



Published by the Junior Doctors Network of the World Medical Association

The information, perspectives, and opinions expressed in this publication do not necessarily reflect those of the World Medical Association or the Junior Doctors Network. WMA and WMA-JDN do not assume any legal liability or responsibility for the accuracy, completeness or usefulness of any information presented.

ISSN (print) 2415-1122 ISSN (online) 2312-220X



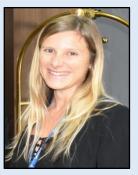
# **Junior Doctors Leadership 2020-2021**

#### **CHAIR**



Dr <u>Yassen Tcholakov</u> Canada

### **DEPUTY CHAIR**



Dr Julie Bacqué France

### **SECRETARY**



Dr Wunna Tun Myanmar

SOCIO-MEDICAL AFFAIRS OFFICER



Dr <u>Manon Pigeolet</u> Belgium

EDUCATION DIRECTOR



Dr <u>Uchechukwu Arum</u> Nigeria/United Kingdom

MEDICAL ETHICS
OFFICER



Dr <u>Lwando Maki</u> South Africa

MEMBERSHIP DIRECTOR



Dr <u>Lyndah Kemunto</u> Kenya

PUBLICATIONS DIRECTOR



Dr <u>Helena Chapman</u> Dominican Republic

# COMMUNICATIONS DIRECTOR



Dr <u>Maki Okamoto</u> Japan

IMMEDIATE PAST CHAIR



Dr <u>Chukwuma</u> <u>Oraegbunam</u> Nigeria

# Editorial Team 2020-2021



**Dr Victor Animasahun** Nigeria



**Dr Nishwa Azeem Pakistan** 



Dr Sejin Choi Republic of Korea



**Dr Ricardo Correa** Panama/United States



Italy



Dr Suleiman A. Idris Nigeria



Dr Mashkur Isa Nigeria/United Kingdom



**Dr Jooyoung Moon** Republic of Korea



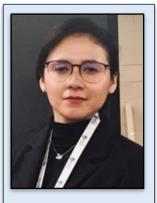
**Dr Mellany Murgor** Kenya



**Dr Vandrome Nakundi** Kakonga Dem. Rep. of Congo



**Dr Parth Patel** Malawi



Dr Jeazul Ponce H. Mexico



### **Table of Contents**

### **TEAM OF OFFICIALS' CONTRIBUTIONS**

07 Words from the Chair

By Dr Yassen TCHOLAKOV (Canada)

**08 Words from the Communications Director** 

By Dr Maki OKAMOTO (Japan)

09 Words from the Publications Director

By Dr Helena CHAPMAN (Dominican Republic)

### **PUBLICATIONS TEAM'S CONTRIBUTIONS**

10 Reflections about Lessons Learned during the COVID-19 Pandemic By JDN Publications Team

### **WORKING GROUP UPDATES**

15 Medical Ethics Working Group

By Dr Lwando MAKI (South Africa)

16 Comprehensive Primary Health Care Working Group

By Dr Flora KUEHNE (Germany)

18 Medical Exchange, Education, and International Mobility Working Group

By Dr Uchechukwu ARUM (Nigeria/United Kingdom)

### JUNIOR DOCTORS' SCIENTIFIC PERSPECTIVES

20 Public Health Doctors in the Republic of Korea and their Role in Promoting One Health

By Dr Jeagu KANG (Republic of Korea), Dr Geon YONG OH (Republic of Korea), and Dr Sejin CHOI (Republic of Korea)

24 Child Abuse in the Republic of Korea and the Role of Junior Doctors By Dr Jaehyun LEE (Republic of Korea) and Dr Sejin CHOI (Republic of Korea)



### **Table of Contents**

28 From Border Control to One of the First Countries Enjoying Economic Recovery: Taiwan's Measures for Crisis Relief

By Dr Chiang KUAN YU (Taiwan)

**32 Foreign Affairs, Human Resources, and Junior Doctors as Insiders** By Dr Samuel D'ALMEIDA (France)

### JUNIOR DOCTORS' COMMUNITY REFLECTIONS

35 The COVID-19 Effect: Italian Junior Doctors Adapt to Career Changes during the COVID-19 Pandemic

By Dr Giacomo CROTTI (Italy) and Dr Federica BALZARINI (Italy)

38 Second Wave and Uncertainties: Experiences with Emotional Stress and Burnout

By Dr Maymona CHOUDRY (Philippines)

41 Ethiopia's Medical Talent: The Dilemma

By Dr Eleleta Surafel ABAY (Ethiopia)

44 Call for Solidarity from Junior Doctors: Civil Disobedient Movement in Myanmar

By Dr Wunna TUN (Myanmar)

### JUNIOR DOCTORS' ACTIVITIES

46 Advanced Field Epidemiology Training Program: A Nigerian Junior Doctor's Experience

By Dr Suleiman Ahmad IDRIS (Nigeria)

49 Betrayed and Undermined during a Pandemic: The Plight of Young Physicians and Surgeons in India

By Dr Manu PRADEEP (India)



### **Table of Contents**

53 JDN Working Groups: A Platform for International Networking and Career Advancement

By Dr Dabota BUOWARI (Nigeria)

55 Kick-off of the Public Health Interest Group: Significance and Future Steps

By Dr Hangyeol LEE (Republic of Korea) and Dr Sejin CHOI (Republic of Korea)

58 The First Junior Doctors Network's eHealth Working Group By Dr Lisa GONZÁLEZ LÓPEZ (Dominican Republic) and Dr Ankush BANSAL (United States)

### INTERNATIONAL CONFERENCES

61 Introducing Policy at the World Medical Association: The Global Surgery Experience

By Dr Manon PIGEOLET (Belgium)



### Words from the Chair

Yassen Tcholakov, MD MScPH MIH
Chair (2020–2021)
Junior Doctors Network
World Medical Association



Dear colleagues from around the world,

It is my pleasure to introduce this 21<sup>st</sup> Issue of the *Junior Doctors Network (JDN) Newsletter*. As we are approaching the middle of this first *fully virtual* JDN term, the team has deployed many efforts to make the best of these circumstances. These efforts include connecting with members through other modalities and making our meetings more engaging with discussions and thematic activities beyond our administrative tasks. The *JDN Newsletter*, even before the pandemic, served the noble role of bringing junior doctors together from across the globe. Now, these connections are more important than ever, and I hope that you will enjoy the coming pages.

On behalf of the JDN Management Team, I would like to thank all participants who joined the JDN biannual meeting and the World Medical Association (WMA) Council meeting in April 2021. Since the work of the JDN stems from the ideas and policies set forward by the WMA, understanding the logistics for these decision-making activities can provide insight on how JDN members can contribute to this process.

The last few months have been filled with important discussions on the organization of the WMA Associate Membership. Since the JDN forms part of the WMA Associate Membership, these changes are relevant to our network. I am happy that many JDN members were invited to participate in these discussions, and we hope that the outcome will provide more opportunities for all WMA members, including junior doctors.

Lastly, as the 2020-2021 term approaches its halfway point, we would like to invite JDN members to learn more about upcoming JDN leadership roles. We would be happy to share more about our leadership positions, as we hope to recruit JDN leaders for the next term!

Sincerely, Yassen Tcholakov



## **Words from the Communications Director**

Maki Okamoto, MD
Communications Director (2020–2021)
Junior Doctors Network
World Medical Association



Dear colleagues,

It is my pleasure to welcome you to the 21st issue of the *Junior Doctors Network (JDN) Newsletter*.

Over 18 months have passed since the start of the coronavirus disease 2019 (COVID-19) pandemic. Although the world has changed in numerous ways – how people interact, spend time, and work – we must look toward a better future! As most conferences were held on virtual platforms, junior doctors were able to join conferences without additional expenses or leave time. This unique time has highlighted opportunities for strengthening online learning and discovering new collaborations across countries and clinical specialties.

Supported by the World Medical Association (WMA), the JDN provides this international platform, where JDN members can share their passion and enthusiasm to enhance medical practices and support global health initiatives. We recognize the efforts of our wonderful JDN Publications Team, led by Dr Helena Chapman, for preparing this outstanding 21<sup>st</sup> issue of the *JDN Newsletter*.

To learn more information about JDN activities and updates, please visit the JDN media accounts (Figure 1).

Media	Resource			
Website	https://www.wma.net/junior-doctors/			
Mailing List	https://goo.gl/forms/jCP774K1fldLloWj1			
Twitter	<u>@WmaJdn</u>			
Facebook (Members)	WMA-JDN			
Facebook (Public)	WMA JDN			
Instagram	<u>wma_jdn</u>			

Figure 1. List of JDN media resources.

We hope that you enjoy the articles – and despite social distancing – feel that your colleagues are close and support your dedicated efforts on the frontline!

Take care and stay safe, Maki Okamoto



## **Words from the Publications Director**

Helena Chapman, MD MPH PhD Publications Director (2020–2021) Junior Doctors Network World Medical Association

Dear JDN colleagues,

On behalf of the Publications Team (2020-2021) of the Junior Doctors Network (JDN), we are excited to share the 21<sup>st</sup> issue of the *JDN Newsletter* with junior doctors across the world.

Now, more than one year since the start of the coronavirus disease 2019 (COVID-19) pandemic, junior doctors have led response efforts for national health systems. Our contributions to clinical management, community health, medical education, policy activities, and research applications are valuable assets to advance the scientific knowledge base.

The *JDN Newsletter* offers a global platform where junior doctors across the globe share their medical and public health leadership activities in local and national health initiatives. This 21<sup>st</sup> issue includes articles from junior doctors from Belgium, Canada, Dominican Republic, Ethiopia, France, Germany, India, Italy, Japan, Myanmar, Nigeria, Philippines, Republic of Korea, South Africa, Taiwan, United Kingdom, and the United States. These reports disseminate updates on JDN activities, scientific perspectives on pressing global health issues, and reflections on community experiences. Their leadership can empower other junior doctors to develop health promotion activities and enhance communication between World Medical Association (WMA) and JDN members.

We recognize the leadership of all editors of the JDN Publications Team 2020-2021 as we finalized this 21<sup>st</sup> issue. We appreciate the continued support of the JDN Management Team and WMA leadership as we prepared this high-quality resource for junior doctors. We hope that you enjoy reading about junior doctors' experiences in this 21<sup>st</sup> issue!

Together in health, Helena Chapman



# Lessons Learned during the COVID-19 Pandemic by the JDN Publications Team (2020–2021)

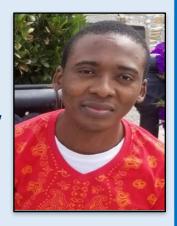
### **Dr Helena Chapman (Dominican Republic)**

The COVID-19 pandemic has highlighted the need for the One Health approach to guide global efforts to mitigate disease spread. By building transdisciplinary collaborations that integrate innovative scientific data and approaches, we can better understand the interconnectedness between humans, animals, and the surrounding ecosystems. As junior doctors, we can lead local, national, and international initiatives that prepare health systems to manage emerging One Health threats and protect population health.



## **Dr Victor Animasahun (Nigeria)**

The COVID-19 pandemic has made me realise that I am stronger than I think, and that we are stronger together. I am amazed at how quickly that I have been able to adapt to remote learning and consultations and advance my professional development and proficiencies in patient care.



### Dr Nishwa Azeem (Pakistan)

During the pandemic, I have realised that innovative measures can be devised to prioritize health at the forefront of global dialogue. Since low-income countries have mobilised resources in such a sophisticated manner, I am hopeful that we can strengthen our future collaborations that address global challenges like antimicrobial resistance and climate change.



## Dr Sejin Choi (Republic of Korea)

During the COVID-19 pandemic, telemedicine became an essential tool for communication between doctors and patients, and virtual meetings and conferences were the new normal. Moving forward, understanding that virtual technology will be implemented into our clinical training and professional development, I believe that inperson interactions can strengthen doctor-patient rapport. As junior doctors, we should develop innovative approaches to build rapport with patients, even as telemedicine becomes a part of our clinical practice.



### Dr Ricardo Correa (Panama/United States).

The COVID-19 pandemic has accelerated a new era of technology, not only for patient care (telemedicine), but also for education and training (telehealth). Although the first months were difficult, we slowly adapted to these changes. In telemedicine, we encountered the influence of the social determinants of health on health outcomes. For example, patients without reliable internet access may have limited access to medical services and health information. In tele-education, trainees and students learned alternative techniques in medical assessment, but missed the inperson interactions with patients and supervisors, which are vital for training. Moving into the future, I envision that health care will incorporate in-person and virtual approaches.



### **Dr Giacomo Crotti (Italy)**

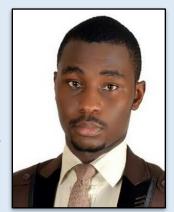
The COVID-19 pandemic has taught us the value of the health workforce. Building more resilient health systems requires pursuing the best standards of safety, training, and well-being for health care workers.





## Dr Suleiman Ahmad Idris (Nigeria)

Throughout my medical training, I had only read about pandemics in textbooks. Now, as a junior doctor working in field epidemiology in Nigeria, I have firsthand experience of the role of infection prevention and control measures during the COVID-19 pandemic. I have been able to learn more about this novel coronavirus, train my colleagues in field epidemiology techniques, and contribute to contact tracing that aims to curb disease transmission in Nigeria.



### Dr Mashkur Abdulhamid Isa (Nigeria/United Kingdom)

The COVID-19 pandemic has brought to limelight the deep and longstanding health inequities plaguing the world. I realize that the goal of 'Health for All' cannot be achieved without addressing health inequities. As junior doctors, we have a role to play in promoting fairness and equality in health across the world.



### **Dr Jooyoung Moon (Republic of Korea)**

Over the past year, I was able to participate in more international conferences than ever before because most were held virtually.

When life gives you lemons, make lemonade!



### **Dr Mellany Murgor (Kenya)**

The pandemic has been a reminder of how we are all in a global village and fully depend on each other. Now more than ever, we need to rally behind the achievement of Universal Health Coverage. The observation of unprepared health systems highlights the need for better investment and restructuring. As healthcare workers are resilient and committed to healthcare service delivery, we must ensure that they have safe and well-equipped work environments.



# Dr Vandrome Nakundi Kakonga (Democratic Republic of the Congo)

The current pandemic has highlighted the weaknesses of global health systems. As junior doctors, we should reconsider the role of health policy and patents on pharmaceuticals and vaccines, in efforts to advocate for equal distribution of public health resources to all communities.



### **Dr Parth Patel (Malawi)**

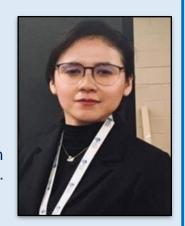
The COVID-19 pandemic has carved a well versed and globally relevant healthcare leader in me. As the pandemic has been restrictive in nature, it surely has brought forth numerous opportunities for me to expand my global network and enhance my leadership skills.





### **Dr Jeazul Ponce Hernández (Mexico)**

As a global community, I realized that governments and national leaders must understand the intricate links between health and economy and hence prioritize public health and health promotion initiatives. As junior doctors, we are trained health leaders who can directly impact the health and well-being of our community citizens.



# **Medical Ethics Working Group Update**

Lwando Maki, MBCHB DiPEC AHM MRSSAf
Medical Ethics Officer (2020–2021)
Chair, Medical Ethics Working Group (2020–2021)
Junior Doctors Network
World Medical Association



Medical Ethics form the foundation of the medical profession and comprise an integral part of global health. Over the past decade, health professionals have encouraged discussions on diverse topics related to Medical Ethics, including clinical competencies and responsibilities, human and animal research, patient confidentiality, and end-of-life care. As such, junior doctors should be engaged as active leaders, promoting continued dialogue among the global health workforce on these themes.

Founded in June 2019, the Medical Ethics Working Group – the largest Junior Doctors Network (JDN) Working Group to date – aims to strengthen a global network, where junior doctors can share essential information, resources, and activities on Medical Ethics topics with JDN membership. It has a vibrant and diverse membership, where members represent the majority of World Health Organization regions as well as various medical and surgical specialties. The team has planned exciting activities for this term, but some have been delayed due to COVID-related response efforts (Figure 1).

If you are interested in Medical Ethics and would like to participate with other JDN colleagues in collaborative activities, please contact Dr Lwando Maki (Chair, Medical Ethics Working Group: dr.lwando.maki@gmail.com).

Stay connected, and let your voice reach the world!

Sincerely, Maki

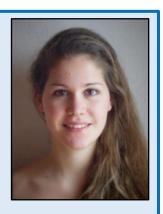
- ☐ Medical Ethics Alive: To coordinate a webinar on the International Code of Medical Ethics.
- Medical Ethics Media: To explore targeted opportunities to host sessions in specific global regions (e.g. South America).
- ☐ Medical Ethics Delegation: To form a delegation to the 14th World Conference on Bioethics, Medical Ethics, and Health Law in Porto, Portugal (April 2022).
- Medical Ethics Papers: To finalize three scientific manuscripts for the World Medical Journal. To coordinate a second collaboration (Medical Ethics Special Edition of the JDN Newsletter) with the Publications Team.
- Medical Ethics Policy: To contribute policy in World Medical Association (WMA) documents that are shared by the JDN Medical Ethics and Socio-Medical Affairs Officers.

Figure 1. Coordinated Medical Ethics Working Group activities for 2021.



# **Comprehensive Primary Health Care Working Group Update**

General Practice and Family Medicine Resident Munich, Germany



Primary Health Care (PHC) is recognized as a cornerstone to achieve universal health coverage (UHC) and the targets of the Sustainable Development Goals (SDGs).

This holistic approach focuses on individual and community health, addressing the integrated health care needs of patients and focus on preventive, curative, palliative, and rehabilitation services to improve population health and well-being.

In order to build a platform within the Junior Doctors Network (JDN) for discussion, collaboration, and related activities, the JDN founded the Comprehensive PHC Working Group in January 2020. During the initial phase, we established the PHC Working Group structure. As our clinical responsibilities transitioned to coronavirus disease 2019 (COVID-19) response efforts, we prepared and submitted a review article about advocacy priorities for PHC physicians and providers across countries. Team members successfully collaborated on the established tasks for this article.

In January 2021, we disseminated a new call for JDN members to join the PHC Working Group. Since many JDN members of diverse clinical and public health specialties were interested in joining the Working Group, we can now expand our scope to work on additional projects within the field of PHC. In the upcoming months, we plan to develop activities that explore the following topics: PHC Workforce (International Year of Health and Care Workers), PHC and the COVID-19 Pandemic, and Community Involvement in PHC. Furthermore, we would like to increase our engagement in advocacy activities within the JDN and the World Medical Association (WMA).



As the chair of the PHC Working Group, I have observed that JDN members continue to share their global leadership through the development and delivery of pioneering projects. I would like to recognize the current and past JDN Management Team members – Dr Christian Kraef (Germany), Dr Yassen Tcholakov (Canada), Dr Manon Pigeolet (Belgium), and Dr Caline Mattar (Lebanon/United States) – for their continued support of this PHC Working Group.

I appreciate the enthusiasm expressed during our virtual meetings, sharing of resources and methodological advice, and inspiring discussions that foster exchanges of experiences and visions.

If you are interested in PHC and would like to participate with other JDN colleagues on our monthly virtual meetings and collaborative activities, please contact Dr Flora Kuehne (Chair, JDN Public Health Care Working Group: <a href="mailto:Flora.Kuehne@med.uni-muenchen.de">Flora.Kuehne@med.uni-muenchen.de</a>).

Sincerely, Flora Kuehne



# Medical Exchange, Education, and International Mobility Working Group Update

Uchechukwu Arum, MD
Education Director (2020–2021)
Chair, Medical Exchange, Education, and International Mobility
Working Group (2020–2021)
Junior Doctors Network
World Medical Association



Founded in last quarter of 2020, the Medical Exchange, Education, and International Mobility Working Group is comprised of energetic, highly motivated, and dedicated Junior Doctors Network (JDN) members who are interested in the advancement of medical education.

Education is one of the vital mission statements of the JDN, since the adequate education of healthcare workers ultimately translates into optimal patient care.

Over the past few months, our Working Group has coordinated several activities for continued learning and networking (Figure 1).

January 2021: JDN members connected on the first quarterly Working Group telecon.
 February 2021: The Working Group participated in the Accreditation Council for Graduate Medical Education (ACGME) annual conference, which was held virtually from February 24-26, 2021. Using the theme, "Meaning in Medicine: Mastering the Moment", JDN members attended various conference sessions and expanded their networks within the graduate medical community.
 March 2021: The Working Group Lead (Dr Uchechukwu Arum) coordinated the "Doctors' Well-being" webinar on March 20, 2021. The keynote speakers included Dr Stuart Slavin, a renowned ACGME Senior Scholar on Doctors' Well-being, and Dr Elizabeth Gitau, Chief Executive Officer of the Kenya Medical Association.
 April 2021: The Working Group Lead (Dr Uchechukwu Arum) coordinated the Working Group sessions at the JDN biannual meeting.
 February-June 2021: The Working Group is currently collaborating with the JDN Publications Team to publish the Doctors' Well-being Special Edition of the JDN Newsletter.

**Figure 1.** Coordinated Medical Exchange, Education, and International Mobility Working Group activities for January-June 2021.



Moving forward, our Working Group is currently organizing plans for additional activities in Fall 2021:

First, the Working Group will coordinate the International Organizations webinar to offer JDN members with a better understanding of overall function and career opportunities with international organizations – like the World Bank, World Health Organization, and United Nations. Second, in collaboration with the World Federation of Medical Education, the Working Group will conduct a postgraduate medical survey with JDN members in efforts to develop a global postgraduate medical directory. Finally, the Working Group will explore avenues to partner with health institutions that encourage medical exchange and international mobility. With the increased mobility of the medical workforce across countries and continents, interdependence of nations in combating disease, and globalisation, there is need for continued exchange of innovative ideas and expertise.

As JDN members, we are leaders at the forefront of health advocacy and can empower other physicians to learn more about pressing health topics associated with medical exchange and international mobility.

The Working Group welcomes JDN members to contribute ideas and participate in activities that will help advance medical education. These efforts will ultimately advance the delivery of high-quality medical care and positively impact population health. If you are interested in medical education and would like to participate with other JDN colleagues on our virtual meetings and collaborative activities, please contact Dr Uchechukwu Arum (Chair, JDN Medical Exchange, Education, and International Mobility Working Group: <a href="mailto:arumaco@gmail.com">arumaco@gmail.com</a>).

Sincerely, Uchechukwu Arum



# Public Health Doctors in the Republic of Korea and their Role in Promoting One Health

<u>Jeagu Kang</u>, MD Public Health Center of Buyeo-gun Buyeo, Republic of Korea

Geon Yong Oh, MD
Public Health Center of Imsil-gun
Imsil, Republic of Korea

Sejin Choi, MD MSc Seoul Detention Center, Ministry of Justice Department of Translational Medicine Seoul National University College of Medicine Seoul, Republic of Korea

\*Members of the Korean Association of Public Health Doctors







The One Health concept promotes the view that human, animal, and ecosystem health should be approached in a holistic and integrated manner and strengthened through interdisciplinary and interdepartmental collaborations (1).

With multiple pandemics with zoonotic disease links – such as severe acute respiratory syndrome (SARS), Middle East respiratory syndrome (MERS), and coronavirus disease 2019 (COVID-19) – One Health has been placed at the forefront of global discussions in medical sciences (2). Amid this global trend, the Ministry of Health and Welfare of the Republic of Korea has supported two research studies that emphasize the One Health approach: Research on the Korean Approach to One Health for Improved Citizens' Health (2018) and the Second Master Plan for Prevention and Control of Infectious Diseases (2018-2022) (3). These plans, however, neglected the role of the public health doctors (PHDs) in the Republic of Korea, who can potentially serve as community leaders in promoting the One Health approach.



PHDs are junior doctors who serve medically vulnerable areas in public facilities across the Republic of Korea for a period of three years. This public health service is an alternative pathway to the military service requirement. Notably, from February to March 2020, PHDs played a pivotal part in curbing the explosive increase of the coronavirus disease 2019 (COVID-19) in the Republic of Korea. Currently, they have continued to contribute significantly to the national COVID-19 quarantine procedures.

Moving forward, PHDs are competent health leaders who can identify gaps and strengthen the implementation of the Republic of Korea's One Health system.

### **Contributions to One Health**

As PHDs currently serve vulnerable communities focusing on primary health care services, they also have One Health related roles. Even before the COVID-19 pandemic, PHDs worked with veterinarians and livestock quarantine teams to support response efforts for zoonotic disease outbreaks, such as the highly pathogenic avian influenza (H5N1) and African swine fever (4,5). They were swiftly deployed to block off areas with the livestock quarantine team and performed medical evaluations of local residents and team members. PHDs also prescribed Tamiflu (Oseltamivir) as prophylaxis measures to farm workers.

Their past and present contributions demonstrate that PHDs can successfully manage risks and lead One Health activities in the Republic of Korea's public health system. First, PHDs work directly with local populations and can understand the nexus between their unique health challenges as well as animal and environmental exposures. Since many PHDs work at local public health centers, they manage infectious and chronic disease risks of small rural villages. Second, PHDs have access to government data and resources, which can allow them to analyze epidemiological data, contact government officials from corresponding departments, and form multi-sectoral collaborations. Finally, PHDs have a representative organization – Korean Association of Public Health Doctors (KAPHD) – where they can receive prompt educational updates and training for their primary care services.



However, the One Health concept is still not widely recognized among the medical community in the Republic of Korea. There is also a lack of systematic state-led PHD education on One Health.

To address these limitations, common goals must be established to foster One Health transdisciplinary and multi-sectoral collaborations and empower PHDs in their community activities.

### **Future Recommendations**

As PHDs serve the local communities, some recommendations may encourage the national health system to incorporate PHDs with leadership roles in One Health. First, an epidemiological survey can be conducted by health leaders – including the KAPHD, Korea Disease Control and Prevention Agency, Animal and Plant Quarantine Agency, and National Institute of Environmental Research – to determine how many PHDs support the One Health concept. This survey can help identify knowledge gaps and provide recommendations for structured One Health education and training programs. Second, regional-level interest groups – such as PHDs, public quarantine veterinarians, physicians, veterinarians, and farm workers – can be developed to translate One Health knowledge to active collaborations that meet the unique needs of local public health units. Hence, One Health collaborations can recognize, share, and develop solutions to challenges in local regions. Finally, a systematic education system with government support can strengthen how PHDs analyze, plan, execute, and evaluate public health programs.

### **Future Steps**

If PHDs are properly trained in One Health, two potential steps will be achieved. First, zoonotic infection control and management can be improved through the development of regional-specific collaborative models. For example, in the Republic of Korea, the infection rates of rabies and brucellosis in humans and animals have different regional distributions (6). Hence, in areas where bovine brucellosis is common, an interest group consisting of PHDs, veterinarians, and farm workers can provide information exchange (7). PHDs can then preemptively plan appropriate clinical diagnosis and management, surveillance reporting, and educational activities about human brucellosis.



Second, environmental health systems can be strengthened through a collaborative model with the water sector that can facilitate information exchange and inspection requests. For example, as of 2020, 99.2% of the water supply in the Republic of Korea has been installed and managed by public institutions. However, since many rural areas still use low-cost water supplies such as wells and groundwater, it is difficult to identify sources of water pollution after the occurrence of natural disasters. Hence, as PHDs can promptly examine water supplies, they can report gastrointestinal infections for surveillance reporting, identify sources of pollution in local areas, and request site inspections by water supply businesses.

Moving forward, PHDs in the Republic of Korea have the potential to pioneer activities that promote the One Health approach across local communities. Other One Health topics to address are deforestation and changes in land use, air quality, vector-borne disease transmission, and other environmental pathogens like scrub typhus infections (8).

This call to action will require the distribution and analysis of national epidemiological surveys, the formation of regional-level interest groups for transdisciplinary collaborations, and robust One Health educational programs with sustainable government support for health professionals.

#### References

- 1) Stadtlander CT. One Health: people, animals, and the environment. Infect Ecol Epidemiol. 2015;5:30514.
- 2) El Zowalaty ME, Jarhult JD. From SARS to COVID-19: a previously unknown SARS-related coronavirus (SARS-CoV-2) of pandemic potential infecting humans call for a One Health approach. *One Health*. 2020;9:100124.
- 3) You J. Lessons from South Korea's COVID-19 policy response. Am Rev Public Adm. 2020;50:801-808.
- 4) Kim HK, Jeong DG, Yoon SW. Recent outbreaks of highly pathogenic avian influenza viruses in South Korea. *Clin Exp Vaccine Res.* 2017;6:95-103.
- 5) Yoo D, Kim H, Lee JY, Yoo HS. African swine fever: Etiology, epidemiological status in Korea, and perspective on control. *J Vet Sci.* 2020;21:e38.
- 6) Yang DK, Kim HH, Lee KK, Yoo JY, Seomun H, Cho IS. Mass vaccination has led to the elimination of rabies since 2014 in South Korea. *Clin Exp Vaccine Res.* 2017;6:111-9.
- 7) Lee BY, Higgins IM, Moon OK, et al. Surveillance and control of bovine brucellosis in the Republic of Korea during 2000–2006. *Prev Vet Med.* 2009;90:66-79.
- 8) Min K-D, Lee J-Y, So Y, Cho S-i. Deforestation increases the risk of scrub typhus in Korea. *Int J Environ Res Public Health*. 2019;16:1518.

# Child Abuse in the Republic of Korea and the Role of Junior Doctors

Jaehyun Lee, MD Sunchang Health Center & Country Hospital, Sunchang, Republic of Korea

Sejin Choi, MD MSc Seoul Detention Center, Ministry of Justice Korean Association of Public Health Doctors Seoul, Republic of Korea



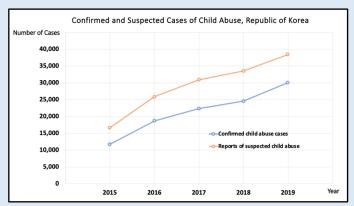


According to the World Health Organization (WHO), child maltreatment refers to the physical or emotional abuse and neglect, leading to potential harm to a child's health, often in the context of relationships of power or trust (1). Although current estimates vary by country, the WHO reported that an estimated 300 million children between 2-4 years of age experience regular physical or psychological harm from their caregivers (1).

In the Republic of Korea, there were an estimated 30,000 child abuse cases in 2019 (2) (Table 1). The numbers of confirmed and suspected child abuse cases are increasing due to social awareness on child abuse (2) (Figure 1). Although the official report for 2020 has not yet been finalized, many citizens worry about cases being underreported due to the closure of schools and day care centers during the coronavirus disease 2019 (COVID-19) pandemic. Since the perpetrators of 76.9% of the reported child abuse cases in 2019 were parents, it demonstrates that some parents believe that corporal punishment is the way to educate children (2). This cultural perception may serve as a source for the increased cases of child abuse in the country (3).

	Year					
	2015	2016	2017	2018	2019	
Child abuse cases (number)	11,715	18,700	22,367	24,604	30,045	
Rate increase (%)	16.8	60	20	10	22	

**Table 1**. The number of child abuse cases and the rate of increase from 2015-2019, Republic of Korea. Credit: Ministry of Health and Welfare, Republic of Korea (3).



**Figure 1**. The number of confirmed and suspected cases of child abuse from 2015-2019, Republic of Korea. Credit: Ministry of Health and Welfare, Republic of Korea (3).



This health burden can be highlighted in two recent examples. First, Jeongin, a 16-month-old, who was physically abused by her adoptive mother, passed away in Fall 2020 (4). Her death was a result of severe nutritional deficiencies and pancreatic rupture, as a result of the physical abuse. This tragic event even led to the #sorryjeongin social media campaign, including a post by a BTS member (K-pop music star) on Weverse (5). Second, when police responded to a reported case of child abuse in 2020, they released the name of the reporter's identity (6). As a result, this reporter, a public health doctor, was then threatened by the perpetrator (7). The mismanagement in this reported case of child abuse – where the police were unaware of investigation protocols and related laws on child abuse – is evidence of the problems of the current policies related to child abuse in the Republic of Korea.

Calls for action to improve policies related to the prevention of childhood maltreatment and implement educational campaigns have gained support among the general population.

### Lack of Expertise and Standardization

In the Republic of Korea, the Child Protection Agency (CPA) and the police are the only entities involved in the management of child abuse cases. Since they both experience a heavy workload with insufficient human resources, they are challenged to manage the complex aspects of such incidents. For this reason, a multidisciplinary approach is paramount, where experts from diverse fields – such as social welfare, economics, and healthcare – can collaborate and propose appropriate action plans that incorporate funding and educational programs to reinforce a swift, multifaceted response.

Another challenge involves the discrepancy of the legal conclusions between the CPA and the police, which suggest that there is no standardization over child abuse and no designated individual to mediate discussions. This was noted as about 80% of all suspected reports of child abuse were confirmed as child abuse cases, while 20% were categorized as misreports in 2019 (2). In contrast, in the case of sexual abuse, family violence, and sex trafficking cases, the Seoul Crisis Intervention Center for Women and Children serves as the designated agency to provide all related services, including legal services, medical care, and psychological counseling for women of all ages, children under 13 years of age, and the mentally handicapped who have experienced sexual abuse (8). As such, identifying an agency to serve as the mediator can facilitate the step-by-step protocols to offer ethical services. For example, doctors at medical facilities can examine victims, secure evidence for legal authorities, and provide medical treatments and psychological counseling. They can also offer psychiatric interventions for perpetrators.



In Japan, child abuse is also a serious problem, and authorities have observed an increase in cases each year. Since current child guidance centers have limited resources, Japanese leaders introduced the Child and Family Support Center as the designated agency to connect all related organizations, such as municipal administrations and medical centers. Child abuse prevention and child protection teams were also established in university hospitals and pediatric hospitals.

### **Need for Medical Interventions**

In efforts to prevent child abuse, the Republic of Korea has emphasized moral obligations for legal authorities who prepare investigative reports as well as strong punishments for perpetrators. However, sufficient physical and mental support services for victims is essential, especially since victims rarely receive close health evaluations after the event. Although doctors must prepare a report when they discover suspected cases, their medical opinions are often not chosen as evidence. About 10% of child abuse cases in the Republic of Korea are repeated cases committed by the same perpetrator, which demonstrate that countermeasures are not effective enough (2). One potential solution is to mandate psychiatric counseling, diagnosis, and treatment for perpetrators.

In cases of limited access to medical care, community-based support should strengthen links between the child, non-offending family members, and community members. Mental health support and treatment – whether formal or informal – should include the child's caregivers and be closely coordinated with legal efforts to protect the child. Since the perpetrators of 94.5% of repeated cases are the victims' parents, it is important to separate the victim from the perpetrator (2). However, as 83.9% of abused children are not separated from perpetrators and live in their original homes, the vicious cycle continues (2).

### **More Training Opportunities**

Currently, there are limited education and training opportunities on child abuse for healthcare workers, including junior doctors. The Korean Medical License exam includes a "child abuse" section, but there are few chances for doctors to receive continued medical education on this topic. Some solutions can include introducing a subspecialty for child abuse pediatricians (CAP) and integrating regular continued education courses or seminars on child maltreatment.



Junior doctors in the Republic of Korea are willing to equip themselves with essential knowledge and skills to standardize the process for assessing suspicious injuries and reporting confirmed or suspected cases of child abuse. By providing proper training through robust policies and legislation, these certified doctors will serve as health leaders and advocates to protect our children.

# Junior doctors can raise their voices to hospitals and medical associations to develop appropriate education and training programs on child maltreatment.

#### References

- 1) World Health Organization. Child maltreatment. 2020 [cited 2021 Mar 15].
- 2) Ministry of Health and Welfare (Republic of Korea). *Child abuse and neglect annual report 2019.* Seoul: Ministry of Health and Welfare; 2020. Korean.
- 3) Child Welfare Institute, Republic of Korea. *Child abuse prevention guidelines*. Seoul: Child Welfare Institute; 2014. Korean.
- 4) Hye-Yeon S, Myo-Ja S. <u>Death of abused toddler shocks Korea</u>. Korea Joong Ang Daily. 2021 [cited 2021 Feb 2].
- 5) Jae-Yeon W. <u>Death of adopted baby ignites reckoning over systematic failure to stop child abuse</u>. *Yonhap News Agency*. 2021 [cited 2021 Feb 2].
- 6) Yoonha C. Reports of child abuse neglected. SBS. 2021 [cited 2021 Feb 2]. Korean.
- 7) Taewoong J, Minsoo K. <u>Teachers and doctors hesitate to report child abuse</u>. *MBN*. 2021 [cited 2021 Feb 2]. Korean.
- 8) Seoul Crisis Intervention Center for Women and Children. <u>Seoul Crisis Intervention Center for Women and Children</u>. 2021 [cited 2021 Feb 2]. Korean.

# From Border Control to One of the First Countries Enjoying Economic Recovery: Taiwan's Measures for Crisis Relief

Chiang Kuan Yu, MD
Hospitalist, Taipei City Hospital
Deputy Chief Executive, Global Taiwan Medical Alliance
Taipei, Taiwan



On January 7, 2020, Chinese health officials confirmed that a novel coronavirus (2019-nCoV) was associated with the cluster of acute respiratory illness threatening the Chinese city of Wuhan since December 2020. The person-to-person transmission became quickly evident as nosocomial infections were reported in China. The newly emerged virus, designated as the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), had over 70% similarity with SARS-CoV-1. It was an alarming reminder of the preceding coronavirus that caused hundreds of severe illness cases and at least 73 deaths in Taiwan in 2003 (2).

The return of millions of travelers from the Chinese New Year celebrations in Mainland China in early 2020 heralded an increased number of imported SARS-CoV-2 cases (3).

Through strict precautions taken at the border and well-organized hospital networks, the Taiwan Command Epidemic Center Central achieved a 254-day record without local cases of the coronavirus disease 2019 (COVID-19) since May 2020. The outstanding outcome of a nearzero conversion rate of imported cases to local cases came from timely actions and accumulated from epidemic expertise the emergencies managed during the past 20 years. Nevertheless, nosocomial transmission remained a concern. since two nosocomial infection outbreaks had occurred over a period of nine months. The last incident was reported at the Taoyuan General Hospital, directed by the Ministry of Health and Welfare, in January 2021 (Photo 1).



**Photo 1.** Physicians at the Taoyuan General Hospital commemorate the last reported nosocomial infection. Credit: Wealth Magazine

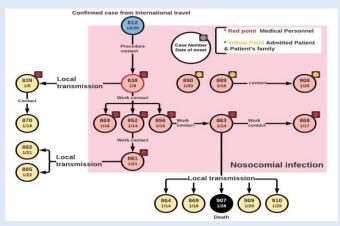
### From Total Lockdown to an Effective Entry Management Strategy

In 2003, a hospital-acquired case of SARS occurred at Taipei City Hospital (Heping Branch). Although inexperienced in infection control activities, government officials ordered an immediate lockdown as the first cluster of SARS cases was confirmed. As a result, staff and patients were confined to the hospital, where they were exposed to the pathogen since they were unable to establish a quarantine ward. During the 14-day lockdown, 57 medical personnel were infected and seven died, while 97 non-medical personnel were infected, and 24 died (1 committed suicide) (4).

# Lessons learned from this 2003 outbreak set the framework for the unexpected COVID-19 pandemic.

Taiwan developed the "Zero Clearing" plan, which relied on rigorous epidemic surveillance as the standard containment method for countries of advanced border control. In 2020, when the Taoyuan General Hospital reported a positive COVID-19 case, emergency measures were implemented. A widespread testing protocol was immediately initiated for patients and staff in order to quantify the size of the hospital outbreak and avoid the hospital lockdown. Patients with low or moderate risk of infection were transferred to other hospitals, while patients with high risk were quarantined individually.

Within the local community, the Taiwan Central Epidemic Commander Center coordinated an efficient contact tracing network successfully isolated 5,000 contacts for a 14-day home quarantine (Figure 1). Authorities reported physicians, nosocomial cases (2 caretaker, 2 patients, nurses, 1 patients' dependents) and 11 local cases and one death (80-year-old dependent) (5). At the time of preparing this article, no further cases had occurred after February 13, 2021.



**Figure 1.** Epidemiologic investigation of COVID-19 cases. Credit: Taiwan Central Epidemic Commander Center (5).

After Taiwan implemented the epidemic prevention model at the border, no additional domestic COVID-19 cases had been reported since May 2020. However, with the opening of airline travel and discoveries of virus mutations, nosocomial infections were reported in early January 2021, and authorities initiated national control measures. In mid-February 2021, authorities reported that the eradication efforts were successful, with no new cases of domestic infection (Figure 2). The Taiwan Central Epidemic Command Center also expanded the contract tracing network of suspected COVID-19 cases to approximately 5,000 people (Figure 3).

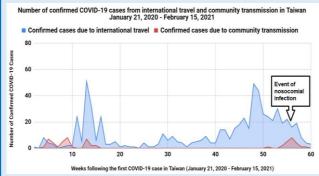


Figure 2. Reports of COVID-19 cases from January 2020 to February 2021, Taiwan. Credit: Taiwan Central Epidemic Commander Center (5) and Open Data by National Development Council.

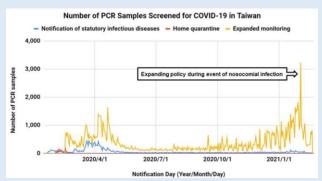


Figure 3. Number of PCR samples screened for SARS-CoV-2 infections, Taiwan. Credit: Taiwan Central Epidemic Commander Center (5) and Open Data by National Development Council.

### **Success Factors for a Country Relying on Border Control**

Since Taiwan has yet to initiate the COVID-19 vaccination campaign, border control and public health and social measures remain the primary keys to curb the pandemic. Several aspects have emerged crucial in dealing with the crisis.

### 1. Adequate professional knowledge of national leadership

Based on lessons learned from the SARS pandemic in 2003, government officials in Taiwan have established a crisis relief network between the major hospitals to manage imported cases. Moreover, the upgrade of contact tracing and testing protocols proved to offer a more suitable and successful measure, compared to a total lockdown to manage the nosocomial outbreak.

### 2. Effective communication between authorities and hospital personnel

The early coordination of a temporary outpost of the Taiwan Centers for Disease Control (CDC) enabled direct communication among government officials, hospital personnel, and local administrators (6). This communication strategy – emphasizing video calls and telephone calls over documents and e-mails – fostered the clear identification of roles and responsibilities.



#### 3. Effective communication with citizens

In January 2021, when local cases were reported, citizens were anxious about the lack of available vaccines and harboured doubts about the competence of the Taiwan CDC. In response, the Taiwan CDC held daily press conferences to communicate the effective implementation of border control and public sanitation measures. On February 10, 2021, government officials announced the successful purchase of five million Moderna vaccines and a prospective purchase of 10 million AstraZeneca vaccines. Citizens were informed that inoculation would begin before the third quarter of 2021.

### Conclusion

According to the World Health Organization (WHO) guidelines, communication among national authorities, hospitals, and the community is pivotal for an effective crisis management strategy (8). As government officials provided daily updates on these national measures, citizens gained confidence in their oversight of the border control and public sanitation measures. Strict triage, quarantine, and effective entry bans to high-risk hospitals were recognized as the most efficient prevention and mitigation efforts. Through the outstanding performance in managing the pandemic crisis and massive vaccination program, Taiwan is expected to become one of the first countries to regain economic momentum by the end of 2021 (7).

# Taiwan represents a model among other Asian countries, by implementing this strict national prevention and control strategy to curb disease transmission.

#### References

- 1) Singhal T. A review of coronavirus disease-2019 (COVID-19). Indian J Pediatr. 2020;87:281-286.
- 2) Wang C, Ellis S; Bloomberg. <u>How Taiwan's COVID response became the world's envy</u>. *Fortune*. 2020 [cited 2021 Feb 20].
- 3) Chien L-C, Beÿ CK, Koenig KL. Taiwan's successful COVID-19 mitigation and containment strategy: achieving quasi population immunity. *Disaster Med Public Health Prep.* 2020:1-4.
- 4) Focus News Agency, Taiwan. <u>2003 SARS outbreak and Helping Hospital in Taiwan</u>. 2020 [cited 2021 Feb 20]. Traditional Chinese.
- 5) Jie C. <u>COVID-19 Toyuan Hospital infection analysis, Taiwan</u>. *The Reporter*. 2021 [cited 2021 Feb 20]. Traditional Chinese.
- 6) Taiwan Centers for Disease Control. Press release. 2021 [cited 2021 Jan 22]. Traditional Chinese.
- 7) Buchholz K. Global vaccine timeline stretches to 2023. Statista. 2021 [cited 2021 Feb 20].
- 8) World Health Organization. <u>Outbreak communication: best practices for communicating with the public</u> during an outbreak. Geneva: WHO; 2005.



# Foreign Affairs, Human Resources, and Junior Doctors as Insiders

Samuel d'Almeida, MD MPH London School of Economics and Political Science London School of Hygiene and Tropical Medicine Fort-de-France, France



"As long as the rich countries do not get their human resource issues in order, the poor countries will continue to suffer from an enormous brain drain"

- Dr Otmar Kloiber (World Medical Journal, May 2009)

This statement was made at the first World Medical Association (WMA) seminar on the human resources for health (HRH) crisis, which highlighted a partnership with the World Health Organization (WHO)'s Global Health Workforce Alliance (GHWA) – now repurposed as the Global Health Workforce Network.

## Intergovernmental Aspects of Health Employment

HRH was traditionally seen as a domestic issue on the supply-side, which incorporates medical education and bilateral immigration policies. In the 2000s, the international community acknowledged that the HIV/AIDS crisis was protracted by a global HRH crisis. An Agenda for Global Action emerged following the 2008 Kampala Declaration, which focused on three aspects of workforce development as a whole – supply, demand, and mobility from the transnational to the local level (1). This health policy field became more institutionalised, with the adoption of new soft laws such as a WHO Global Code of Practice on the International Recruitment of Health Personnel, and the emergence of a global policy community for HRH.

However, the 2007-2008 global financial crisis and the Great Recession placed an enormous strain on resource mobilization. Following the 2014–2016 Ebola virus disease crisis in West Africa, the United Nations (UN) High-Level Commission on Health Employment and Economic Growth rekindled the Kampala narrative. It must be said that only US \$7.3M out of US \$70M (as planned by end line) have so far been committed to the corresponding 2016-2021 UN Multi-Partner Trust Fund (MPTF) called 'Working for Health'.



### **The Domestic Sphere**

At the domestic level, health often commands the second biggest share of government expenditure worldwide – often 5-10% - and HRH often amounts for two-thirds of health budgets (2). Therefore, the whole government is lurking on HRH spending. As highlighted by Greek Junior Doctors – Hellas in the *Junior Doctors Network (JDN) Newsletter* of April 2020, the Great Recession took a heavy toll on junior doctors' perspectives of their future workplace. Although many junior doctors have considered working abroad, Greece is far from being the only European country to face HRH maldistribution (3).

HRH policies have ebbs and flows. Since the coronavirus disease 2019 (COVID-19) crisis, finance ministers have paid more attention to HRH. Many governments and central banks have responded with countercyclical measures – such as stimulus – rather than initial cuts in health expenditure. However, traditional donor countries shifted their burden by deregulating the international market of HRH recruitment (4).

### The Foreign Sphere

The year 2021 became WHO's International Year of Health and Care Workers, a glorification which remains obscured by the tenace lack of commitment to official development assistance (ODA) to the UN MPTF.

However, new insights can be drawn on the international theory, which includes realism, constructivism, and neoliberal institutionalism like liberal intergovernmentalism (5,6).

First, the theory of realism would depict the international system as anarchic and HRH mobility as a zero-sum equation. In realism, states aim at being self-reliant. If one state is gaining, then another state must be losing, and therefore brain drain is conceptualized as a geopolitical strategy. Second, the theory of constructivism implies that states want to uphold and comply with international norms and laws related to HRH because of international prestige. Although, from such a perspective, states will not share information about failed domestic or development politics because this would damage their image. Third, the theory of neoliberal institutionalism implies that states tend to increase interdependence to win mutual benefit. Α subset. the theory of liberal intergovernmentalism, postulates three central planks of engagement that can be applied



to the home-foreign affairs nexus in HRH. These include: 1) national interest shaped by state's constituencies and interest groups (e.g. national junior doctors' associations); 2) asymmetric interdependence between states; and 3) institutional framework (e.g. financing, norms, laws, expertise).

### Conclusion

There is an osmotic relationship between domestic and foreign HRH policies. Taken in isolation, national plans are inherently widening global inequities. The COVID-19 pandemic re-exposed sound countercyclic measures in high-income countries, lack of commitment in multilateral ODA, and deregulation of the international market. As health services remain a significant issue for governments, junior doctors should pause and reflect on the future of health service delivery across the globe.

### **Policy Recommendations**

More attention needs to be placed on the international economics of HRH mobility. National junior doctors' associations, based on their traditional insider status in domestic policies, should join efforts with their foreign affairs' policy community on HRH and develop innovative ideas. In turn, the JDN may move to institutionalise these international efforts at the national level with a novel normative standpoint (7,8).

### References

- 1) World Health Organization, Global Health Workforce Alliance. <u>The Kampala Declaration and Agenda for Global Action</u>. Geneva: WHO; 2008.
- 2) Chen L, Evans T, Anand S, Boufford JI, Brown H, Chowdhury M, et al. Human resources for health: overcoming the crisis. *Lancet*. 2004;364:1984-1990.
- 3) d'Almeida S. <u>Time for a European 'Health Union'?</u> LSE Blog Social Policy, International Social and Public Policy. 2021 [cited 2021 Feb 22].
- 4) European Commission. <u>Guidance on free movement of health professionals and minimum harmonisation of training in relation to COVID-19 emergency measures recommendations regarding Directive 2005/36/EC. Brussels: European Commission; 2020.</u>
- 5) Paxton N, Youde J. Engagement or dismissiveness? Intersecting international theory and global health. *Glob Public Health*. 2019;14:503-514.
- 6) Schimmelfennig F. Liberal intergovernmentalism and the crises of the European Union. *Journal of Common Market Studies*. 2018;56:1578-1594.
- World Medical Association. <u>Archived: WMA Council Resolution on the Healthcare Skills Drain</u>. 2017 [cited 2021 Feb 22].
- 8) World Medical Association. <u>WMA Statement on Ethical Guidelines for the International Migration of Health</u> Workers. 2003 (revised in 2014) [cited 2021 Feb 22].



# The COVID-19 Effect: Italian Junior Doctors Adapt to Career Changes during the COVID-19 Pandemic

Giacomo Crotti, MD Public Health Doctor Milan, Italy

Federica Balzarini, MD
Public Health Doctor
Brescia, Italy





The coronavirus disease 2019 (COVID-19) pandemic marked 2020 in many ways. Now, one year later, it continues to influence our lives as we enter the *new normal*. The virus has challenged global clinicians and scientists as they learned about this novel coronavirus through its clinical presentation and rapid spread through aerosols and droplets when in close contact with infected individuals. The impact of the pandemic has also affected the economic and health sectors, where vulnerable communities have been most affected.

# Following the outbreak in Wuhan, China, Italy was the first Western country to experience a massive COVID-19 outbreak, with the first cases reported on February 20, 2020.

The epicentre of the Italian first wave of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was the Lombardy region, with 105,000 infections and 17,000 fatalities reported from March to September 2020 (1). The peak of the pandemic in the Lombardy region was reached on March 21, 2020, when over 3,200 new cases were reported, including 1,500 hospitalizations, and 150 admissions to intensive care units (1). This surge created an unprecedented, localized health system collapse, which then spread across Italy (1). From February 20, 2020 until March 24, 2021, Italian national authorities reported 3,440,862 confirmed COVID-19 cases and 106,339 deaths (2). Just like Italy, other countries experienced stressors to their national health system, including workforce shortage, to highlight the lack of human resources to manage this unprecedented crisis (3).

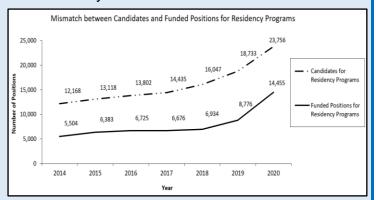
According to official figures, Italy stands over the Organization for Economic Co-operation and Development (OECD36) average for the number of doctors, with four physicians per 1,000 population, with half of them being over 55 years old, and moving toward retirement over the next 10 years (4-5). By 2030, there is an estimated deficit of 80,000 clinicians in



hospitals and general practice, thus making workforce governance an absolutely urgent matter (4-6). The most natural way to manage resource scarceness is by examining its production process.

In 2013, the competition to access medical residency programs in Italy, held annually in every single university independently, was centralized. The establishment of a unified competition for all the positions on the national territory was aimed to overcome

meritocracy concerns and to ensure the access and quality of the medical training uniformly throughout country (Figure 1). Hence, the age-old question of the gap between candidates and ministerial scholarships for medical residency programs remained unsolved, and the opportunity was missed to enforce a strong and decisive action plan. Today, the prospect of filling the void left by mass retirements expected in the next decade is unlikely (6).



**Figure 1.** Mismatch between candidates and funded positions for medical residency programs. Source: Italian Ministry of Education, Universities, and Research (MIUR).

When the Italian health service came under increasing pressure by the emergence of SARS-CoV-2, the workforce shortage issue regained appeal. Immediately, significant actions were put in place by the Italian Government, including changing de facto the career path of junior doctors and coordinating appropriate contracts to hire doctors for urgent activities of contact tracing, diagnostic testing, and home-care services.

Additionally, two groundbreaking measures had been considered for a long time and were subsequently implemented under the pressure of the COVID-19 crisis. First, the health authorities enacted a decree that allowed medical residents and general practice trainees to work inside the regional health system during their final years of training. Authorities provided them with the same accountability and benefits of specialized doctors, but in addition to their clinical responsibilities, they were required to complete eight hours of weekly supervised work (7). Second, medical graduation became a qualification for permission to enter general practice without completion of the Ministry of Health examination. This exception increased the number of junior doctors who entered the National Health Service and hence offered relief to the strained health system.



As the second wave arrived at Italy, the COVID-19 pandemic continued to stress the health system. After months of increased workload, reduced time for formal training, and changes to the work environment, resident doctors came back classified as *students*, and they had been offered university credits and no financial incentives to support the COVID-19 community vaccination efforts (8). Hence, this extraordinary emergency fostered a call to action for reform of Italian medical education and training programs.

Despite the challenges experienced during the COVID-19 pandemic, the Italian health authorities have not yet developed the strategic and farsighted vision needed to enforce a successful policy for medical training. Indeed, by implementing short-term actions to manage the current crisis and temporarily fill the workforce shortage, policymakers are likely to miss the chance to build a robust medical training. Since an effective medical training system is the cornerstone for high-quality clinical and public health services, a successful reform requires continued investment to examine the results within the next decade. Lessons learned from the COVID-19 community response underline the value of a well-proportioned and trained health workforce.

Globally, all junior doctors must advocate for an effective and accessible medical training in order to strengthen and preserve the real asset of every health system: the health workforce.

- 1) Perico L, Tomasoni S, Peracchi T, Perna A, Pezzotta A, Remuzzi G, et al. COVID-19 and lombardy: TESTing the impact of the first wave of the pandemic. *EBioMedicine*. 2020;61:103069.
- 2) Il Sole 24 Ore. Coronavirus in Italy, data and map. 2021 [cited 2021 Mar 24]. Italian.
- 3) Organization for Economic Co-operation and Development. <u>Skill measures to mobilise the workforce during the COVID-19 crisis</u>. Paris: OECD Publishing; 2020.
- 4) Organization for Economic Co-operation and Development. <u>Health at a Glance 2019: doctors (overall number)</u>. Paris: OECD Publishing; 2019.
- 5) Nebo Ricerche PA. NHS Health Report 2019: employees of public health companies. 2019 [cited 2021 Feb 23]. Italian.
- 6) Randstad Research Italia. <u>The figures of medical profiles in Italy and the impact of the coronavirus</u>. 2020 [cited 2021 Feb 23]. Italian.
- 7) President of the Republic (Italy). Measures to strengthen the National Health Service and economic support for families, workers and businesses related to the COVID-19 epidemiological emergency. *Italian Official Gazette*: General Series No. 70. 2020 [cited 2021 Feb 23]. Italian.
- 8) Panorama della Sanità. Medical residents, Anelli (Fnomceo) to Manfredi (Miur): they are not students, they are doctors in all respects: treat them as such. 2020 [cited 2021 Feb 23]. Italian.



# Second Wave and Uncertainties: Experiences with Emotional Stress and Burnout

Maymona Choudry, MD MPH
General Surgery Resident
Vicente Sotto Memorial Medical Center
Cebu City, Philippines



"...If you feel burnout setting in, if you feel demoralized and exhausted, it is best, for the sake of everyone, to withdraw and restore yourself"

— Dalai Lama

Burnout is one of the most common mental health issues among doctors in training, especially those in surgical specialties. This can contribute to poor job satisfaction and have a negative impact on mental and physical health (1).

# Burnout syndrome is characterized by emotional exhaustion, depersonalization, and reduced personal achievement.

The term *burnout*, first defined by Freudenberger, was used to describe emotional exhaustion experienced by civil servants. There are three components of burnout: overwhelming exhaustion, feelings of cynicism or depersonalization, and sense of ineffectiveness and lower efficacy. Evidence shows that burnout can affect patient safety and patient outcomes, increase prescription errors, reduce quality of medical services, and weaken interprofessional relationships (1).

According to one meta-analysis, the global prevalence of burnout among residents is considerably high and estimated at over 50% (1). The following causes of burnout were identified: bureaucratic requirements, continually changing work environments, micromanagement by the hospital administration, poor clinical supervision, sensationalist media reports of medical errors, limited health care resources, litigious environments, and poor work-life balance among residents.



#### Aliyah's Experiences

Aliyah is a second-year surgical resident, assigned to Cardiovascular and Thoracic Surgery in a tertiary hospital, as part of her subspecialty clinical rotations. Since she was on-call every day, she was responsible for managing any referrals from the emergency room or hospital ward. This meant that she had to stay at the hospital for long periods of time, with no fixed time and little to no leisure time. Eventually, she was able to cope with multiple tasks and referrals, performing bedside procedures, and scheduling emergency and elective cases on certain days.

Although it was fun and satisfying to complete her clinical responsibilities, she started to feel isolated and alone during the rotation. It did not bother her much, or so she thought.

She was able to observe and participate in numerous types of surgeries, which piqued her interest in thoraco-cardiovascular surgery. At the end of her rotations, she was promoted to her third year of residency, where new challenges and adversities would await in 2021.

In December 2020, the coronavirus disease 2019 (COVID-19) cases in Cebu city decreased to fewer than 10 cases per day. It had appeared that daily routines were returning to the *new normal*. At the start of January 2021, Aliyah was assigned to the Trauma Service with a team of nine residents from various training years. She felt happy to become a part of a team again and have colleagues with whom she could brainstorm and discuss issues. She also knew that she could rely on her colleagues for additional support whenever she encountered difficulties during the rotation.

During the first week, they received mandatory swabbing for COVID-19 testing. Some residents were asymptomatic but tested positive for the infection. Once again, they had to go back on skeletal workforce, and there were numerous changes in teams, rotations, and schedules. As she managed these new changes, she was assigned to the COVID-19 team and was on the first team to be assigned one week of straight duty. She felt overwhelmed and disconnected from her colleagues and patients, which stimulated feelings of exhaustion and stress. As she neared day seven, she was already feeling hopeless and exhausted, to the point where she just wanted to quit and go home. She stopped everything, realizing that enough was enough, and she had to retreat and recuperate to find herself again. She realized that she was experiencing *burnout*.



#### **Forward Steps**

Burnout is commonly experienced across health care professions. Although we cannot avoid stressful clinical scenarios, we must adapt to our profession and adopt techniques and strategies to significantly lower the risk of burnout. However, there is a burgeoning literature base to support the assertion that resilience is a skill that may be learned and cultivated, which is instrumental in preventing burnout (2). Emotional intelligence has also been reported as a strong predictor of resident well-being (2).

Individual physicians should work hard to combat burnout by actively nurturing their personal and professional lives and prioritising work-life balance. Furthermore, they can place greater emphasis on finding meaning in their daily work, focusing on what is important in life, and maintaining a positive outlook.

Moving forward, these strategies – such as employing mindfulness techniques, consciously expressing gratitude, and celebrating small victories – can be effective in reducing burnout.

- 1) Low ZX, Yeo KA, Sharma VK, et al. Prevalence of burnout in medical and surgical residents: a meta-analysis. *Int J Environ Res Public Health*. 2019;16(9):1479.
- 2) Moalem J. Resources in Surgical Education: Burnout in surgery. 2017 [cited 2021 Feb 7].



## **Ethiopia's Medical Talent: The Dilemma**

Eleleta Surafel Abay, MD
Public Health Analysis Intern
Global Health and Education Projects, Inc
Addis Ababa, Ethiopia



Low-income countries, including Ethiopia, continue to struggle with national investment in health workforce education and training (1). As a country with a fast growing population, Ethiopia has faced severe gaps in the demand and provision of essential health services, mainly due to a shortage of trained workers (2). In light of this fact, the Ethiopian government has focused on strengthening the health care system by establishing new health care facilities and expanding physician training through the "flood and retain" strategy (3).

The enforcement of this policy, through the expansion of the medical program and increased enrollment, has been a clear attempt to encourage meaningful change in the number of available health care workers at all levels.

Currently, over 30 recognized medical schools in Ethiopia produce an oversized output of physicians. Despite the increased number of health care facilities, these medical graduates struggle to find proportional opportunities of employment, career, and professional development. Since medical education directly impacts public health and the quality of care, it must base its framework on the health system through strictly regulated governance. Unfortunately, the disproportionate focus on the "flood" (rather than the "retain") policy has left room for career preference, urban concentration, and talent exodus. Such results suggest that the strategy has inadvertently negated the very aim it was established to achieve.

A recent research study examined career preferences from medical students across six Ethiopian medical schools. Authors reported that medical students favor of specialties of Internal Medicine and Surgery, leaving gaps in the crucial fields of Pediatrics and Obstetrics and Gynecology (4). These findings present an alarming challenge for the

country, especially as they relate to maternal and child mortality rates. Ultimately, career choice is a dynamic process that is subject to continuous change as students advance in their coursework and clinical rotations. Given the complexity of the phenomenon, in order to develop evidence-based strategic interventions, robust longitudinal studies should examine how the factors associated with career preference change across medical education.

## Ethiopia continues to be one of the countries with the highest physician emigration in Sub-Saharan Africa, due to inadequate professional support and substandard retention strategies.

Compared to other professional areas, the medical pool is most susceptible to talent exodus. This is a result of the increasing demand for health professionals in high-income countries that offer better financial incentives, conducive training and working environments, and better living conditions. Given how educating medical doctors is an expensive initiative for any low-income country, focusing on devising mechanisms to tap on the knowledge and skills of those professionals who have already left can be one mitigation strategy (3).

As medical interns continued to face bureaucratic hurdles in license acquisition, poor working conditions, lack of social security and financial benefits, and limited career advancement opportunities, they led a nationwide strike in May 2019. Notably, the strike brought several unexpected consequences, including the cessation of central deployment of medical graduates by the country's Ministry of Health. This central deployment freeze left the new graduates alone in the job search and shifted the hiring mandate to regional and city administration health bureaus, which fostered corruption and nepotism (**Photos 1-2**).



**Photo 1.** University of Gondar medical doctors on strike, May 2019. Credit: UoG official Facebook page.



**Photo 2.** Recent medical graduates in line for job applications, September 2020. Credit: Ethio Doctors Jobs and Vacancies official Telegram page.



In conclusion, the shortsighted national governance of the health system has jeopardized past efforts and overlooked the health workforce shortage and emigration trends. This has left the country in the frustrating paradox of unmet health care needs for the general population as well as concerns about continued medical training and employment for recent medical graduates (5). Moving forward, there is an imminent necessity to develop high-quality, large-scale longitudinal analyses of existing medical training and retention strategies that support evidence-based policies.

# Robust research protocols coupled with effective implementation strategies have the potential to effectively mitigate this national burden to the health system.

- 1) World Health Organization. <u>Global strategy on human resources for health: Workforce 2030</u>. Geneva: WHO; 2016.
- 2) Berhan Y. Medical doctors profile in Ethiopia: production, attrition and retention. In memory of 100-years Ethiopian modern medicine and the new Ethiopian millennium. *Ethiop Med J.* 2008;46 (Suppl 1):1-77.
- 3) Tamrat W. Medical education and the Ethiopian exodus of talent. Center for International Higher Education. 2019 [cited 2021 Feb 3].
- 4) Assefa T, Mariam DH, Mekonnen W, Derbew M. Medical students' career choices, preference for placement attitudes towards the role of medical instruction in Ethiopia. *BMC Med Educ*. 2017;17(1):96.
- 5) Biniam E. Op-ed: the "Flood and Retain" strategy and the future of Ethiopian doctors. 2019 [cited 2021 Feb 3].



# Call for Solidarity from Junior Doctors: Civil Disobedient Movement in Myanmar

Wunna Tun, MBBS MD Secretary (2020–2021) Communications Director (2013–2016) Junior Doctors Network World Medical Association



On February 1, 2021, the Myanmar military junta illegally seized all the three powers of the State. They detained the legal government leaders and parliamentarians who were elected systematically in the general election of November 2020, according to the democracy rules and free wish of the people. On February 3, 2021, junior doctors from Myanmar – together with other health professionals – started the Civil Disobedience Movement (CDM) and vowed to close public hospitals across the country. They aimed to defy the new military regime that took control of the government and seized civilian leaders in a coup (1).

As junior doctors, our duty is to first consider our patient care and manage their health needs. However, how can we provide clinical care and use our medical knowledge without violating human rights and civil liberties under military dictatorship?

While joining the CDM, we are providing gratuitous medical care at private clinics and hospitals, with the help of well-wishers with conscience and dignity and in accordance with appropriate medical practice (2).

Currently, some doctors are fleeing their homes to hide from the military regime, while other doctors have been seized (3). Soldiers have opened fire at ambulances and medical personnel who provide emergency treatment (4). Doctors have been targets while providing care at private clinics. For this reason, senior doctors in Myanmar also strongly support the CDM, which is described as the peaceful demonstration by junior doctors and medical professionals in Myanmar.



We will continue to support the CDM until power is returned to the civilian government. International specialty bodies support and stand in solidarity with doctors from Myanmar (5). On behalf of the doctors in Myanmar, I would like to call for solidarity and understanding from the Junior Doctors Network (JDN), WMA, and doctors around the globe during these challenging times in Myanmar.

- 1) Shepherd A. Myanmar medics resist military coup. *BMJ*. 2021;372.
- 2) World Medical Association. WMA Declaration of Geneva. 2021 [cited 2021 Feb 22].
- 3) Htwe ZZ. 2021. Myanmar medics in hiding as regime targets hospital-led disobedience movement. 2021 [cited 2021 Feb 22].
- 4) JURIST Staff. Mandalay death toll rises after Myanmar police, soldiers open fire on protesters. 2021 [cited 2021 Feb 22].
- 5) Royal College of General Practitioners. <u>Statement on Myanmar February 2021</u>. 2021 [cited 2021 Feb 22].



# Advanced Field Epidemiology Training Program: A Nigerian Junior Doctor's Experience

Suleiman Ahmad Idris, MBBS
Field Epidemiology and Laboratory Training Program Resident
Global Immunization Division Fellow
Africa Field Epidemiology Network
Katsina, Nigeria



The Field Epidemiology Training Program (FETP) is a two-year fellowship, modelled after the United States' Centres for Disease Control and Prevention's (US CDC) Epidemic Intelligence Service (EIS) fellowship. This global program trains physicians, veterinarians, and laboratory scientists to become field epidemiologists through didactic sessions of class lectures (25%) and fieldwork experiences (75%) (1). A professional network called the Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET), which was formed in 1997, manages the accreditation of 87 FETPs in more than 165 countries and territories (1).

In Nigeria, the FETP has a laboratory and a veterinary component to address One Health challenges and is therefore called Nigeria Field Epidemiology and Laboratory Training Program (NFELTP) (2). The NFELTP is coordinated by the Nigeria Centre for Disease Control and US CDC, through the Africa Field Epidemiology Network. Notably, NFELTP residents and graduates were instrumental to help contain the Ebola virus outbreak in 2014 (2).

# Since its initiation in 2008, over 200 epidemiologists have received this NFELTP advanced training.

Prior to my admission into the 11<sup>th</sup> cohort of the NFELTP in 2019, I served as a paediatric emergency physician at a local public hospital. My clinical responsibilities included the evaluation and treatment of acute cases of infectious diseases (e.g. diarrhoeal diseases, malaria, pneumonia), febrile seizures, malnutrition, and vaccine-preventable diseases (e.g. measles). Since vaccine-preventable diseases continue to increase morbidity and mortality in Nigerian children, prompt medical treatment is key to reduce the risk of complications.



During the first six weeks, sessions were made up of academic lectures, group exercises, formal presentations, and asynchronous content. Topics included biostatistics, epidemiology, disease surveillance, outbreak investigation, case studies, and software programs (e.g. Microsoft Excel, Epi Info, QGIS). After classroom lectures and exams, we were deployed to our field sites at the Ministries of Health around all the 36 Nigerian States as epidemiology, immunization, and surveillance support staff. Our field supervisors and mentors were instrumental in providing optimal support during this field training.

In February 2020, my first field experience was a response to a Lassa fever outbreak in Katsina state. Although I was initially terrified when the index case was reported at my field site, I felt prepared after my FETP training in infection prevention and control of Lassa fever. In this case, nine family members attended a wedding in another Nigerian state with an ongoing outbreak of Lassa fever. Four family members were diagnosed with Lassa fever, and three died. As a FETP fellow, I collected blood samples, conducted the case investigation and contact tracing, performed data management and analysis, and generated the situation report.

In April 2020, as the coronavirus disease 2019 (COVID-19) was spreading across the world, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) cases were diagnosed at my field site. Prepared for response efforts, I supported disease surveillance by collecting nasopharyngeal samples for data collection, performing data management and analysis, developing appropriate surveillance reporting and risk communication strategies, and training health workers (**Photos 1-2**). From my earlier field experiences with Lassa fever, I felt more confident and prepared to manage the epidemiology team.



Photo 1. NFELTP resident Dr Suleiman Idris prepares to collect nasopharyngeal samples from suspected COVID-19 cases in Katsina State, Nigeria. Credit: Dr Suleiman Idris.



**Photo 2.** NFELTP residents Dr Bello Suleiman Abdullahi (left) and Dr Ahmad Suleiman Idris (right) trace contacts of COVID-19 cases in Katsina State, Nigeria. Credit: Dr Suleiman Idris.



In summary, learning is ongoing, and epidemiology skills are important to clinical and public health practitioners. Through the integrated coursework with fieldwork applications, learning is accelerated, and mentors provide essential guidance and support. Through my fellowship, I have sent two manuscripts to peer-reviewed journals for publication, three more manuscripts are in preparation, and three research proposals are pending ethical approval.

The COVID-19 pandemic has illuminated the importance of the FETP program across the world, highlighting the need for skilled epidemiologists.

The FETP fellowship program – which enhances the training of health professionals in field epidemiology – should be expanded, supported, and sustained in all countries. For now, I am exactly where I want to be, and I look forward to completing my fellowship as an official field epidemiologist in late 2021.

- 1) Training Programs in Epidemiology and Public Health Interventions Network. <u>Training programs</u>. 2021 [cited 2021 Feb 14].
- 2) Nigeria Centre for Disease Control. <u>Nigeria Field Epidemiology and Laboratory Training Program</u>. 2021 [cited 2021 Feb 14].



# Betrayed and Undermined during a Pandemic: The Plight of Young Physicians and Surgeons in India

Manu Pradeep, M.B.B.S.

Junior Medical Officer
Indian Council of Medical Research – National Institute for Research
in Tuberculosis BCG Vaccine Trial
Department of Community Medicine, Amrita School of Medicine
Kochi, India



In 2019, as the Union Government of India aimed to reform medical education, the pandemic offered the perfect opportunity to impose several ill-conceived, undemocratic, and regressive laws on the battered medical fraternity. Despite outright condemnation and outcry from the Indian Medical Association (IMA), the Indian Dental Association as well as several specialty organizations, the Government of India stood resolute in its decision. Notably, two laws were swiftly enforced the National Medical Commission Act of 2019 and the Indian Medicine Central Council (Post-graduate Ayurveda Education) Amendment Regulations of 2020.

### **Autonomous Regulator or Government Guard Dog?**

The first challenge was observed on August 8, 2019, with a significant policy change. The National Medical Commission Act of 2019 called for the National Medical Commission (NMC) to replace the existing autonomous regulatory body, the Medical Council of India (MCI). Since the MCI had been involved in numerous past scandals, including several corruption allegations, many leaders rejoiced at this national action. Unfortunately, this move came with a notable departure from the democratic norms of electing medical professionals to lead the MCI, which key positions were replaced with nominated senior government administrative officials (1,2).

## A Bridge Course for All

Historically, the delivery of primary care services has been limited in rural India, due to poor accessibility, health workforce shortages, limited community participation, and lack of national oversight. To address this challenge, the National Medical Commission Act of 2019 authorized the NMC to expand medical prescribing practices in primary healthcare settings to certain mid-level practitioners called Community Health Providers (CHP) (1). This approach – which extended Modern medicine prescription practices to allied Modern and traditional health practitioners – offered them an opportunity to pursue basic clinical training and obtain this national registration. This model is similar to that observed in the United States, where nurse practitioners undergo rigorous clinical training to be eligible for prescribing medicines.



# This approach utilized a one-year bridge course to grant the legitimacy of Modern medicine to all Traditional medicine practitioners albeit no stringent oversight.

Alas, the curriculum for CHPs has a limited scope that hindered comprehensive preparation for Traditional medicine practitioners (3). Hence, the National Medical Commission Act of 2019 explicitly overlooked the sustainable solution of employing skilled primary care physicians with respectable salaries, supporting medical staff, and providing appropriate infrastructure. As a result, public and private rural hospitals could employ traditional medicine practitioners and benefit from substantial budget savings. Notably, traditional medicine practitioners are exploited as low-cost labour with salaries as low as one-fifth of those of Modern medicine, who ironically remained unemployed despite possessing required expertise (2).

#### **Woes of Medical Training**

Through the National Medical Commission Act of 2019, the regulatory oversight of the private medical education sector was relinquished on key accreditation standards, including infrastructural (mandatory digitised classrooms) and teaching faculty standards (part-time visiting faculty) for new medical universities (4). As a result, private institutions will be able to conduct undergraduate courses on virtual platforms and use more part-time faculty, while requiring high tuition fees. Notably, the NMC proposed the national adoption of the National Exit Test (NEXT) for postgraduate entrance examination, in lieu of distinct final graduation examinations by individual universities.

## **Stressors among Post-graduate Medical Trainees**

By omitting the mandate to stipulate post-graduate course fees on 50% of unreserved seats, private medical universities will be unregulated, and they can increase fees for post-graduate candidates as they prepare for NEXT. NEXT is poised to replace the National Eligibility cum Entrance Test (PG) (NEET-PG) in 2022 (1). Moving forward, post-graduate course fees are speculated to rise by 5-to-10-fold on the prevailing structure, as the National Medical Commission Act of 2019 did not have stringent mandates to regulate these practices by private medical universities (2). With 83,175 medical graduates graduating each year, more low- and middle-income junior doctors will be forced to assume enormous student debt, which will cripple their finances for decades.

Together with economic debt, junior doctors will continue to endure significant stressors throughout their post-graduate training programs, characterized by intense work demands, challenges in work-life balance, and risk of burnout.

#### **Future of Surgery under Assault**

The Indian Medicine Central Council Amendment Ordinance of 2020 authorised Ayurvedic medicine practitioners (Bachelor of Ayurvedic Medicine and Surgery, B.A.M.S.), who represent most traditional medicine practitioners, to pursue a two-year post-graduate training in 58 common surgeries, including laparotomies and cataract surgeries. This specialty training results in the Master of Surgery (Ayurveda) Shalya Tantra (General Surgery) or the Master of Surgery (Ayurveda) Shalakya Tantra (Diseases of Eye, Ear, Nose, Throat, Head, and Oro-dentistry) (5). This training, however, includes the advanced principles of surgical techniques, surgical disinfection, and anaesthetic practices, adapted from Modern medicine, which was only offered to B.A.M.S. practitioners in a very limited scope. Hence, as they are expected to be trained by their Modern surgical colleagues, this scenario has created a false equivalency between Modern and Ayurvedic medicine. Notably, the IMA has vehemently opposed this "mixopathy" and continues to protest peacefully with hunger fasts, for the future of modern medicine in India (6).

#### **Junior Doctors' Voices of Dissent**

The IMA Junior Doctors Network (JDN) National Council has actively organised protests and public awareness campaigns, such as "Janta Ki Awaaz" (Voice of the People), where Indian junior doctors facilitated a productive dialogue with the general population about the pitfalls of this law. They continue to advocate for the formal repeal of these two laws and engage with the Union Government of India to reform the health sector with the medical fraternity seen as a productive partner and stakeholder (**Photos 1-2**).

The health of 1.36 billion Indians and the fate of nearly 926,000 doctors hang in the balance, as India bravely fights the relentless pandemic with our junior doctors managing the frontlines.



**Photo 1**. At the "Janta Ki Awaaz" campaign, the symbolic black arm band represents solidarity with the IMA-JDN (Delhi, India). Credit: Dr Shiv Joshi.



Photo 2. Hunger Fast Protest by IMA and Indian Dental Association leaders (Kerala, India) in February 2021. Credit: Dr Manu Pradeep.



- Ministry of Law and Justice (Government of India). <u>National Medical Commission Act 2019</u>. 2019 [cited 2021 Feb 11].
- 2) Indian Medical Association. Point by point rebuttal to public stance of Gol. 2019 [cited 2021 Mar 23].
- 3) National Institute of Public Health Training and Research, Ministry of Health and Family Welfare (Government of India). Post graduate diploma in community health care (PGDCHC). 2021 [cited 2021 Feb 11].
- 4) National Medical Commission (Government of India). <u>Minimum requirements for annual M.B.B.S admissions regulation</u>. 2020 [cited 2021 Feb 23].
- 5) Central Council of Indian Medicine (Government of India). <u>Indian Medicine Central Council (Post-graduate Ayurveda Education) Amendment Regulations</u>. 2020 [cited 2021 Feb 11].
- 6) Indian Medical Association. No to mixopathy (relay hunger strike against mixopathy). 2021 [cited 2021 Feb 11].



# JDN Working Groups: A Platform for International Networking and Career Advancement

Dabota Yvonne Buowari, MD
Department of Accident and Emergency
University of Port Harcourt Teaching Hospital
Port Harcourt, Rivers State, Nigeria



The medical field fosters collaborations between diverse groups of health practitioners working in clinical practice, community health promotion, and research. One key example is the role of the <u>Junior Doctors' Network</u> (JDN) in promoting these academic collaborations. The JDN aims to empower young doctors to work together towards a healthier world through advocacy, education, and international collaboration. JDN members participate in working groups focused on specific topics, such as medical ethics, antimicrobial resistance, primary health care, and climate change and health. Team members gain skills by preparing project tasks, such as writing statements, organizing webinars, producing health promotional videos, and writing articles for peer-reviewed journals.

As these JDN working groups facilitate ongoing partnerships, relationships, and networking, junior doctors may expand their professional networks beyond the JDN.

The expansion of these professional networks was exemplified by my experience as a member and co-lead of the JDN Medical Ethics Working Group. These collaborations can be fruitful as junior doctors connect with colleagues from different countries and combine their expertise to established projects, including the development of scientific manuscripts.

## **Example: JDN Medical Ethics Working Group**

As a member of the JDN Medical Ethics Working Group since 2020, I participated in the ethics paper writing project, where members prepared articles on topics related to medical ethics and the coronavirus disease 2019 (COVID-19) pandemic. As Dr Shiv Josh (India) and I served as co-leads of the ethics paper writing project, our direct interactions allowed us to learn more about our professional interests and hence foster potential collaborations.

Months later, Dr Joshi and his team at the College Union of the Calicut Medical College (Kerala, India) were organizing the MEDMEET International UG Medical Conference, scheduled for August 2020. He invited me to participate on the international panel, *World Amidst Pandemic: Will the Human Race Fight It Down*, which highlighted the global response efforts during the COVID-19 pandemic. This international panel included seven speakers representing Columbia, India, Nigeria, Taiwan, United Kingdom, and the United States (Figure 1).

During the conference, each panelist responded to questions about the ongoing COVID-19 pandemic, such as national health actions by health systems, implemented reduce measures to disease transmission, research advancement for a vaccine, and recommended coping strategies for society. presentation, I During my panel shared experiences as an emergency physician in Nigeria during this challenging COVID-19 pandemic. I also described the epidemiological trends in Nigeria, including the economic impact on the health system and mental health implications due to the restricted movements during lockdowns and curfews.



**Figure 1.** Promotional flyer for the MEDMEET International UG Medical Conference 2020. Credit: MEDMEET.

In summary, the diverse connections and professional networking from participation in various JDN working groups can lead to achieving additional career goals and advancement. For example, my JDN connection afforded me the opportunity to serve as a panelist on an international webinar for the first time. Furthermore, since medicine is a dynamic field with frequent scientific discoveries, such networking opportunities can result in valuable knowledge sharing and continued professional development. This personal experience demonstrates that JDN collaborations have the potential to extend beyond finalizing one single project of a working group and offer professional networks for a lifetime.



# Kick-off of the Public Health Interest Group: Significance and Future Steps

Hangyeol Lee, MD
Department of Family Medicine
Seoul National University Hospital
Seoul, Republic of Korea

Seoul Detention Center, Ministry of Justice Seoul, Republic of Korea





The perception of *ideal healthcare* differs among doctors, just as doctors appear homogeneous on the outside but heterogeneous on the inside. For the past 30 years, since the term *public health* first appeared in government documents (1), how to revolutionize and improve public health has always been disputable, partly due to the vague definition of *publicness* and its complex nature with multiple stakeholders. Meanwhile, various attempts have been made through policy-making to ensure a healthier society. However, despite its significance, junior doctors in the Republic of Korea have felt powerless and unheard in the *health policy* issues, including policy-making activities.

Notably, pivotal moments for junior doctors arrived in 2020. In the Republic of Korea, an unprecedented era of the pandemic was not the only highlight of the year. The government tried to increase the admission quotas at the medical colleges and develop a new medical school focused on public health. However, since these policies were made without consultations with doctors or medical societies, authorities faced stiff resistance (2). As a result, doctors – including junior doctors – staged a walkout to protest these policies, noting that these measures would have negative effects on the national healthcare system.

These events aroused attention among junior doctors on healthcare systems and health policy, especially on the potential impact on infectious disease management and population health.

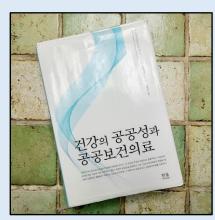
As junior doctors, we reflected on these health policy topics: Have we ever had the chance to freely and openly discuss these issues? Why have we not had an opportunity to discuss these issues on a local or national level? Realizing that the answers were *no* and *rarely*, the solution was clear: junior doctors need more academic opportunities to share knowledge and debate these essential health policy issues.

#### Forming a Public Health Interest Group

To tackle this topic, several young doctors formed a Public Health Interest Group to promote shared knowledge and jumpstart the national dialogue on public health issues. Junior doctors with different backgrounds, working across diverse healthcare facilities, joined this project. These team members included one emergency medicine resident, two interns at university hospitals who will become family medicine and public health residents in March 2020, one public health doctor (under military service) working at a correctional facility, two doctors working at the Korea Disease Control and Prevention Agency, and one board-certified radiologist.

As a group, we decided to read Publicness in Health and Health Care by Prof Chang-yup Kim of Seoul National University Graduate School of Public Health (Photo 1). This book contains six sections. The first section introduces the background of publicness, a concept that can be defined as ownership or formal legal status or degree of attachment to public values (3). The second section covers theories and terms related to publicness. including public sphere, public value, public dominance, and publicness of civil society. The third section describes how to apply these theories or concepts to the health system. These sections include theories of historic figures (Jürgen Habermas, Michel Foucault, Amartya Sen). The fourth and fifth sections include discussion about the public health system of the Republic of Korea and other countries. The sixth section incorporates the future of publicness and public health.

Starting in September 2020, virtual meetings were held monthly to discuss book chapters (Photo 2). Since team members had different working environments, their interpretations of concepts offered insight and a more comprehensive view on theories, reality, and potential solutions. For example, when discussing the best approaches to recruit doctors to public health, the dialogue included emphasizing economic incentives and supporting policies.



**Photo 1**. *Publicness in Health and Health Care*. Credit: Dr Hangyeol Lee.



**Photo 2.** Screenshot of the Public Health Interest Group meeting. Credit: Dr Sejin Choi.



Notably, Prof Kim described the concept of *health regime*, which adds to the definition of Diane Sainsbury of *regime* is "a complex of rules and norms that create established expectations". However, Prof Kim defines health regime to emphasize that public health should be approached through conventional components (e.g. facility, human resources, finance, governance) as well through political, economic, and sociocultural conditions. In this manner, doctors can conceptualize public health as a *totality* and *multi-layer*, *multi-axial phenomenon*. Hence, by adopting the concept of health regime, we learned that public health should be reinforced by reforming all related aspects of health systems.

Although the book content is challenging to analyze and understand, due to unfamiliar concepts from medical training, the Public Health Interest Group offers an opportunity to engage with other doctors on valuable academic exercises.

#### **Forward Steps**

In the forward of the book, Prof Kim wrote: "The process of producing and accumulating knowledge is social and collective... If the knowledge is not produced, circulated, practiced, and accumulated socially, writings based on that knowledge are not easy to comprehend. As this difficulty can only be overcome through cooperation and solidarity as social engagement, I encourage readers to join this cause."

This Public Health Interest Group focuses on promoting shared knowledge and discussion on essential public health issues among doctors. However, as Prof Kim stated, more doctors and healthcare workers should join the citizenry movement to gradually change the world. Following this sentiment, this team hopes to encourage health professionals to form groups that focus on important issues for community health. This momentum can lead to collective activities with community members, politicians, and government officials. Public engagement is needed more than ever: this is a call for action to our colleagues in the Republic of Korea and the world.

- 1) Kim C-Y. Further conceptualizing of 'publicness' in health and health care in South Korea. *Public Health Affairs*. 2017;1:65-77. Korean
- 2) Cha S. <u>South Korean doctors strike over plan to boost medical student numbers</u>. Reuters. 2020 [cited 2021 Feb 23].
- 3) Min HS, Park Y, Kim C-Y. Recognition of the concept of publicness in healthcare: a content analysis of Korean newspapers. *J Korean Med Sci.* 2017;32:393-400.



## The First Junior Doctors Network's eHealth Working Group

Lisa María González López, MD General Physician Primary Health Center 30 de Mayo Santo Domingo, Dominican Republic

Ankush Bansal, MD FACP FACPM SFHM
Voluntary Clinical Assistant Professor of Medicine
Florida International University
Miami, Florida, USA





Digital health is a broad term that refers to the use of information and communication technologies in medicine and other health care related professions to manage illnesses and health risks and promote wellness (1).

Since digital health is a process that is currently shaping the future, it must be continuously evaluated, especially as technology continues to advance at such a quick pace. It must ensure adequate security protocols are followed and monitored to increase patients' safety. As a virtual process, patients should have the same amount of confidentiality, respect, and treatment, when compared to a face-to-face setting.

## Initiation of a New World Medical Association (WMA) Working Group

In November 2020, Dr Joe Heyman (Chair, WMA Associate Members), distributed the WMA call for the development of a Working Group to review the WMA Statement on *Guiding Principles for the Use of Telehealth for the Provision of Health Care* to the Junior Doctors Network (JDN) membership (1). This email represented a fantastic opportunity for interested junior doctors to embark on this digital health journey.

In December 2020, the eHealth Task Force became the newest Working Group, under the leadership of Dr Prof Kun Zheng, Chair of the Chinese Medical Association. Other members included WMA Associate Members from the Israeli, Malaysian, Uruguayan, and Finnish Medical Associations, Dr Ankush Bansal (WMA Associate Members lead), and myself.

#### Agenda for WMA Discussion

The eHealth Task Force reviewed the document prepared by the WMA's Socio-Medical Affairs Committee (SMAC). This document compiled the comments to the WMA Statement of 15 National Medical Associations and Associate Members. including China, France, Germany, New Zealand, and the United States. The eHealth Task Force led the discussion to consider the merging of three policies mobile (telehealth, health. and telemedicine) into one or developing three different policies (Table 1).

Categories of Digital Health	Definitions
Telehealth	Telehealth is defined as remote health care service delivery, which offers health information sharing for clinical management and continuing education for health professionals (2).
Mobile health	Mobile health supports the use of electronic devices employing voice, short messaging services (SMS), applications (apps), and global positioning system (GPS) in medical and public health practice (3).
Telemedicine	Telemedicine is similar to telehealth with a primary focus on remote health care service delivery, but does not include continuing education for health professionals (4).

**Table 1**. Categories and definitions of digital health (2-4).

At the conclusion of the WMA meeting, the unanimous decision was to merge these three policies. Ms Malke Borow (Director, Division of Law and Policy, Israeli Medical Association) and I volunteered to prepare the first draft before sending it to the eHealth Task Force colleagues. Coincidentally, since the Medical Technology Working Group, under the Israeli Medical Association's leadership, had similar objectives as the eHealth Task Force, the WMA Associate Members section decided to merge both entities into the eHealth and Medical Technology Task Force.

#### **Memorable Course of Discussion**

Over the past three months, the eHealth and Medical Technology Task Force has continued to revise the WMA Statement. They considered the comments provided by other Medical Associations in the original document. Task Force team members, who represent diverse countries like Australia, India, Kuwait, Palestine, and Romania, have contributed their expertise from medicine, public health, and digital health and demonstrated enthusiasm for continued learning on these topics.

The team coordinated Zoom meetings to brainstorm on these tasks, which allowed them to share diverse perspectives, appreciate critical analyses, and ultimately build professional relationships. Currently, Ms Borow and I are working on a second draft so that the eHealth and Medical Technology Task Force team members can collectively review the content prior to submission to the WMA.



#### Values and Future of eHealth and Medical Technology Task Force

In the eHealth and Medical Technology Task Force, team members evaluated the efficiency, potential improvements, probable issues encountered in ethical matters, and actions that could enhance electronic and digital health quality. Since members supported effective and high-quality communication between patients and their healthcare providers, they have attempted to be as concise and straightforward as possible in the WMA Statement. They provided a clear definition of digital health technology and clarified other terms – telehealth, mobile health, and telemedicine – that are often poorly understood by the scientific and general community.

As the Task Force continues to revise the WMA Statement, team members seek to strengthen security protocols while discussing medical ethics involved in privacy laws.

Since patient-centered healthcare is a key component of digital health, healthcare providers should share the potential risks and implications with patients regarding privacy concerns, such as technological failures, unauthorized access, patient data and confidentiality breaches, and possible secondary use of data. This Task Force aims to ensure that patients feel protected and taken care of during their routine healthcare visits as well as during crises (e.g. pandemic, wars, natural disasters) that can infringe on their well-being. To better understand the challenges facing patient security protocols, the Task Force looks forward to developing new projects that focus on patient data security and records policies.

- 1) Ronquillo Y, Meyers A, Korvek SJ. <u>Digital health</u>. StatPearls. 2020 [cited 2021 Mar 16].
- 2) World Health Association. Telehealth. 2020 [cited 2021 Mar 14].
- 3) World Medical Association. WMA Statement on Mobile Health. 2017 [cited 2021 Mar 14].
- 4) World Medical Association. WMA Statement on the Ethics of Telemedicine. 2020 [cited 2021 Mar 14].



# Introducing Policy at the World Medical Association: The Global Surgery Experience

Manon Pigeolet, MD MSc Harvard T.H. Chan School of Public Health Boston, Massachusetts, USA



Global surgery is an emerging field in global health, which aims to enhance access to timely, affordable, and safe surgery for all citizens.

Global surgery is an emerging field in global health, which aims to enhance access to timely, affordable, and safe surgery for all citizens. Although global surgery has not yet been formally included as an advocacy domain in previous advocacy efforts of the World Medical Association (WMA), working group members believed that it was time that the Junior Doctors Network (JDN) and WMA highlight the importance of surgery and anesthesia care as a part of universal health coverage and health systems strengthening efforts around the world.

# To address these efforts, JDN members formed the Global Surgery Working Group in February 2019.

After founding the Global Surgery Working Group, JDN members collectively discussed the need to raise awareness of the importance of surgery and anesthesia care through the development of a WMA resolution on *Access to Surgery and Anesthesia Care*. This proposed activity was described at the monthly JDN teleconference meetings and received support by the JDN Management Team to proceed with the next steps of the plan. This article describes the four steps – searching the literature, writing the draft resolution, seeking informal feedback, and requesting formal feedback – completed by the JDN Global Surgery Working Group members to develop the WMA resolution on *Access to Surgery and Anesthesia Care*.



#### **Searching the Literature**

JDN members conducted a literature review to become familiarized with the emerging topics of Global Surgery, such as current knowledge, attitudes, and practices surrounding the delivery and accessibility of global surgery and anesthesia care. Then, they reviewed policy briefs on the topics of access to surgery and anesthesia care by other international organizations, such as the report from <a href="https://doi.org/10.2016/j.com/nc/4">The Lancet Commission on Global Surgery</a> and the World Health Assembly Resolution 68.15 on <a href="https://doi.org/10.2016/j.com/nc/4">Strengthening Emergency and Essential Surgical Care and Anaesthesia as a Component of Universal Health Coverage</a>. Finally, JDN members conducted an in-depth search within existing WMA resolutions, policies, and declarations in order to identify existing content on surgery or anesthesia care.

#### Writing the Draft Resolution

By understanding the current views on access to surgery and anesthesia care in the global health arena, we proceeded to prepare the resolution. As a team, we identified common goals and ideas as well as accountable individuals and organizations for the implementation. We prepared and circulated the draft resolution within the working group to obtain feedback by members and confirm that the content truly reflected the vision for global surgery and anesthesia care. Once we reached group consensus, we integrated the final revisions and prepared the document in the official format of a resolution.

### **Seeking Informal Feedback**

As we wanted to seek informal feedback from WMA leadership on our draft resolution, Dr Chukwuma Oraegbunam (JDN Chair, 2018–2019) discussed the elements of the resolution with Dr Otmar Kloiber (WMA Secretary General). As such, WMA leadership agreed with the draft resolution and next steps to formally propose the resolution to the WMA audience. WMA leadership offered two options: 1) introduce the resolution through the WMA Associate Members group which would be sent to the WMA General Assembly; or 2) collaborate with a National Member Association (NMA) that can introduce the policy to the WMA Council or the WMA General Assembly (GA). Since we did not have contacts with an NMA who would potentially be interested in supporting this policy, we decided to introduce the policy through the WMA Associate Members' meeting.



#### **Requesting Formal Feedback**

At the WMA Associate Members' meeting, which preceded the WMA GA (October 2019) in the Republic of Georgia, members voted to support the policy and its formal presentation at the GA. Subsequently, the document was forwarded to the WMA General Assembly, where it was reviewed by the NMAs who chose to have it re-circulated for further comments. The document was eventually sent back and forth several times between the NMAs and the WMA General Assembly and Council for feedback, voting, and re-circulation. The final version was completed with support from Dr Lwando Maki (JDN Medical Ethics Officer, 2018–2021) and Dr Yassen Tcholakov (JDN Chair, 2020-2021), who both helped incorporate the recommended edits provided by NMAs. The final version was submitted to the WMA in January 2021. This revised document still contained the central ideas and beliefs described in the initial version. Finally, the WMA Council proposed the policy for adoption at the virtual WMA Council Meeting (April 2021), where NMAs voted on its adoption.

# In early 2019, this entire process resembled the adventures of Alice in Wonderland and seemed to be a lengthy and laborious process.

However, now that we have finally reached the end of the tunnel and can celebrate another JDN-driven WMA resolution, this process does not feel intimidating anymore. On behalf of the JDN Global Surgery Working Group, we hope that this narrative offers insight into the internal proceedings of the WMA and can serve as a framework for JDN-driven policies and future collaborations.