups on creating advocacy activities and organize projects and publications to foster active participation of junior doctors in WHO-related activities.

## 05 The Climate Change and Health Working Group Last Report! Time for Planetary Health to take the Stage

[Yassen Tcholakov](#), MD MSc MIH

Chairperson of the WMA JDN

Chairperson of the JDN Climate Change Working Group

Public Health and Preventive Medicine Physician

Montreal, Canada



Lekha Rathod, MBBS MScIH

Incoming Chairperson of the JDN Planetary Health Working Group

Research Assistant, Julius Global Health, UMC Utrecht, The Netherlands

Member, Planetary Health Alliance

Mumbai, India



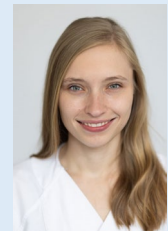
Laura Jung, MD MSc Public Health

Incoming Co-Chairperson of the JDN Planetary Health Working Group

Infectious Disease Resident

Board Member of the German Alliance on Climate Change and Health

Leipzig, Germany



The JDN Climate Change Working Group was formed in 2015 to organize JDN work and increase the WMA's capacity to engage in international climate change policy. It brought together JDN members who had a variety of prior experiences in the field and who were motivated by the desire to make the voice of doctors heard in the climate negotiations. In the following years, the group contributed to the planning, organizing and coordinating advocacy related to negotiations of what would become the Paris Agreement. The JDN was back then one of the very few health groups which assiduously followed those negotiations. Recognizing the unique position of health professionals in developing a positive narrative capable of influencing climate change policy, and the unique experience of many JDN members in the field, the working group served as a platform where JDN members got together to collaboratively write articles, conduct advocacy, relevant research, and contribute to WMA Policy including importantly the latest revision of the WMA Declaration on Climate Change and Health.

## 05 The Climate Change and Health Working Group Last Report! Time for Planetary Health to take the Stage

For the last few years, the Working Group has been functioning in ad-hoc mode, only taking on tasks when opportunities present themselves. Nevertheless, this year, the working group chair was approached by members interested in restarting work in this area. Discussions eventually led to the proposal of a new JDN Working Group on Planetary Health, which was created at the same time as the closure of the previous Climate Change and Health Working Group. The new planetary health working group recognizes that climate change is just one of several planetary boundaries that have been overstepped by humanity. This more holistic perspective gives us the opportunity to better react to the global environmental degradation, which is becoming increasingly apparent, and its impact on human health and wellbeing. The answer offered by planetary health focuses on transdisciplinary action on a policy as well as on the community level. The new working group, therefore, aims to bring together health professionals who can act as change agents for a healthy future. It furthermore plans to engage the whole JDN network, building on the member's experiences with health impacts and local solutions to the planetary crisis.

This article is the last sign-off of Yassen Tcholakov as the Chair of the Climate Change Working group, but he will nevertheless work closely with the newly formed Planetary Health WG to ensure the success of this transitional period and this new start under the leadership of co-chairs [Lekha Rathod](#) and [Laura Jung](#). If you are interested in contributing in any way, please reach out to them.

## 06 COVID-19 / Pandemic working group

Wenzhen (Jen) Zuo, MD  
Chairperson of the JDN COVID-19 / Pandemic Working Group  
Canada

Marie-Claire (MC) Wangari, MD  
Co-chairperson of the JDN COVID-19 / Pandemic Working Group  
Kenya

### Introduction

The Pandemic Working Group is a newly re-activated working group since January 2022 from the ad-hoc “COVID-19 working group”, created at the beginning of this pandemic. It was re-started at the height of the Omicron wave, to offer a space for junior doctors around the world to share their experiences from their respective countries and to keep ourselves informed about realities that are facing each other. We have shared stories while working with colleagues around the world and have collected these stories via a google form. These are pending to be published over a social media campaign later this autumn.

The current aim of the working group is to review developments in the public health arena on matters pertaining to health emergencies of concern e.g., COVID-19 and monkeypox and appraise solutions being tabled with an aim to add the voice of junior doctors worldwide in these efforts.

In terms of accomplished activities, the working group has participated in following all the discussions around the New Pandemic Treaty that is being negotiated at the World Health Organisation (WHO). We took part in the first and second meetings of the Intergovernmental Negotiating Body (INB) of WHO as representatives from the WMA. We presented at the last April's council meeting of WMA in Paris a session on “Vaccine inequity and hesitancy”. We also had an advocacy strategic planning session last July, which set the foundation of our advocacy strategic planning for the next two years for the Pandemic Instrument.

What's up-coming next: projects and opportunities to look out for

- Comments from the WG about the zero draft of the Pandemic New Instrument - early September 2022
- Advocacy toolkit being drafted in collaboration with UAEM - October 2022
- WMA GA in Berlin: WG session at the pre-GA JDN's autumn bi-annual meeting
- Publication of pandemic stories on social media
- Third INB meeting in Dec - online streaming early December

If you are interested to join us, please write to [wenzhen.zuo@gmail.com](mailto:wenzhen.zuo@gmail.com)

## 07 Brief Review of the context of the Act for the Improvement of Training Conditions and Status of Medical Residents in Korea: Focusing on Working Hours and On-duty Allowance

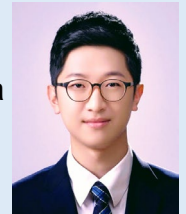
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\*Both authors contributed equally to this work



Figure 1 Korean medical residents protesting unfair 100-hour work weeks. 2012. Source: <http://www.bosa.co.kr/news/articleView.html?idxno=2051728>



## 07 Brief Review of the context of the Act for the Improvement of Training Conditions and Status of Medical Residents in Korea: Focusing on Working Hours and On-duty Allowance

Medical residents in Korea maintain a dual status of being both workers and trainees. In 2015, the Act for the Improvement of Training Conditions and Status of Medical Residents (the Medical Resident Act, 전공의법 (Korean)) was legislated by the South Korean government.(1)

Before the legislation, Korean medical residents worked an average of nearly 90 hours a week(2). Many of them experienced physical, verbal, and sexual violence in the workplace (2, 3). As a result, medical residents reported significantly higher levels of musculoskeletal symptoms and deteriorated mental health as compared to the general population (2, 3).

In 2014, a medical resident won a case concerning the payment of the on-duty allowance was not enough considering the Labour Standards Act<sup>1</sup>. (Daejeon High Court 2014. 11. 26, judgment 2013 Na 11186). In many training hospitals in Korea at the time, it was customary to pay wages comprehensively without any extra pay for overtime or holiday work and only ten to twenty dollars for night duty. The court ruled that medical residents should also be paid an on-the-job allowance under the Labour Standards Act which sets out the minimum standards for any employment.

This litigation concerning the on-duty allowance and studies(2, 3) concerning the impractical working hours led to the introduction of the Medical Resident Act. After the introduction of the Medical Resident Act, the working hours of the medical residents decreased considerably. According to the '2021 Resident Study' conducted by the Korean Intern Medical Association (KIRA), medical residents work about 77 hours on average per week.(4, 5) Although the average working hours of medical residents increased slightly in 2021 than in 2020 due to the influence of COVID-19, it is clear that the working hours are gradually decreasing considering the five-year trend.(5) Despite the clear improvement, medical residents are still not fully protected by the Labour Standards Act.

<sup>1</sup>The Labour Standards Act is a national act which prescribes minimal standards for terms and conditions of employment including wages, working hours, holidays, and leave. Overtime work, night work and holiday work must be paid 50% more than the ordinary wage. The maximum weekly working hours is 52 hours and employers must grant a daily rest period of at least 11 hours.



## **07 Brief Review of the context of the Act for the Improvement of Training Conditions and Status of Medical Residents in Korea: Focusing on Working Hours and On-duty Allowance**

### **Long Working Hours**

The current act regulates that the working hours cannot exceed more than 80 hours per week for an average of four weeks. Contrary to the original intention of reducing the working hours of the medical residents, this provision had the effect of stipulating the working hours of the medical residents to be practically 80 hours. Another problem is that the act permits 36 hours of non-stop work up to three times a week.

### **Absence of Additional Wage Calculation Standards**

Medical residents face unpaid overtime, night, and holiday work due to the absence of additional wage calculation standards. Medical residents are not subject to the provisions of the Labour Standards Act regarding working hours and holidays due to the adoption of the comprehensive wage system.<sup>(6)</sup> According to the 'COVID-19-related Resident Survey' conducted by the KIRA, 59% of respondents reported that they did not receive even the minimum allowance for approximately two years after the outbreak of COVID-19.<sup>(5)</sup>

### **The Necessity of the Medical Resident Act Reform**

Medical residents are still enduring long working hours and 36 hours of continuous work. It is necessary to revise the Medical Resident Act, which presupposes fundamental labour rights under the Labour Standards Act.<sup>(7)</sup> The primary goal is to reduce medical residents' working hours and to reduce the upper limit of the continuous 36 hours of work.

It is also essential to introduce a procedure for negotiating contracts with the possibility of reducing working hours and improving on-duty allowance through the trade union.<sup>(6)</sup> There is a need for revision to guarantee payment of disaster allowances when working overtime, at nighttime, on holidays, or working in disaster situations such as COVID-19.<sup>(6)</sup> Through the related discussions, the hope is that the employment contract will be made based on equal and reasonable negotiations between employers and medical residents and will protect the rights and interests of medical residents in accordance with those stipulated in the Labour Standards Act.

## 07 Brief Review of the context of the Act for the Improvement of Training Conditions and Status of Medical Residents in Korea: Focusing on Working Hours and On-duty Allowance

### References

1. Act on the Improvement of Training Conditions and Status of Medical Residents. [Available from: [https://elaw.klri.re.kr/eng\\_mobile/ganadaDetail.do?hseq=40274&type=abc&key=ACT%20FOR%20THE%20IMPROVEMENT%20OF%20TRAINING%20CONDITIONS%20AND%20STATUS%20OF%20MEDICAL%20RESIDENTS&param=A](https://elaw.klri.re.kr/eng_mobile/ganadaDetail.do?hseq=40274&type=abc&key=ACT%20FOR%20THE%20IMPROVEMENT%20OF%20TRAINING%20CONDITIONS%20AND%20STATUS%20OF%20MEDICAL%20RESIDENTS&param=A)].
2. Kim S, Kim S, Kim J. Working condition, health and perceived patient safety among doctors in training: 2014 Korean Intern and Resident survey. *Health and Social Welfare Review*. 2015;35(2):584-607.
3. Kim S. The working condition and patient safety of the medical resident: training that was too painful was not training. *Journal of the Korean Medical Association*. 2016;59(2):82-
4. Sohn S, Seo Y, Jeong Y, Lee S, Lee J, Lee KJ. Changes in the working conditions and learning environment of medical residents after the enactment of the Medical Resident Act in Korea in 2015: a national 4-year longitudinal study. *Journal of educational evaluation for health professions*. 2021;18.
5. COVID-19-related Resident Survey Seoul: Korean Intern Resident Association, 2022; [updated 9 Feb 2022. Available from: <http://youngmd.org/155/?idx=10214730&bmode=view>.
6. Kim I. Problems and improvement plans of the current medical residents training system. *Medical Policy Forum*. 2012;10(1):102-7.
7. Kang M. 'Seven years after the Medical Resident Act. time to reform the act considering 'labour rights' Seoul: Medical Times; [updated 14 Feb 2022. Available from: <https://www.medicaltimes.com/Main/News/NewsView.html?ID=1145732>].

## 08 WHA75 WMA Intervention Writing: Human Resource for Health

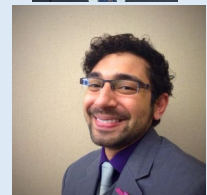
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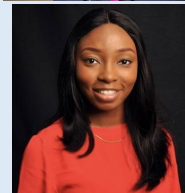
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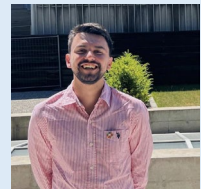
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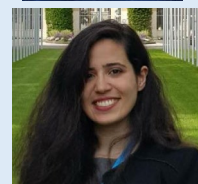
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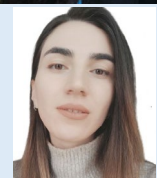
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## 08 WHA75 WMA Intervention Writing: Human Resource for Health

The 75th World Health Assembly (WHA) in May 2022 spanned over a week in the Palais des Nations, Geneva, Switzerland (1). The main theme was 'Health for Peace and Peace for Health' focusing on four Pillars. The Human Resources for Health (HRH) agenda falls under Pillar 1: a target for more than one billion people benefitting from universal health coverage (UHC).

In 2016, the 69th WHA adopted resolution 69.19 to develop the WHO Global Strategy on Human Resources for Health: Workforce 2030. This provided policy options for the Member States on health workforce education, regulation, retention, skill optimization, and other workforce needs. The concept of this is to develop workforce optimization policies, to stimulate investments in the health labor market that are responsive to population needs, to build institutional capacity and partnerships and to develop data for monitoring and accountability that are applicable in a variety of socioeconomic and regional contexts. (3). In May 2021, the 74th WHA adopted resolution 74.14 on protecting, safeguarding and investing in the healthcare workforce to develop a clear set of actions, a 2022–2030 agenda and an implementation mechanism to be presented to the 75th WHA in 2022 for accelerating investments in healthcare worker education, skills, jobs, safeguarding and protection. Core objectives across key sectors based on key principles were described (4). Part of this was the development of the “global healthcare worker compact”, a document that aimed to provide the Member States, stakeholders and other relevant organizations with technical guidance on how to protect healthcare workers and safeguard their rights and to promote and ensure decent work, free from racial and all other forms of discrimination and a safe and enabling practice environment (5). The Compact had four domains: 1) preventing harm, 2) providing support, 3) inclusivity, and 4) safeguarding the rights of healthcare workers with a suggestion they could be operationalized through Workforce 2030 (3). None of these policies suggests what is legally binding to protect the safety of the health workforce. This leaves the human rights of the health workforce up to dangerous interpretation.

The World Medical Association (WMA) holds an official observer status with the World Health Organization (WHO). JDN is part of the Associate Members of the WMA and contributes to drafting its intervention statements for the WHA (2).

## 08 WHA75 WMA Intervention Writing: Human Resource for Health

There were a total of 10 JDN members working on HRH policy at the WHA, which was the largest JDN engagement for writing interventions at the WHA. Membership was open to all JDN members; this team included Wunna, Balkiss, Pablo, Flora, Minku, Nikolai, Khatia, Ian, Lekha, Iretomiwa, and Imtia who provided their enormous contributions to the HRH policy draft. JDN Management team members Yassen, Wenzhen, and JDN WHO WG chair Laura provided crucial support. The team used a collaborative model giving all members an opportunity to provide initial input, followed by multiple rounds of refinement of the statements and an opportunity for all members to suggest changes. The working documents of the group including a detailed background, discussion, comments and references were stored separately for future use. The team met virtually on 2 occasions and each meeting lasted approximately 120 minutes. These meetings were used to edit the draft and share different perspectives among members from our diverse backgrounds through collaborative discussion. The team discussed the topic in a shared document and exchanged several emails over the queries and comments.

The JDN HRH draft team decided to stress exploring legally binding mechanisms to protect the safety of the health workforce in this WMA intervention.

The team prepared 2 versions of their intervention, one is 140 words and another is 300 words in case these statements would be used for further constituency statements. The JDN draft of this statement was further revised and improved by the WMA secretariat. Ultimately, the WMA statement was accepted as a constituency statement together with International Pharmaceutical Federation, International Pharmaceutical Students' Federation, FDI World Dental Federation, World Confederation for Physical Therapy, March of Dimes, and the International League of Dermatological Societies (6). All of the constituency members agreed about the importance of a legally binding mechanism to protect HRH. The final statement can be read below.

*The Health Workforce HWF is the core of health systems. The shortage of health personnel will grow with the pandemic exacerbating that problem. Due to increased educational inequities, future professionals have either ceased studying or received substandard education, adding to the shortfall and widening skills-gaps. The governance of HRH issues is increasingly complex and WHO plays a central role to increase coherence.*

*The delivery of high-quality health services depends on environments that support decent work conditions. Throughout the pandemic, healthcare personnel have worked long hours, faced unwarrantable violence and worsened mental health in high-pressure environments. Under-investment has resulted in the deterioration of working conditions. The protection and performance of the HWF requires legally binding strategies to guarantee the safety of health personnel especially in high-risk settings.*

## 08 WHA75 WMA Intervention Writing: Human Resource for Health

*States should mobilize investments to retain healthcare professionals in the profession and in their country by providing the support they need to meet their goals. These retention strategies include protection, resourcing, training, career development and fair remuneration. Member states (MS) must implement the international code for recruitment of HWF.*

*MS must improve the safety and sustainability of the HWF through accountability and instruments that enable data-driven decision-making by exploring legally binding mechanisms to uphold workforce rights, including all equity-seeking groups and to provide methods to analyze data to minimize institutional barriers and biases. The four domains of the Global health and care worker compact: preventing harm; providing support; inclusivity; and safeguarding rights, must be addressed by MS.*

*Professionals in training and early career are often used as replacement or sent into the harshest working conditions. It is critical that they are not exploited and be put into dangerous situations.*

It remains to be seen if future WHO and the Member States meetings will work to strengthen legal protections for healthcare workers. In the meantime, JDN members can continue advocating for improved working conditions and provide support for each other so that we can achieve these improvements, together with patients and our health systems, in solidarity.

### References

1. WHA75 (2022). Available at: [https://apps.who.int/gb/e/e\\_WHA75.html](https://apps.who.int/gb/e/e_WHA75.html) (Accessed: July 10, 2022).
2. About us (no date). Available at: <https://www.wma.net/junior-doctors/about-us/> (Accessed: July 10, 2022).
3. Human resources for health (2022). Available at: [https://apps.who.int/gb/ebwha/pdf\\_files/WHA75/A75\\_15-en.pdf](https://apps.who.int/gb/ebwha/pdf_files/WHA75/A75_15-en.pdf) (Accessed: July 10, 2022).
4. Seventy-fifth world health assembly (2022). Available at: [https://apps.who.int/gb/ebwha/pdf\\_files/WHA75/A75\\_12-en.pdf](https://apps.who.int/gb/ebwha/pdf_files/WHA75/A75_12-en.pdf) (Accessed: July 10, 2022).
5. Human resources for health (2022b). Available at: [https://apps.who.int/gb/ebwha/pdf\\_files/WHA75/A75\\_13-en.pdf](https://apps.who.int/gb/ebwha/pdf_files/WHA75/A75_13-en.pdf) (Accessed: July 10, 2022).
6. 75 th World Health Assembly -2022 Constituency statement on agenda item 15. Human resources for health (2022). Available at: <https://www.wma.net/wp-content/uploads/2022/05/WHA75-HPs-constituency-statement-on-HRH-1.pdf> (Accessed: July 10, 2022).



## 09 A One Health approach to tackling Antimicrobial Resistance

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### Overview

Antimicrobials are widely used across industries, in the environment, veterinary, and human health sectors. These are life-saving drugs and essential agents against infectious diseases. However, their effectiveness has been seriously compromised because of the increasing number of resistance genes in most bacteria, fungi and parasites causing human disease (1). This is a worldwide challenge known as Antimicrobial Resistance (AMR), and it has become a global threat to public health systems in recent decades. The interconnection between human and animal habitats in their shared environment contributes to antimicrobial resistant organisms' emergence, evolution, and spreading (2); thus, fighting AMR requires a One Health approach.

The misuse of antimicrobials has increased recently because in some countries, these remain unregulated, available without a prescription, and relatively cheap to acquire. Additionally, complicated social, political, and microbiological dynamics undermine competent AMR stewardship in human medicine, especially in low and middle-income countries. The consequences of infection with resistant organisms are concerning and contribute to extended hospital stays and increased mortality; the proliferation of antimicrobial-resistant microorganisms compromises the protection of current and future patients undergoing surgery, chemotherapy, or any other medical procedure (3).

### The burden

According to the Review in Antimicrobial Resistance by the UK government, it is expected that by 2050, drug-resistant infectious diseases will cause 10 million deaths each year (4). The global prevalence of AMR is vast and has been estimated in a recent report from Murray CJL et al. in 2019 (5). In predictive statistical models, an estimated 4.95 million deaths were associated with bacterial AMR, including 1.27 million deaths directly attributable to bacterial AMR. In addition, the six death leading pathogens associated with resistance were *Escherichia coli*, followed by *Staphylococcus aureus*, *Klebsiella pneumoniae*, *Streptococcus pneumoniae*, *Acinetobacter baumannii*, and *Pseudomonas aeruginosa*. This report has been the most comprehensive, with data from systematic literature reviews, hospitals, and surveillance systems from 204 countries.



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### Types of antimicrobial resistance

The spread of resistant strains in bacteria is facilitated via several vectors such as humans, animals, and the environment (6). Clinically significant resistance genes can cross habitat boundaries from environmental microorganisms to human pathogens. The pathogens (bacteria) that face antimicrobial selection pressure enhance their fitness by acquiring and expressing resistance genes, then sharing them with other bacteria through gene over-expression and silencing, phase variation, or horizontal gene transfer (7).

Levels of resistance can be widely different among related bacterial groups. Susceptibility and resistance are usually measured through the minimum inhibitory concentration (MIC), defined as the minimal concentration of a drug that will inhibit the growth of bacteria. This concept is used to classify the types of AMR in bacteria as natural or acquired (8) (9).

#### 1. Natural Resistance

Natural resistance may be intrinsic (always expressed) or induced (the genes are naturally in the bacteria but only expressed to resistance levels after exposure to an antibiotic). The most prevailing intrinsic resistance mechanisms in bacteria are:

- a. Reduced permeability of the outer membrane
- b. Efflux Pumps

Examples of bacteria and their intrinsic resistance to antibiotics are: *E. coli* (intrinsic resistance to macrolides) and gram negatives (intrinsic resistance to glycopeptides and lipopeptides)

#### 2. Acquired Resistance

Acquiring genetic material that confers resistance to bacteria is possible through the following (8, 9):

- a. Transformation
- b. Transposition
- c. Conjugation
- d. Mutations
- e. Bacteriophage-borne transmission (rare)
- f. Plasmid-mediated transmission of resistance genes (most common acquisition route of extraneous genetic material)

### Mechanisms of antimicrobial resistance

The main categories of antimicrobial resistance mechanisms in bacteria are (Figure 1):

1. Limiting uptake of a drug (Natural), including antimicrobials.
2. Inactivation of a drug (Natural/Acquired) by affecting its chemical mechanisms.
3. Modification of a drug target (Acquired) to build resistance.
4. Active drug efflux (Natural/Acquired) to eject toxic substances.

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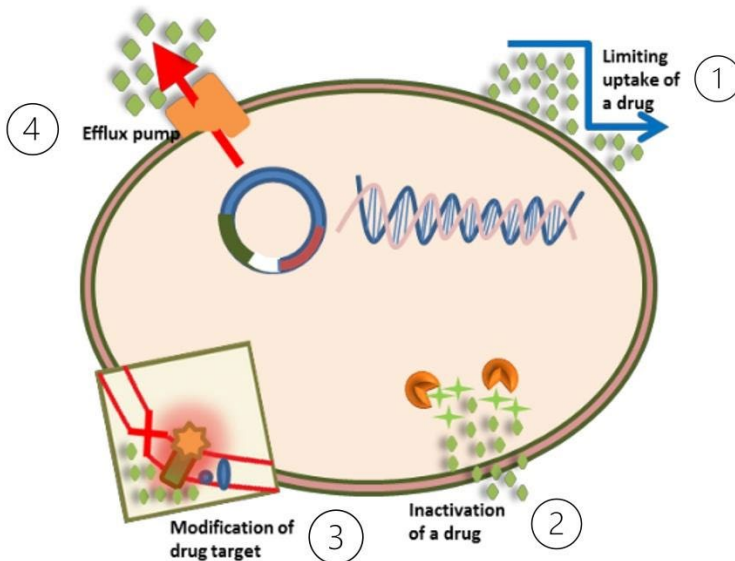


Figure 1: Antimicrobial Resistance Mechanisms.  
Image credits: Kosmidis S, 2015.

The microbiome of humans, animals, plants, water and soils are interconnected within the bacterial pangenome<sup>1</sup>, including their antimicrobial-resistant genes (ARGs) that can flow between them without restrictions (6). This mobile resistome<sup>2</sup> can transmit ARGs from person to person and into the environment. Additionally, the exposure to pathogens has been exacerbated through the rapid growth, expansion, and international travel of human populations, leading to more people living in close contact with wild and domestic animals, both livestock and pets. This scenario facilitates the spread of existing or known (endemic) and new or emerging zoonotic diseases.

### Antimicrobial resistance under the One Health lens

The multifactorial nature of the AMR as a global health threat requires a transdisciplinary effort, where multiple sectors, disciplines, and communities at different levels of society are involved. This perspective is what is promoted by the One Health concept, a term officially launched in 2004 within "The Manhattan Principles" at a Wildlife Conservation Society's meeting. The document focused on providing recommendations for a more holistic approach to Health considering the, back then, recent outbreaks of severe acute respiratory disease (SARS), highly pathogenic avian influenza H5N1, and Ebola between 2003 and 2004 (10).

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Currently, the most recent definition of the One Health approach has been provided by the One Health High-Level Expert Panel (OHHLEP) and supported by the Quadripartite (WHO-WOAH-FAO-UNEP) in 2021. It states that One Health should be an integrated and unifying approach that aims to balance and sustainably optimize the Health of people, animals, and ecosystems. It recognizes that the health of humans, domestic and wild animals, plants, and the general environment (including ecosystems) are closely linked and interdependent (11).

Implementing the One Health approach strengthens the collaboration between sectors and disciplines, which contributes to protecting Health and addressing health challenges such as the emergence of infectious diseases and antimicrobial resistance. Additionally, this approach allows tackling the full spectrum of disease control by linking the Health of humans, animals, plants, and the environment. As previously mentioned, these are interrelated and impact antimicrobial resistant organisms' emergence, evolution and spreading (Figure 2). A remarkable characteristic of One Health is its applicability at any level of society (community, national, regional and global) to promote the prioritization of research and interventions (11).

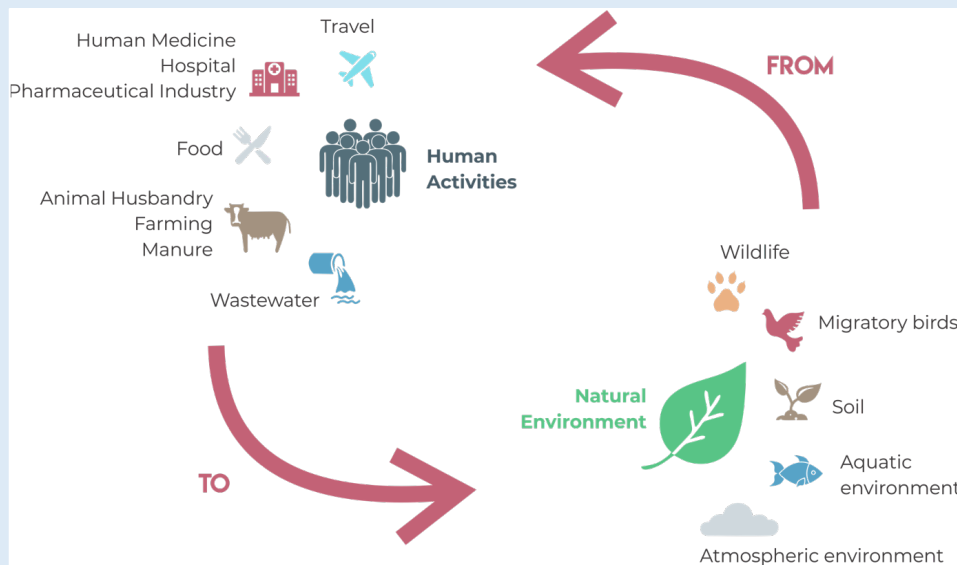


Fig. 2: One Health approach and AMR. Representation of the interrelatedness between human activities and the environment and its elements.

Image Credits: Dr Mabel Ortiz De Leo

Health care professionals are fundamental to combat AMR and other public health issues such as the emergence of zoonotic diseases (e.g., COVID-19 and Monkeypox); adopting a One Health approach represents an excellent opportunity to promote the well-being of individuals, their communities, and ecosystems.

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### References

1. Gil-Gil T, Laborda P, Sanz-García F, Hernando-Amado S, Blanco P, Martínez JL. Antimicrobial resistance: A multifaceted problem with multipronged solutions. *Microbiologyopen*. 2019;8(11):1–4.
2. One Health [Internet]. [cited 2021 Feb 21]. Available from: <https://www.who.int/news-room/q-a-detail/one-health>
3. Ferri M, Ranucci E, Romagnoli P, Giaccone V. Antimicrobial resistance: A global emerging threat to public health systems. *Crit Rev Food Sci Nutr* [Internet]. 2017;57(13):2857–76. Available from: <http://dx.doi.org/10.1080/10408398.2015.1077192>
4. Stone NRH, Rhodes J, Fisher MC, Mfinanga S, Kivuyo S, Rugemalila J, et al. Dynamic ploidy changes drive fluconazole resistance in human cryptococcal meningitis. *J Clin Invest* [Internet]. 2019;129(3):999–1014. Available from: <https://doi.org/10.1172/JCI124516>
5. Murray CJL, Ikuta KS, Sharara F, Swetschinski L, Robles Aguilar G, Gray A, et al. Global burden of bacterial antimicrobial resistance in 2019: A systematic analysis. *The Lancet*. 2022;399(10325):629–55.
6. Sun Q, Wang Y, Hulth A, Xiao Y, Nilsson LE, Li X, et al. Study protocol for One Health data collections, analyses and intervention of the Sino-Swedish integrated multisectoral partnership for antibiotic resistance containment (IMPACT). *BMJ Open*. 2018;8(1).
7. McEwen SA, Collignon PJ. Antimicrobial Resistance: a One Health Perspective. *Antimicrob Resist Bact from Livest Companion Anim*. 2018;521–47.
8. Roy PH. Genetic mechanisms of transfer of drug resistance. *Antimicrobial Drug Resistance*. 2009;53–64.
9. C Reygaert W. An overview of the antimicrobial resistance mechanisms of bacteria. *AIMS Microbiology*. 2018;4(3):482–501.
10. One Health Basics, Centers for Disease Control and Prevention [Internet]. [cited 2022 June 10]. Available from: <https://www.cdc.gov/onehealth/basics/index.html>
11. Joint Tripartite (FAO, OIE, WHO) and UNEP Statement [Internet]. [cited 2022 August 23]. Available from: <https://www.who.int/news/item/01-12-2021-tripartite-and-unep-support-ohhlep-s-definition-of-one-health>

## 10 What does legalization of cannabis mean for Malawi?



[Dr. Parth K. Patel](#)

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The Malawian Cannabis, affectionately known as Malawi Gold (aka Chamba), is internationally known in Africa and Internationally (1). Rated as an elite cannabis strain in the world by a World Bank report, it remains one of the most potent psychoactive substances with the least tested impurities (2). Following years of parliamentary motions and endless debates, in February 2020, a bill was passed by the August House to decriminalize Cannabis for medicinal and industrial purposes (3). This development structured by the Cannabis Regulatory Authority of Malawi (CRAM), allows commercial cultivation and processing of Cannabis, yet it falls short of decriminalizing its recreational use (1).

Examining the cannabis plant through botanical lenses highlights the usefulness of every part of the plant, releasing it from the sole intoxication purposes. The seeds are high in omega-6 fatty acids (GLA) and ten essential amino acids. They can be consumed whole or used to produce various food products, including hemp oil, hemp milk, hemp cheese, and hemp-based protein powder. The stalks of the plant are the most industrially relevant. They are used for diverse purposes, such as in plastic composites (hemp fiberglass and flax are used to create parts for Mercedes, BMW, and Jaguar); clothing (hemp fiber is stronger and softer than cotton); building materials (non-toxic and considered a carbon-sink widely used for insulation and roofing); wood-based products (papers and tissues); ropes made of twisted hemp fibers; biofuel (Hemp ethanol). The leaves have a strong medicinal use for CBD oil (an anti-proliferative agent with analgesic, anti-inflammatory, and anti-anxiolytic effects), predominantly as an adjunct therapy. The flowers are rich in resin and widely used to produce creams, lotions, and shampoos (4).

Furthermore, it is crucial to consider the huge economic benefits for Malawi of decriminalizing Cannabis, given its status as a Low-Middle Income Country (LMIC). Malawi has been heavily reliant and a major producer of tobacco globally. However, with the increasing regulations against tobacco use globally, revenues collected through the markets are dipping lower every season, strangulating economic growth further (5). With strong compliance to the rigorous international standards, Malawi may benefit from a switch to large-scale cannabis production as an exciting revenue earner for the Government, creating massive avenues for the overall progress of the country. Taxes collected could be channeled back into numerous services like roads, transport, education, and healthcare facilities (6).

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Such additional income levels could indirectly mitigate challenges faced in the public health sector as well as provide the avenue to the long-awaited and widespread spoken-about universal health coverage.

Controversial research studies have claimed that the effects of Cannabis used in recreational circumstances are generated through the main psychoactive ingredient called tetrahydrocannabinol (THC) and cannabidiol (CBD), which acts on specific cannabinoid or CB1 receptors (7). THC has strong psychoactive effects, making the user 'high', whereas CBD has an anti-psychoactive effect that moderates the effects of THC (8). Extensive pharmacological analysis suggests that THC has analgesic, anti-inflammatory, antioxidant, and antiemetic properties. In contrast, CBD exhibits the potential to treat epilepsy, schizophrenia, type 2 diabetes, inflammatory bowel disease, and drug dependency. These advantages cannot be ignored while discussing a drug of paramount importance (9).

Despite all this, most countries globally, through innumerable debates, discussions, and forums, have maintained their stance firmly against the adoption and introduction of Cannabis for medicinal purposes due to the lack of safety data.

The CRAM has a fee of US\$10,000 to acquire a license to cultivate Cannabis, claimed a prohibitively high amount for Malawian farmers (5). CRAM has further outlined basic regulations for industrial vs medicinal cannabis production (10). The pressing question regarding the safe usage of medicinal Cannabis for consumers in large and unregulated quantities remains unanswered. Further amplified, technical prerequisites to produce the therapeutic form of this drug do not certainly address quality control measures - uncontrolled contamination, inadequate biochemical processing, as well as disagreements on the most suitable and accurate analytical methods present a challenge not only to consumers but also manufacturers and regulators.

Without a well-defined guideline on when to prescribe Cannabis for medicinal purposes, physicians are at a colossal risk of disciplinary action by regulators in any direct or indirect adverse events. The unavailability of a rigorous framework to mitigate problems arising out of this law should be viewed as an opening for physicians to actively engage stakeholders in advocating for safe production and minimal usage of these unsupervised therapeutic agents, ensuring non-maleficence and enhancing the health of the population at large.



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### References

1. <https://www.reuters.com/article/malawi-cannabis-idUSL8N2IA4VV>
2. <https://web.archive.org/web/2012011213023>
3. [http://www.bnltimes.com/index.php?option=com\\_content&view=article&id=2877:malawi-s-chamba-valued-at-k1-4-billion&catid=42:national&Itemid=401](http://www.bnltimes.com/index.php?option=com_content&view=article&id=2877:malawi-s-chamba-valued-at-k1-4-billion&catid=42:national&Itemid=401)
4. <https://www.theguardian.com/global-development/2020/feb/28/malawi-legalises-cannabis-amid-hopes-of-fresh-economic-growth>
5. <https://www.malawihemp.org/article/hemp-101>
6. <https://www.africanews.com/2022/05/01/malawi-looks-to-cannabis-for-profits-amid-declining-tobacco-demand/>
7. <https://www.ica-malawi.org/faqs>
8. <https://www.nps.org.au/australian-prescriber/articles/prescribing-medicinal-cannabis>
9. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7023045/>
10. <https://www.ncbi.nlm.nih.gov/books/NBK423845/>
11. <http://www.daes.gov.mw/pictures/1633614115GUIDELINES%20FOR%20THE%20CANNABIS%20INDUSTRY%20IN%20MALAWI.pdf>



## 11 Greater Sylhet Floods: A Bangladeshi doctor's experience of a medical camp for flood victims

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A monsoon flood incapacitated the Greater Sylhet region of Bangladesh for almost a month. Many say the region has not seen such a massive flood in the last 50 years. A huge number of people are suffering while they take shelter in temporary shelters. According to Sylhet district administration, 37176 people were staying at 439 shelters as of 1st July 2022. Over 40 thousand houses were destroyed, leaving almost 3 million people homeless. There is an ongoing humanitarian crisis due to food, potable water, clothing, and medicine shortage (1).

Many professional bodies, philanthropists, and social media influencers are trying to provide help in the form of food, medicine, and other necessities. We had a chance to participate in such an initiative recently. We travelled almost 350 kilometres away from the capital city - attempting to reach the most vulnerable and hard-to-reach people. Although I had volunteered in several other medical camps for flood victims during my student days, this was the first time I participated as a medical doctor. Furthermore, I happened to be the senior team leader of a medical team. It was an initiative of several organizations, and our team executed the medical camp as part of the whole relief initiative. We had three doctors and a final-year medical student from Sylhet (Picture 1).



## 11 Greater Sylhet Floods: A Bangladeshi doctor's experience of a medical camp for flood victims



Figure 1: Relief and medical team on the rooftop of our boat. Credit : Moin Uddin Ahsan Tushar.

Many regions of Greater Sylhet remain submerged during monsoon, and the residents have adapted to the yearly water-logging. People built their houses to remain above water during the rainy season. However, mother nature has not been so kind this year and flooded all the low-lying areas. It took us 18 hours to reach our destination. There were barely any dry lands to set up our relief and medical camps. We went to distribute as much relief as possible from our boat as most of the houses were like isolated islands.



Figure 2: Doctors consulting patients on a boat. Credit: Moin Uddin Ahsan Tushar

## 11 Greater Sylhet Floods: A Bangladeshi doctor's experience of a medical camp for flood victims

We brought surplus medicine for common conditions during floods such as diarrhoea, common cold, abdominal ache, skin infections, traumatic injuries etc. (Figure 2). However, people were more eager to acquire food as they were starving. Currently, the government and the military are trying to distribute relief but are stretched too thin. We observed a lack of coordination that left many areas of the flood-affected land without any aid. Our team of junior doctors and a final-year medical student - a local volunteer - tried to distribute as much medicine as possible and disseminate essential health education.

Although our initiative satisfied us momentarily, it also showed us how inadequate our efforts were. People needed continuous medical support, unlike our one-day camp. A comprehensive disaster management plan that includes coordination among all the relevant organizations is of utmost importance in situations like this. Although Bangladesh is a riverine country with floods of various intensities almost every year, this flood reminded us of the necessity to work harder and do better for the people in terms of disaster management. It is recommended to incorporate non-governmental organizations and volunteers in our disaster management plan more carefully than ever to avoid more humanitarian crises.

In conclusion, we realize that such medical and relief camps are part of our civic duty, but those need to be executed under centralized coordination, preferably by the government, so that most people receive the aid they urgently require.

### Reference

1. Sylhet Flood: Over 37,000 people still living in shelters. Dhaka Tribune [Internet]. 2022 July Available from: <https://www.dhakatribune.com/bangladesh/2022/07/01/sylhet-flood-over-37000-people-still-living-in-shelters> ]

## 12 Multitudinous Trainee Doctors have been slaughtered mercilessly and arrested by Myanmar Military since Military Coup

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It has been 700 days since Myanmar's military coup. On the eve of February 1, 2021, Myanmar military ousted the democratically elected Myanmar government officials and State Counsellor Aung San Suu Kyi. Since then, tens of thousands of junior doctors have walked away from military-run hospitals and institution to join civil disobedience movement (CDM) against the military junta. (1). There were 80-100 percent of healthcare professionals in each region in Myanmar have engaged in CDM which become the largest doctors' protest in the history of world (2).

Myanmar junior doctors continue to take care of patient in secretly with the aid of well-wishers in compliance with the international code of medical ethics and the physician's pledge (3). Myanmar army and security forces systematically assaulted, detained, and murdered medical personnel for no apparent reason. The World Medical Association (WMA) criticized the detention and harassment of physicians by Myanmar army and security forces while they were treating patients in Myanmar in the statement issued in third week of February 2021 (4).

Although these WMA statement and other international concern on headline on world media, the military increased their force to jail and torture doctors more frequently and brutally, but junior doctors continued to care for patients in secret risking their own life for patients (1).

During the WMA Council Meeting in April 2021, the WMA released a strong expression of solidarity for the people of Myanmar and medical workers in Myanmar (5). Myanmar's military ignored these declarations, believing that they could not be used to take action to military (6). Myanmar military increase their crime against humanity and abducted family members of junior doctors and force junior doctors to surrender. Even junior doctors surrender their life with family members, Myanmar military killed mercilessly over family members in front of junior doctors. Representatives from NMA from across the world attended the WMA Virtual Annual Meeting in October 2021 and endorsed the WMA Policy Statement to support physicians in Myanmar (7).

Tens of thousands of Myanmar junior doctors and medical personnel were injured, imprisoned, humiliated, and massacred since military coup, and their families were kidnapped and slaughtered. Recently in July 2022, trainee doctors who are travelling to carry out their medical training was slaughtered mercilessly by Myanmar Military (8).



## **12 Multitudinous Trainee Doctors have been slaughtered mercilessly and arrested by Myanmar Military since Military Coup**

The WMA and other UN, NGO, and international leaders' statements have not stopped the military's atrocities. The international community is impotent to protect Myanmar and has taken no legal action to confront these hallmarks of military war crimes against Myanmar's doctors and humanity.

The World has two parallel dimensions. In one realm, medical students and trainee physicians are peacefully learning, caring for patients, and traveling to medical conferences. The leaders and people of that universe are praying and releasing statements and debating issues for Myanmar, Ukraine, Tigray, Syria, and other countries. Support without action is useless for people in another alternate dimension. In a parallel universe in Myanmar, there are service health disruptions, the killing of junior doctors, their families, and friends, air bombing attacks on healthcare centers with fighter planes, the burning down of innocent people's homes, and a food security problem.

I am urging the WMA, NMA, JDN, member states and other international organizations to work together to bring Myanmar's military and security forces to the International Criminal Court and arrest them immediately in order to prevent junior doctors from being slaughtered mercilessly and arrested by the Myanmar military.

Statements and other forms of support are meaningless without action, and all Myanmar Junior Doctors will no longer honor these statements and other forms of support, urging for the above-mentioned actions before the JDN Biannual Meeting in October 2022.

### References

1. Radio Free Asia. 2022. Junta-Run Public Hospitals Rejecting Even Myanmar's Sickest COVID-19 Patients. [Accessed 27 April 2022] Available at: <https://www.rfa.org/english/news/myanmar/hospitals-07292021170330.html>
2. Devex, 2022. [online] Available at: <<https://www.devex.com/news/threats-torture-and-telemedicine-myanmar-s-health-workers-need-help-102803>> [Accessed 27 April 2022].
3. Parsa-Parsi RW. The Revised Declaration of Geneva: A Modern-Day Physician's Pledge. JAMA. 2017;318(20):1971–1972. doi:10.1001/jama.2017.16230
4. WMA - The World Medical Association-Harassment and arrest of doctors in Myanmar condemned by physician leaders Wma.net. 2022 [cited 27 April 2022].
5. Available from: <https://www.wma.net/news-post/harassment-and-arrest-of-doctors-in-myanmar-condemned-by-physician-leaders/>

## **12 Multitudinous Trainee Doctors have been slaughtered mercilessly and arrested by Myanmar Military since Military Coup**

6. Wallen B, Zoramsanga I. From trainee doctor to guerrilla warrior: How Myanmar's youth are preparing for civil war [Internet]. The Telegraph. 2022 [cited 27 April 2022]. Available from: <https://www.telegraph.co.uk/world-news/2021/08/13/trainee-doctor-guerrilla-warrior-myanmars-youth-preparing-civil/>
7. WMA - The World Medical Association-WMA General Assembly [Internet]. Wma.net. 2022 [cited 27 April 2022]. Available from: <https://www.wma.net/news-post/wma-general-assembly-7>
8. Hagan, R., Reuters (2022) Teenage trainee doctors 'slaughtered' in Myanmar amid mounting reports of atrocities, mirror. Available at: <https://www.mirror.co.uk/news/world-news/teenage-trainee-doctors-slaughtered-myanmar-27424198> (Accessed: July 10, 2022).