



WORLD  
MEDICAL  
ASSOCIATION

**Junior Doctors Network Newsletter**  
**Issue 20**  
October 2020

# JUNIOR DOCTORS NETWORK

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

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 2019–2020

INTERIM CHAIR



Dr [Yassen Tcholakov](#)  
Canada

SECRETARY



Dr [Julie Bacqué](#)  
France

SOCIO-MEDICAL  
AFFAIRS OFFICER



Dr [Christian Kraef](#)  
Germany

EDUCATION  
DIRECTOR



Dr [Uchechukwu Arum](#)  
Nigeria

MEDICAL ETHICS  
OFFICER



Dr [Lwando Maki](#)  
South Africa

MEMBERSHIP  
DIRECTOR



Dr [Lyndah Kemunto](#)  
Kenya

PUBLICATIONS  
DIRECTOR



Dr [Helena Chapman](#)  
Dominican Republic

COMMUNICATIONS  
DIRECTOR



Dr [Maki Okamoto](#)  
Japan

IMMEDIATE PAST  
CHAIR

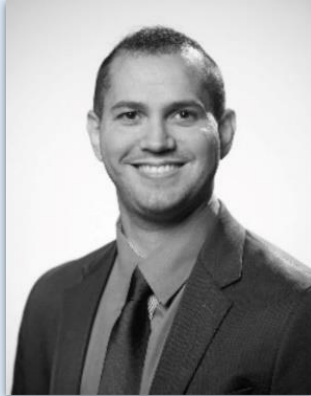


Dr [Chukwuma  
Oraegbunam](#)  
Nigeria

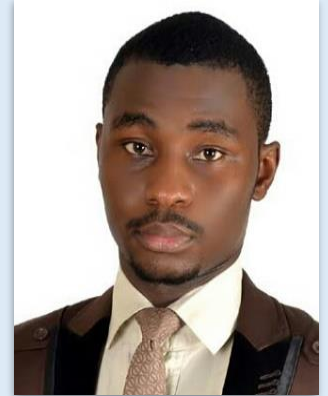
## Editorial Team 2019–2020



Dr [Victor Animasahun](#)  
Nigeria



Dr [Ricardo Correa](#)  
Panama/United States



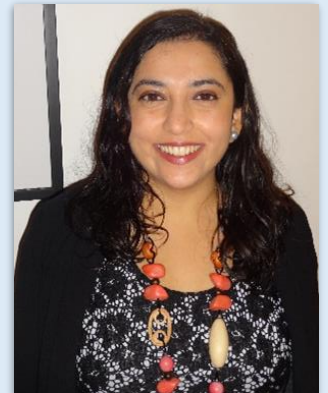
Dr [Suleiman A. Idris](#)  
Nigeria



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



Dr [Nneka Okafor](#)  
Nigeria



Dr [Mariam Parwaiz](#)  
New Zealand



Dr [Jeazul Ponce H.](#)  
Mexico



Dr [Konstantinos](#)  
[Roditis](#)  
Greece



## **Table of Contents**

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

#### **08 Words from the Interim Chair**

By Dr Yassen TCHOLAKOV (Canada)

#### **09 Words from the Communications Director**

By Dr Maki OKAMOTO (Japan)

#### **10 Words from the Publications Director**

By Dr Helena CHAPMAN (Dominican Republic)

### **SPECIAL SERIES: 10<sup>th</sup> JDN ANNIVERSARY**

#### **11 JDN 10<sup>th</sup> Anniversary Working Group Update**

By Dr Julie BACQUÉ (France)

#### **12 Words from the WMA Secretary General**

By Dr Otmar KLOIBER (WMA)

#### **14 Reflections by the JDN Founders**

By Dr Xaviour WALKER (New Zealand/United States) and Dr Lawrence LOH (Canada)

#### **15 Reflection by the Inaugural JDN Chair**

By Dr Xaviour WALKER (New Zealand/United States)

#### **20 Reflection by the Inaugural JDN Deputy Chair**

By Dr Lawrence LOH (Canada)

#### **22 JDN Management Teams (2011–2020)**

#### **25 Reflections by Former JDN Chairs**

By Dr Thorsten HORNUNG (Germany), Dr Nivio MOREIRA (Brazil), Dr Ahmet MURT (Turkey), Dr Caline MATTAR (Lebanon/United States), and Dr Chukwuma ORAEBUNAM (Nigeria)

## **Table of Contents**

### **32 Reflections by Former JDN Officers**

By Dr Kostas RODITIS (Greece), Dr Wunna TUN (Myanmar), Dr Paxton BACH (Canada), Dr Yassen TCHOLAKOV (Canada), and Dr Maki OKAMOTO (Japan)

### **41 Reflections about the Future and Memorable Experiences by Former JDN Officers**

By Dr Kazuhiro ABE (Japan), Dr Gbujie Daniel CHIDUBEM (Nigeria), Dr Mike Kalmus ELIASZ (United Kingdom), Dr Chibuzo NDIOKWELU (Nigeria), Dr Mariam PARWAIZ (New Zealand), and Dr Fatima Cody STANFORD (United States)

### **43 Reflections about the Future by the JDN Management Team (2019–2020)**

By Dr Yassen TCHOLAKOV (Canada), Dr Julie BACQUÉ (France), Dr Christian KRAEF (Germany), Dr Uchechukwu ARUM (Nigeria), Dr Lwando MAKI (South Africa), Dr Lyndah KEMUNTO (Kenya), Dr Helena CHAPMAN (Dominican Republic), Dr Maki OKAMOTO (Japan), and Dr Chukwuma ORAEBUNAM (Nigeria)

### **48 Reflections about the Future by the JDN Publications Team (2019–2020)**

By Dr Helena CHAPMAN (Dominican Republic), Dr Victor ANIMASAHUN (Nigeria), Dr Ricardo CORREA (Panama/United States), Dr Suleiman Ahmad IDRIS (Nigeria), Dr Vandrome NAKUNDI KAKONGA (Democratic Republic of the Congo), Dr Nneka OKAFOR (Nigeria), Dr Mariam PARWAIZ (New Zealand), Dr Jeazul PONCE HERNÁNDEZ (Mexico), and Dr Kostas RODITIS (Greece)

### **51 Accomplishments of the JDN Publications and Communications Teams (2012–2020)**

### **54 Reflection by a Former Communications Director**

By Dr Wunna TUN (Myanmar)

## **Table of Contents**

### **56 Reflections about the Future by JDN Members**

By Multiple Authors

### **64 Reflections about the Impact of Global Health Contributions by JDN Members**

By Multiple Authors

### **66 Reflections about Memorable Collaborations by JDN Members**

By Multiple Authors

### **69 Junior Doctors Lead COVID-19 Response Efforts: Session at the JDN Virtual Meeting 2020**

By Dr Dabota Yvonne BUOWARI (Nigeria) and Dr Wunna TUN (Myanmar)

### **71 JDN Offers an Optimal Platform for Collaboration**

By Dr Dabota Yvonne BUOWARI (Nigeria)

### **75 Fostering Global Health Collaborations among Junior Doctors: Eight Years of Achievements**

By Dr Helena CHAPMAN (Dominican Republic) and Dr Victor ANIMASAHUN (Nigeria)

## **JUNIOR DOCTORS' COMMUNITY REFLECTIONS**

### **79 Personal Experiences of Public Health Doctors in the Republic of Korea**

By Dr Keyhoon KIM (Republic of Korea) and Dr Sejin CHOI (Republic of Korea)

### **82 My JDN, My Passion**

By Dr Dabota Yvonne BUOWARI (Nigeria)

### **83 My Face Mask**

By Dr Dabota Yvonne BUOWARI (Nigeria)



## **Table of Contents**

### **JUNIOR DOCTORS' SCIENTIFIC PERSPECTIVES**

#### **84 Challenges of Residency Training and Early Career Doctors in Nigeria**

By Dr Ugo ENEBELI (Nigeria), Dr Oladimeji ADEBAYO (Nigeria), Dr Okhuaihesuyi UYILAWA (Nigeria), Dr Aliyu SOKOMBA (Nigeria), and Dr Olusegun Olaopa (Nigeria)

#### **88 Transition to Telehealth and Telemedicine: The “New Normal” in the Training of Surgical Residents in the Philippines**

By Dr Maymona CHOUDRY (Philippines)

#### **91 Doctors' Well-being: Igniting the Light Inside You**

By Dr Uchechukwu ARUM (Nigeria)

#### **94 Telemedicine Applications during the COVID-19 Pandemic in Myanmar**

By Dr Hsu MYAT (Myanmar)

#### **97 COVID-19 and Children: Global Dialogue for Junior Doctors**

By Dr Rujvee PATEL (India)

#### **100 International Collaborations in the Post-Pandemic Era: Focus on the After Action Review**

By Dr Chiang Kuan YU (Taiwan)

### **JUNIOR DOCTORS' ACTIVITIES**

#### **103 Junior Doctors Advocate for Justice: The 30-Day Record**

By Dr Jaehyeon JANG (Republic of Korea)

#### **107 Managing COVID-19 Contact Tracing Teams in Las Vegas, Nevada**

By Dr Kristina Mihajlovski (United States)

### **INTERNATIONAL CONFERENCES**

#### **109 Inclusive Participation in Global Surgery at the UN General Assembly during the COVID-19 Pandemic**

By Dr Manon PIGEOLET (Belgium) and Dr Fabiola CASTEDO CAMACHO (Bolivia/Uruguay)

## Words from the Interim Chair

[Yassen Tcholakov](#), MD MScPH MIH  
Interim Chair (2019–2020)  
Junior Doctors Network  
World Medical Association



Dear colleagues from around the world,

It is my pleasure to introduce the 20th issue of the *Junior Doctors Network (JDN) Newsletter*. As the JDN celebrates its 10th anniversary this fall, it is only appropriate to reflect on the progress made over these last few years, and how the world has changed.

- ❑ Ten years ago, some junior doctors (now JDN alumni) were dedicated to develop the JDN, while current JDN members had not yet started medical school.
- ❑ Ten years ago, the JDN consisted of only a handful of members, whereas now we have over 500 members from all parts of the world. JDN membership continues to increase each month.
- ❑ Ten years ago, junior doctors had few opportunities to become involved in health policy activities at an international level, whereas the JDN now offers these professional opportunities.

As we celebrate this JDN milestone, I reflect on the *halfway* point of being a junior doctor. As I have been actively involved in the JDN for the past five years, I have appreciated the opportunities to meet colleagues, exchange novel ideas, and understand our different experiences and perspectives in the medical field. As these experiences have shaped how I perceive the world, I sincerely hope that the JDN will continue fostering such experiences for all junior doctors.

Over the past few months, there have been many unexpected and unwelcome changes in the world. Although we had hoped to meet face-to-face with many old friends and new members in Córdoba, we will encourage our global dialogue through this virtual meeting. Nevertheless, I am hopeful that we will foster meaningful connections among junior doctors. The written words of our colleagues in the pages to come are one important way to highlight leadership efforts, and I hope that you enjoy the reading as much as I did.

Sincerely,  
Yassen Tcholakov



## Words from the Communications Director

[Maki Okamoto](#), MD  
 Communications Director (2019–2020)  
 Junior Doctors Network  
 World Medical Association



Dear colleagues,

It is my pleasure to welcome you to the 10<sup>th</sup> Anniversary Edition of the *Junior Doctors Network (JDN) Newsletter*.

My JDN history began in 2016, when I joined the Japan Medical Association – JDN. At that time, I was unaware of JDN. Now, JDN has become an essential part of my life!

Through my participation in international conferences, I was inspired by energetic junior doctors from all over the world and interactive discussions regarding the future of medical practice and global health. We must continue to develop collaborations that allow shared learning and foster professional networks across nations.

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.

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

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

**Figure 1.** List of JDN media resources.

We hope that you enjoy the articles! Please join our JDN activities, where you can make lifelong friendships, share your leadership activities, and be inspired by your colleagues! We look forward to your participation, so that we can strengthen our future collaborations!

Take care and stay safe,  
 Maki Okamoto

## Words from the Publications Director

[Helena Chapman](#), MD MPH PhD  
Publications Director (2019–2020)  
Junior Doctors Network  
World Medical Association



Dear JDN colleagues,

On behalf of the Publications Team (2019-2020) of the Junior Doctors Network (JDN), we are excited to share the JDN 10<sup>th</sup> Anniversary Special Edition of the *JDN Newsletter* with junior doctors across the world.

As the coronavirus disease 2019 (COVID-19) pandemic affects all nations, we have observed that junior doctors are a valuable resource for all national health systems. Our medical and public health expertise in clinical management, community health, medical education, policy activities, and research applications is fundamental to advance scientific inquiry and discovery.

This JDN 10<sup>th</sup> Anniversary Special Edition of the *JDN Newsletter* includes narratives and scientific articles from former and current JDN members from across the globe. JDN founders highlight valuable reflections that provide a timeline of essential steps and encountered challenges during the development of this global network. Their historic leadership and commitment will forever be remembered and appreciated as the next generation of junior doctors join the JDN.

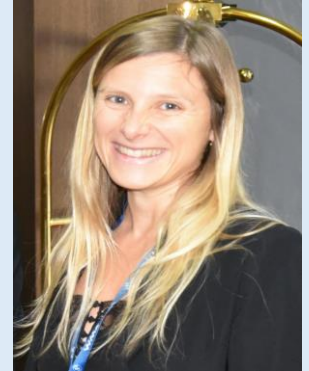
The *JDN Newsletter* offers a global platform where junior doctors across the globe can share their expertise and leadership activities in local and national health initiatives. Their experiences can encourage other junior doctors to lead health promotion efforts as well as enhance communication between World Medical Association (WMA) and JDN members.

We acknowledge the enthusiasm and leadership of all editors of the JDN Publications Team 2019-2020 as we finalized this Special Edition. We appreciate the continued support of the JDN Management Team and WMA leadership as we disseminate this key junior doctors' resource. We invite you to learn about the JDN history and the inspiring work of junior doctors across the world!

Together in health,  
Helena Chapman

## JDN 10<sup>th</sup> Anniversary Working Group Update

[Julie Bacqué](#), MD  
Secretary (2019–2020)  
Junior Doctors Network  
World Medical Association



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

The Junior Doctors Network (JDN) 10<sup>th</sup> Anniversary Working Group was created by junior doctors in May 2020, motivated by their enthusiasm to formally report the accomplishments of the JDN since its foundation in October 2010 in Vancouver, Canada.

JDN members planned to hold this special 10<sup>th</sup> Anniversary event during the World Medical Assembly (WMA) General Assembly, which was scheduled to be held in October 2020 in Cordoba, Spain. With the emerging coronavirus disease 2019 (COVID-19) pandemic – and the need to transition from an in-person to virtual event – the JDN Management Team and Working Group worked collaboratively to organize a two-day virtual event with an energizing agenda that accommodates time zones and JDN member participation.

The Working Group, consisting of 26 JDN members, coordinated their first meeting in June 2020 to discuss their proposed action plan (**Figure 1**). The primary goals were to highlight the JDN history, milestones, and achievements over the past 10 years; showcase junior doctors’ global leadership and activities; and encourage JDN members to engage in future projects.

- ☐ WMA/JDN conference presentations
- ☐ JDN articles for the *World Medical Journal* and *JDN Newsletter*
- ☐ “Question and Answer” session with JDN members
- ☐ Biannual *JDN Newsletter* (Theme: *JDN 10<sup>th</sup> Anniversary*)
- ☐ Medical Ethics video with interviews of previous officers
- ☐ Social media campaign

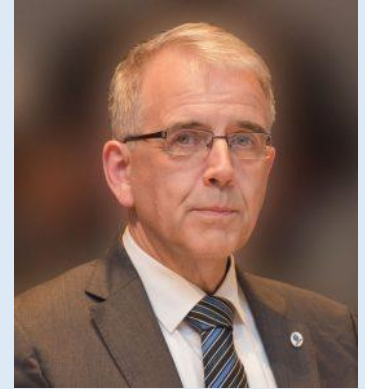
**Figure 1.** Coordinated activities for the WMA/JDN Meeting in October 2020.

Special thanks to all members and supporters of the JDN 10<sup>th</sup> Anniversary Working Group! We have come a long way in the past 10 years, and we will go even further in the next 10 years!



## Words from the WMA Secretary General

Otmar Kloiber, MD  
 Secretary General (2005–2020)  
 World Medical Association



In celebration of the 10<sup>th</sup> Anniversary of the Junior Doctors Network (JDN), we are humbled to include some reflections from Dr Otmar Kloiber, Secretary General of the World Medical Association (WMA). On behalf of the JDN Management Team, we are indebted to the strong support of WMA leadership for JDN activities, including the *JDN Newsletter* (Photo 1).

**What element has been the most satisfying in knowing that you have helped to create and support the JDN over the past 10 years?**

The JDN has become a real global platform, bringing together young physicians to discuss and join in national and global health care issues. Since its inauguration ten years ago, it has been continuously working with a steady increase in participation and activities – a real success story.

**What has surprised you the most about how the JDN has evolved over the past 10 years?**

Working together with the JDN requires significant financial and time investment as well as stamina to sustain these efforts. Yet, the JDN has developed steadily over time. In a very short time, the JDN has been recognized by other organizations as the global organization for young physicians. This external recognition of the JDN is fantastic and beyond anything that we could have predicted.



**Photo 1.** WMA leadership.  
 Credit: Dr Maki Okamoto.

**What do you think are the most pressing issues that junior doctors around the world will have to address in the coming decade?**

The JDN has vividly engaged in the big contemporary global health questions – Universal Health Care, Climate Change, and Digitization – among other pressing issues. However, the patient-physician relationship is under constant attack. Economic pressure and commoditization of health care, coupled with command and control ambitions by governments and payers, threaten the professional autonomy of physicians. The patient-physician relationship is a generational challenge that starts with junior physicians' working conditions and leads to the question of clinical independence in the future. It is now when the decisions are being made about how well and how freely physicians can best serve their patients in the next decade.

**The WMA currently serves as a role model to National Medical Associations (NMAs) by showing that junior doctors have a voice and can contribute positively to the organization. What else do you think that the WMA can do to further encourage NMAs to empower junior doctors nationally to engage in international work?**

Our NMAs are very different. About half of the NMAs are private organizations, and the other half are statutory bodies, where membership is usually defined by the law. The latter group often comprises the regulatory body in their respective countries. In both groups, some NMAs are simultaneously trade unions. In the past, the participation of young physicians has been very different in our member organizations. As an organization, the WMA is traditionally comprised of the senior leadership of the NMA. During the past decade, it has become far more sensitive to the next generation's questions and problems. This has triggered substantial interest related to the involvement of young leaders in their NMAs from both sides. In some NMAs, this has already considerably changed the cooperation with young physician groups. As the WMA has been and will continue to be a catalyst for such change, the JDN has been an important facilitator for these actions.

**Regarding the role of junior doctors in national health systems, what advice would you offer current JDN leaders and members on potential leadership and training activities in global health?**

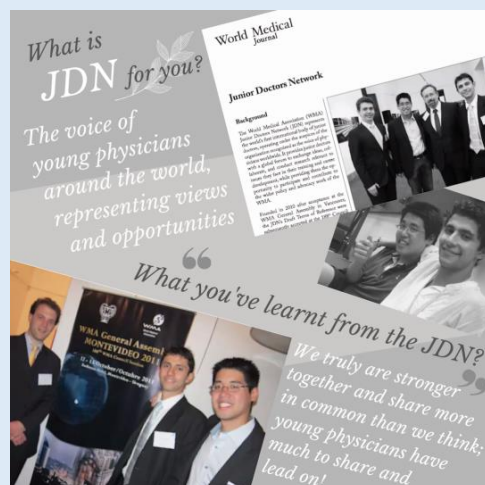
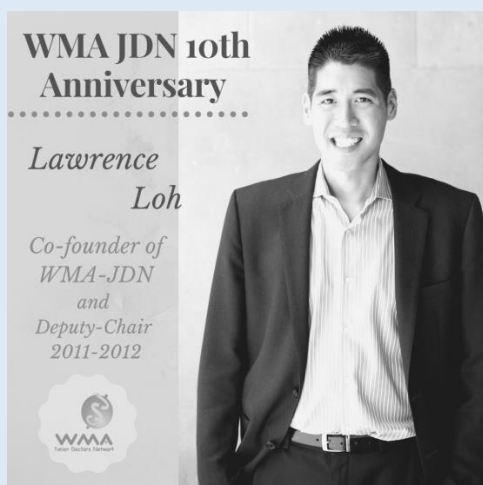
The physician community has always been and still remains under the threat to be divided. There is always a threat to be divided between family physicians and other specialists, employed and self-employed, and young and senior physicians. Global health must be an integral part of all of our thinking. Another dichotomy would not be productive for our global health efforts.

## Reflections by the JDN Founders



### Dr Xaviour Walker (Inaugural Chair, 2010–2012)

The development of the JDN has been a joy to watch and a privilege to serve as co-founder and Inaugural JDN Chair.



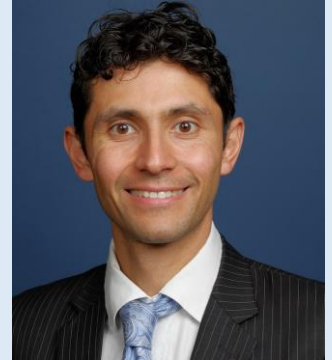
### Dr Lawrence Loh (Inaugural Deputy Chair, 2011–2012)

I am so pleased to see how JDN has turned into the leading platform and voice for the interests of young physicians and physician trainees around the world.



## Reflection by the Inaugural JDN Chair

[Xaviour Walker](#), MD  
Inaugural JDN Chair (2010–2012)  
Junior Doctors Network  
World Medical Association



### The initial idea for the Junior Doctors Network (JDN) began in 2007.

In 2006, I had just attended the International Federation of Medical Students' Associations (IFMSA) General Assembly (March 2006) in Australia, followed by the IFMSA Asia-Pacific Regional Meeting (March 2007) in Japan. I was now a first-year doctor and an IFMSA alumnus. As president of the New Zealand Medical Students' Association (NZMSA), I was actively involved in joining the NZMSA to IFMSA at the IFMSA General Assembly (August 2006) in Serbia. Prior to this meeting, I was introduced by a mutual friend to Lawrence Loh (Canada), who was the IFMSA Americas Regional Coordinator. This key introduction was the start of a long friendship (**Photo 1**).

At the IFMSA General Assembly (August 2006) in Serbia, Lawrence Loh helped support our successful NZMSA application for IFMSA membership. As my graduation approached and my IFMSA participation ended, my interest in global health had increased. During my time as NZMSA President (2005–2006), I had observed the implementation of the Doctors-in-Training Council (DITC) in the New Zealand Medical Association (NZMA) and learned about a similar program in Australia. This step had filled the national void of junior doctor advocacy representation in New Zealand and also allowed the NZMSA President to sit as an ex-officio member on the DITC. Ultimately, this model successfully increased communication between NZMSA and junior doctors.



**Photo 1.** Dr Xaviour Walker.  
Credit: Dr Maki Okamoto.

When I was at the IFMSA Asia-Pacific Regional Meeting (March 2007) in Osaka, Japan, I was traveling on a bus with Ahmed Ali (IFMSA President). He described his participation in the World Medical Association (WMA) meeting and interest to increase IFMSA alumni involvement at these meetings. I discussed how the *Doctors-in-Training* model had successfully worked in New Zealand and Australia. Next, we researched other junior doctor bodies – namely, the British Medical Association junior doctors and the American Medical Association Residents and Fellows section – and developed an initial steering committee to work on increasing junior doctor representation in the WMA.

Over numerous Skype meetings and emails, we developed a proposal on the establishment of a *Doctors-in-Training* Chair and Committee within the WMA committee structure. At this time, I was pursuing my medical residency in the United States (Massachusetts), and Dr Lawrence Loh was completing his public health training in the United States (Maryland) and Canada. Through our frequent communication, we presented the proposal at the WMA General Assembly (May 2010) in France and received initial acceptance but no firm commitment. With the IFMSA General Assembly (August 2010) in Montreal, Canada, near my residence, I traveled by bus and met the Dr Dana Hanson (WMA President). Dr Dana Hanson was extremely supportive of increasing junior doctor representation in the WMA and shared that a similar idea was previously raised by the Canadian Association of Internes and Residents (CAIR). Notably, I met Dr Adam Kauffman (CAIR President) who had incredible energy and support at this important time.

As I attended the WMA General Assembly (October 2010) in Vancouver, Canada, I connected with Dr Adam Kauffman and other CAIR members. Dr Dana Hanson suggested that individuals join as WMA Associate Members and that a group of individuals could form a *group* or *platform*, where we would be able to present our proposal.

### **In October 2010, we created the first global representation of junior doctors at the WMA General Assembly in Canada.**

As I met other junior doctors from the Asia-Pacific region, I learned that Korean junior doctors had a strong national medical association, and Japanese junior doctors wanted to develop a national association. As a result of these conversations and networks, Japanese junior doctors coordinated their national medical association, which is one of the strongest junior doctor networks to date.

After this foundation in 2010, we revised the provisional name (Junior Doctors Committee, JDC) to Junior Doctors Network (JDN) to highlight the team synergy and collaboration. We developed the terms of reference with brief descriptions to allow flexibility within the bylaw restrictions as the JDN grew. We prepared for our next participation in the WMA General Assembly (April 2011) in Sydney, Australia, where Dr Will Perry and several Australian junior doctors attended. We also focused our efforts on the WMA General Assembly (October 2011) in Montevideo, Uruguay, to coordinate a one-day meeting before the General Assembly. We realized that since the WMA General Assemblies occurred around the world, we could coordinate our JDN meetings by connecting with junior doctors of the respective country. As such, we worked closely with junior doctors from South America, including Brazil, where coincidentally Dr Nivio Moreira would later become the JDN Chair (2013–2014). Hence, at the WMA General Assembly (October 2011) in Uruguay, we conducted our first election, where three leadership positions were filled by JDN members with previous IFMSA experiences – JDN Chair (Dr Xaviour Walker, New Zealand/United States), Deputy Chair (Dr Lawrence Loh, Canada), and Secretary (Dr Thorsten Hornung, Germany) (**Photos 2-3**).



**Photo 2.** JDN delegation at the WMA General Assembly 2011 in Uruguay. Credit: JDN.

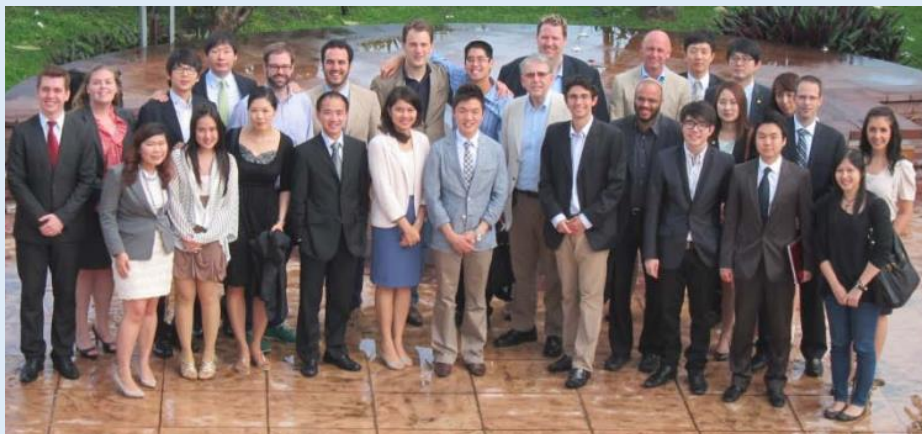


**Photo 3.** JDN Executive Board (2011–2012) at WMA General Assembly 2011 in Uruguay. Credit: JDN.

As subsequent JDN meetings were held in the Czech Republic (April 2012), Thailand (October 2012), Indonesia (April 2013), Brazil (October 2013), Japan (April 2014), and South Africa (October 2014), each meeting increased in attendance and involved more junior doctor networks developed across different countries (**Photos 4-5**). We had JDN meetings in the Eastern Mediterranean Region in Turkey (2013) and Lebanon (2014), which was fundamental for growth and support of this region. Likewise, The Junior Doctors



of Africa was established in 2014 by Dr Patrick Ezie (Nigeria) and other African junior doctors, providing a network of support and advocacy for this region. Over time, there has been continued communications with IFMSA medical students and formal relationships with the World Federation of Medical Education (WFME), guided by the leadership of Dr Ahmet Murt (Chair, 2014–2016) and other JDN members.



**Photo 4.** JDN delegation at the WMA General Assembly 2012 in Thailand.  
Credit: JDN.



**Photo 5.** JDN delegation at the WMA General Assembly 2014 in South Africa.  
Credit: JDN.

As the JDN became active in World Health Organization (WHO) activities, we attended the pre-World Health Assembly (WHA) with senior WMA leadership and the WHA (2013). Over that year, the JDN involvement in WHA, WHO, and UN activities grew significantly, and two major steps were taken. First, JDN leaders – including Dr Lawrence Loh (Canada), Dr

Jean-Marc Bourque (Canada), Dr Elizabeth Wiley (United States), Dr Caline Mattar (Lebanon/United States), Dr Paxton Bach (Canada), Dr Yassan Tcholakov (Canada) – led contributions to numerous WMA policies. Some policies included the Social Media and Medicine (white paper), Physician Wellbeing, Ethical Considerations in Global Medical Electives, Nuclear Weapons (revision), Trade Agreements and Policy Health, and Delhi Declaration on Climate Change (revision). Second, JDN Communications and Publications Directors – Dr Wunna Tun (Myanmar), Dr Ricardo Correa (United States), Dr Kazuhiro Abe (Japan), and Dr Helena Chapman (Dominican Republic) – led the development of the *JDN Newsletter* that highlight junior doctors' leadership activities across their nations. JDN Communications Directors also strengthened the JDN presence on the WMA/JDN webpage and other social media channels.

The development of the JDN has been a joy to watch and a privilege to serve as co-founder and inaugural JDN Chair (**Photo 6**). It has and still very much a team effort focused on representing junior doctors on a global level. Although I have acknowledged several names in this reflection, there are many more JDN leaders who have played pivotal roles.

On behalf of the JDN founders, I would like to sincerely thank the WMA senior leadership for their support and trust that encouraged JDN members to turn our vision into a reality. To the current and future JDN leadership and members, we wish you all the very best, and I am grateful to virtually celebrate this 10<sup>th</sup> Anniversary with our JDN family.



**The development of the JDN has been a joy to watch and a privilege to serve as co-founder and inaugural JDN Chair.**

**Photo 6.** Reflection by Dr Xaviour Walker.  
 Credit: Dr Maki Okamoto.

## Reflection by the Inaugural JDN Deputy Chair

[Lawrence Loh](#), MD, MPH, FCFP, FRCPC, FACPM  
Co-founder and Inaugural Deputy Chair (2011–2012)  
Junior Doctors Network  
World Medical Association



As I have had the privilege of serving as co-founder and inaugural Deputy Chair of the Junior Doctors Network (JDN), it is amazing to see the progress over the past 10 years (**Photo 1**). While the idea of a young physician's platform had been kicked about for a long time in the early 2000s, it was a conversation with Dr Xaviour Walker (New Zealand) in his kitchen in Boston on a cold weekend in March 2010 that brought me on board and launched us on the path to making it a reality.

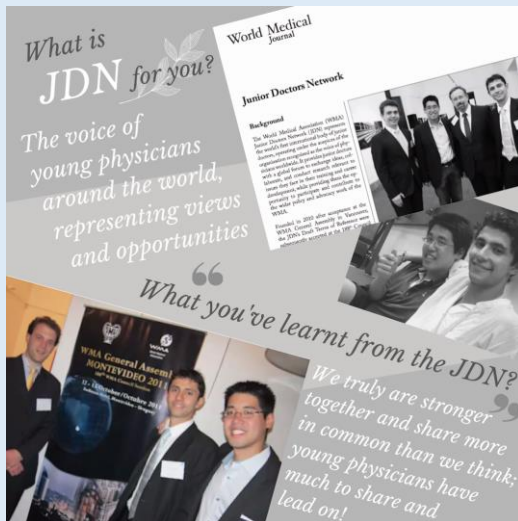
**I am so pleased to see how JDN has turned into the leading platform and voice for the interests of young physicians and physician trainees around the world.**



The best part of being a JDN leader was witnessing the shared idealism that exists among young doctors worldwide (**Photo 2**). Our collaborative tasks aimed to advance the interests of JDN members and supported the broader agenda and discussions of the World Medical Association (WMA). These experiences offered me insight into global health diplomacy and physician leadership. Since those formative years, I went on to serve in public health at all three levels of the Canadian government and currently have the privilege of heading up a large county health department in the Greater Toronto area.

**Photo 1.** Dr Lawrence Loh.  
Credit: Dr Maki Okamoto.





**Photo 2.** Reflection by Dr Lawrence Loh.  
Credit: Dr Maki Okamoto.

**My JDN memories – including the enthusiasm and idealism – are a wellspring that I tap into when the going gets tough – like this year! The professional network and friendships still remain beyond my JDN leadership.**

I hope that the next 10 years of the JDN will continue to see this premier platform for young physicians grow and mature further, continuing to confidently find its voice within the WMA and among all JDN members. As this network can expand the dialogue on pressing medical challenges of our time, new young physician champions can continue to make a difference in global health. The JDN has always been a place where you can collaborate on climate change – or on a karaoke song – and the platform will continue to influence the trajectory of the WMA, JDN member activities, and global health initiatives, for years to come (**Photo 3**).



**Photo 3.** Inaugural JDN officers hard at work at the WMA General Assembly 2011 in Uruguay. Credit: JDN.

## JDN Management Teams (2011–2020)

**Table 1.** List of the JDN Management Team members (2011–2014).

Position	2011–2012	2012–2013	2013–2014
Chair	<b>Dr Xaviour Walker</b> <i>New Zealand/United States</i>	<b>Dr Thorsten Hornung</b> <i>Germany</i>	<b>Dr Nivio Moreira</b> <i>Brazil</i>
Deputy Chair	<b>Dr Lawrence Loh</b> <i>Canada</i>	<b>Dr Jean-Marc Bourque</b> <i>Canada</i>	<b>Dr Caline Mattar</b> <i>Lebanon/United States</i>
Secretary	<b>Dr Thorsten Hornung</b> <i>Germany</i>	<b>Dr Nivio Moreira</b> <i>Brazil</i>	<b>Dr Ahmet Murt</b> <i>Turkey</i>
Socio-Medical Affairs		<b>Dr Fatima Cody Stanford</b> <i>United States</i>	<b>Dr Elizabeth Wiley</b> <i>United States</i>
Education		<b>Dr Ricardo Correa</b> <i>Panama/United States</i>	<b>Dr Ian Pereira</b> <i>Canada</i>
Medical Ethics		<b>Dr Paval Mankal</b> <i>United States</i>	<b>Dr Paval Mankal</b> <i>United States</i>
Membership		<b>Dr Caline Mattar</b> <i>Lebanon/United States</i>	<b>Dr Alexandros Papadopoulos</b> <i>Greece/France</i>
Publications		<b>Dr Kostas Roditis</b> <i>Greece</i>	<b>Dr Hyunyoung Deborah Shin</b> <i>Republic of Korea</i>
Communications		<b>Dr Hyunyoung Deborah Shin</b> <i>Republic of Korea</i>	<b>Dr Wunna Tun</b> <i>Myanmar</i>
Immediate Past Chair		<b>Dr Xaviour Walker</b> <i>New Zealand/United States</i>	<b>Dr Thorsten Hornung</b> <i>Germany</i>
Immediate Past Deputy Chair		<b>Dr Lawrence Loh</b> <i>Canada</i>	<b>Dr Jean-Marc Bourque</b> <i>Canada</i>

**Table 2.** List of the JDN Management Team members (2014–2017).

Position	2014–2015	2015–2016	2016–2017
Chair	<b>Dr Ahmet Murt</b> <i>Turkey</i>	<b>Dr Ahmet Murt</b> <i>Turkey</i>	<b>Dr Caline Mattar</b> <i>Lebanon/United States</i>
Deputy Chair	<b>Dr Patrick Ezie</b> <i>Nigeria</i>	<b>Dr Elizabeth Wiley</b> <i>United States</i>	<b>Dr Paxton Bach</b> <i>Canada</i>
Secretary	<b>Dr Guillaume Dedet</b> <i>France</i>	<b>Dr Kostas Roditis</b> <i>Greece</i>	<b>Dr Kostas Roditis</b> <i>Greece</i>
Socio-Medical Affairs	<b>Dr Elizabeth Wiley</b> <i>United States</i>	<b>Dr Kimberly Golding Williams</b> <i>Canada</i>	<b>Dr Yassen Tcholakov</b> <i>Canada</i>
Education	<b>Dr Ian Pereira</b> <i>Canada</i>	<b>Dr Ghaisani Fadiana</b> <i>Indonesia</i>	<b>Dr Mariam Parwaiz</b> <i>New Zealand</i>
Medical Ethics	<b>Dr John Zorbas</b> <i>Australia</i>	<b>Dr Fehim Esen</b> <i>Turkey</i>	<b>Dr Chukwuma Oraegbunam</b> <i>Nigeria</i>
Membership	<b>Dr Naira Costa</b> <i>Brazil</i>	<b>Dr Chiaki Mishima</b> <i>Japan</i>	<b>Dr Chiaki Mishima</b> <i>Japan</i>
Publications	<b>Dr Ricardo Correa</b> <i>Panama/United States</i>	<b>Dr Ricardo Correa</b> <i>Panama/United States</i>	<b>Dr Gbujie Daniel Chidubem</b> <i>Nigeria</i>
Communications	<b>Dr Wunna Tun</b> <i>Myanmar</i>	<b>Dr Wunna Tun</b> <i>Myanmar</i>	<b>Dr Mardelangel Zapata</b> <i>Peru</i>
Immediate Past Chair	<b>Dr Nivio Moreira</b> <i>Brazil</i>		<b>Dr Ahmet Murt</b> <i>Turkey</i>
Immediate Past Deputy Chair	<b>Dr Caline Mattar</b> <i>Lebanon/United States</i>		<b>Dr Elizabeth Wiley</b> <i>United States</i>



**Table 3.** List of the JDN Management Team members (2017–2020).

Position	2017–2018	2018–2019	2019–2020
Chair	<b>Dr Caline Mattar</b> <i>Lebanon/United States</i>	<b>Dr Chukwuma Oraegbunam</b> <i>Nigeria</i>	<b>Dr Audrey Fontaine</b> <i>France</i>
Deputy Chair	<b>Dr Chukwuma Oraegbunam</b> <i>Nigeria</i>	<b>Dr Yassen Tcholakov</b> <i>Canada</i>	<b>Dr Yassen Tcholakov*</b> <i>Canada</i>
Secretary	<b>Dr Kostas Roditis</b> <i>Greece</i>	<b>Dr Sydney Mukuka</b> <i>Zambia</i>	<b>Dr Julie Bacqué</b> <i>France</i>
Socio-Medical Affairs	<b>Dr Yassen Tcholakov</b> <i>Canada</i>	<b>Dr Mike Kalmus Elias</b> <i>United Kingdom</i>	<b>Dr Christian Kraef</b> <i>Germany</i>
Education	<b>Dr Audrey Fontaine</b> <i>France</i>	<b>Dr Audrey Fontaine</b> <i>France</i>	<b>Dr Uchechukwu Arum</b> <i>Nigeria</i>
Medical Ethics	<b>Dr Sydney Mukuka</b> <i>Zambia</i>	<b>Dr Lwando Maki</b> <i>South Africa</i>	<b>Dr Lwando Maki</b> <i>South Africa</i>
Membership	<b>Dr Chiaki Mishima</b> <i>Japan</i>	<b>Dr Chiaki Mishima</b> <i>Japan</i>	<b>Dr Lyndah Kemunto</b> <i>Kenya</i>
Publications	<b>Dr Kazuhiro Abe</b> <i>Japan</i>	<b>Dr Helena Chapman</b> <i>Dominican Republic</i>	<b>Dr Helena Chapman</b> <i>Dominican Republic</i>
Communications	<b>Dr Chibuzo Ndiokwelu</b> <i>Nigeria</i>	<b>Dr Anthony Chukwunonso Ude</b> <i>Nigeria</i>	<b>Dr Maki Okamoto</b> <i>Japan</i>
Immediate Past Chair		<b>Dr Caline Mattar</b> <i>Lebanon/United States</i>	<b>Dr Chukwuma Oraegbunam</b> <i>Nigeria</i>
Immediate Past Deputy Chair	<b>Dr Paxton Bach</b> <i>Canada</i>		

*\*Interim Chair from June–October 2020*

## Reflections by Former JDN Chairs

[Thorsten Hornung](#), MD

Chair (2012–2013)

Secretary (2011–2012)

Junior Doctors Network

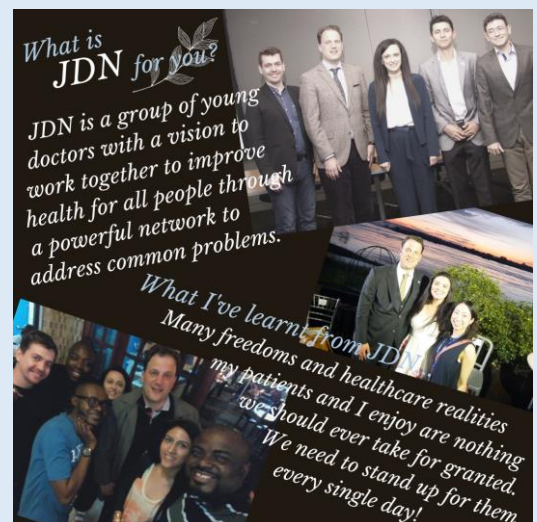
World Medical Association



The Junior Doctors Network (JDN) is a group of young doctors with a vision to work together to improve health for all people through a powerful network to address common problems. As junior doctors, we experience numerous challenges throughout our medical training. During my tenure, I have interacted with other JDN members and gained insight into challenges faced by junior doctors across nations (**Photos 1-2**). As global health leaders, we should continue to advocate for robust medical training and improved access to health care services for all global citizens. Together, we should stand up for our patients each day!

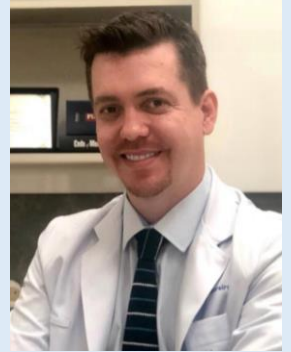


**Photo 1.** Dr Thorsten Hornung.  
Credit: Dr Maki Okamoto.



**Photo 2.** Reflection by Dr Thorsten Hornung.  
Credit: Dr Maki Okamoto.

[Nivio Moreira](#), MD  
Chair (2013–2014)  
Secretary (2012–2013)  
Junior Doctors Network  
World Medical Association



The Junior Doctors Network (JDN) is a group of young doctors from around the world who seek to improve global health by working together and exchanging experiences (**Photos 1-2**). Even though we are from different countries, languages, and cultures, we have more in common than we imagine. After all, we are friends for life from all over the world!



**Photo 1.** Dr Nivio Moreira.  
Credit: Dr Maki Okamoto.



**Photo 2.** Reflection by Dr Nivio Moreira.  
Credit: Dr Maki Okamoto.



[Ahmet Murt](#), MD  
Chair (2014–2016)  
Secretary (2013–2014)  
Junior Doctors Network  
World Medical Association



It is a great pleasure to see that the Junior Doctors Network (JDN) is celebrating the 10<sup>th</sup> anniversary (**Photo 1**). Looking back, it was not easy to start a new network in today's world – plus keep it active for a decade. The JDN has all the reasons to celebrate this victory. While the internal rules and procedures have been shaped over this first 10-year period, the second 10-year period will offer additional leadership experiences to strengthen this foundation.

**I am confident that the JDN will become a more powerful voice over the next decade, highlighting innovative leadership, strong ethical values, and creative applications in community health and policy.**



The JDN offers the opportunity to network with fellow junior doctors, share training experiences, and build essential skills like negotiation. Notably, the lives of junior doctors are composed of multiple challenges – such as work-life balance, economic stress, and career development – that can increase anxiety. For this reason, the JDN advocates for policies that protect junior doctors' health and well-being during their training. I believe that the support of World Medical Association (WMA) leaders has been the most important during this journey.

**Photo 1.** Dr Ahmet Murt.  
Credit: Dr Maki Okamoto.



**Photo 2.** Reflection by Dr Ahmet Murt.  
Credit: Dr Maki Okamoto.

**As a JDN member, you belong to a global family of passionate health professions who want to contribute significantly to improve community health!**

During my JDN leadership, my biggest challenge was the difficult discussions of the WMA Governing Working Group regarding the future of the JDN. However, by developing an organized agenda with clear objectives to facilitate dialogue between JDN and National Medical Association members, we observed that members identified challenges and offered potential solutions to strengthen the future outlook of the JDN.

The JDN family provides essential support for medical training, career planning, ethical scenarios, and other social aspects of medicine (**Photo 2**). As a JDN member, your innovative perspectives to emerging health topics are valuable contributions to global dialogue. Your participation in JDN activities will strengthen your career development as you continue your path in global health!

[Caline Mattar](#), MD  
Chair (2016–2018)  
Deputy Chair (2013–2014)  
Membership Director (2012–2013)  
Junior Doctors Network  
World Medical Association



The Junior Doctors Network (JDN) has gathered a very diverse group of junior doctors from around the world. The bonds that we build in the JDN are unique. Our common identity brings us together and our friendships, despite being miles away from each other, will last a lifetime. Looking back, I fondly remember our JDN meeting at the World Medical Association (WMA) General Assembly (October 2017) in Chicago, Illinois (United States). It was a very exciting moment when the WMA Council Chair recognized the JDN's efforts, advocacy, and expertise at the WMA General Assembly.

**I truly saw how far we have come as an organization by building our global network and encouraging in-depth discussions on pressing health issues.**



**Photo 1.** Dr Caline Mattar.  
Credit: Dr Maki Okamoto.

During my time as JDN Chair, I learned about myself and grew both as a leader and physician (**Photo 1**). I understood that patience, empathetic listening, and staying calm in the face of adversity are essential leadership strategies to address difficult situations. I also faced my biggest challenge related to the skepticism about being the first female leader of the JDN. However, through cohesive teamwork and transparent conversations, this skepticism quickly resolved, and the team thrived. The network grew in membership and gained its place on the WMA policy scene, with external partners as a strong advocate for young physicians and early career health professionals to collaborate on an array of global health issues.



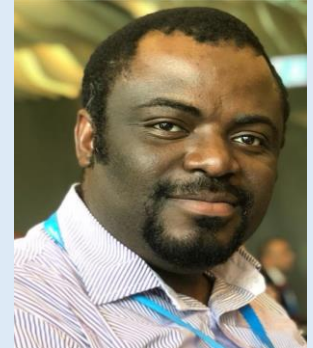


**Photo 2.** Reflection by Dr Caline Mattar.  
Credit: Dr Maki Okamoto.

**JDN was accepted as not only the voice of youth in the WMA, but also as a wealth of expertise on different matters, which helps further the mission of the organization as a whole.**

The JDN has come so far in just 10 years to become the voice of young physicians globally (**Photo 2**). It has brought like-minded people together from across the globe, with a true belief that as the next generation of doctors, we have the duty and the power to improve health for all. I see the JDN continuing in this path, and growing exponentially to ensure that voices of junior doctors from low- and middle-income countries are heard. I continue to be inspired every day by my JDN colleagues, and I know that they will be building an even stronger network to make the world a better, healthier place.

[Chukwuma Oraegbunam](#), MWACP MRCPSYCH  
Chair (2018–2019)  
Junior Doctors Network  
World Medical Association



The Junior Doctors Network (JDN) is a network that continues to expand its reach among junior doctors across the world. I have enjoyed connecting with junior doctors who share the same zeal and passion for health promotion for all. Over my tenure, I have learned about the central role of policy development and impact on global health systems (**Photos 1-2**). Over the next 10 years, I am confident that the JDN will continue to provide more opportunities for junior doctors to influence change in the World Medical Association (WMA) and lead global health initiatives that promote health for all global citizens.



**Photo 1.** Dr Chukwuma Oraegbunam.  
Credit: Dr Maki Okamoto.

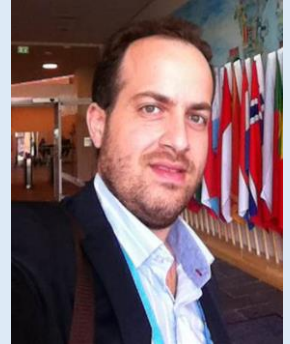


**Photo 2.** Reflection by Dr Chukwuma Oraegbunam. Credit: Dr Maki Okamoto.

## Reflections by Former JDN Officers

[Kostas Reditis](#), MD MSc

Secretary (2015–2018)  
Publications Director (2012–2013)  
Junior Doctors Network  
World Medical Association



**The JDN serves as the main conduit for junior doctors to bring positive change locally, nationally, regionally, and internationally.**

I envision the year 2030, when the Junior Doctors Network (JDN) is celebrating its 20th anniversary. Junior doctors from all over the world onboard the JDN-World Medical Association (WMA) continue making significant changes in their communities with their innovative ideas and leadership towards a healthier and more prosperous society. They work together in smaller teams to achieve a better tomorrow for future generations.

Over my tenure, I was honored to have served as the JDN Publications Director for one year and Secretary for three consecutive years. Notably, I still remember our excitement when the Paris Agreement on Climate Change was passed, as JDN was a key contributor to the successful outcome. This action led to WMA's delegation at the UN climate meetings.

During my term, my biggest lesson learned was that nothing can be done without teamwork and mutual enthusiasm. One of the greatest challenges I faced was how to increase participation on our monthly JDN teleconferences and how to encourage productive and inclusive dialogue. I will always remember establishing new friendships from different countries and cultures, and I look forward to connecting at future WMA and JDN meetings!



[Wunna Tun](#), MBBS MD  
 Communications Director (2013–2016)  
 Junior Doctors Network  
 World Medical Association

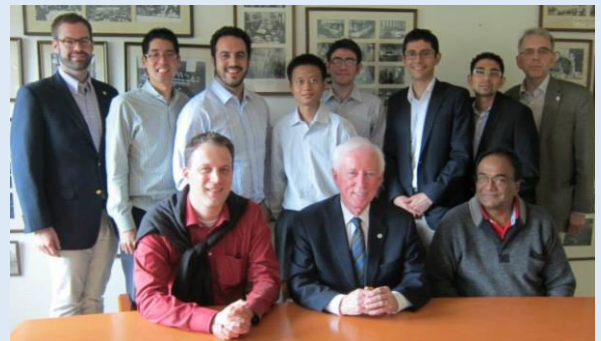


### As people say, memories are significant in our lives.

Over the past few years, my leadership with the Junior Doctors Network (JDN) has influenced my personal and professional development. I have expanded my global network through valuable interactions with fellow junior doctors from around the world.

In 2012, Prof S. Kyaw Hla, vice president of the Myanmar Medical Association, informed me about JDN activities and offered the business cards of Dr Thorsten Hornung (Germany), Dr Xaviour Walker (New Zealand), Dr Lawrence Loh (Canada), and Dr Hyunyoung Deborah Shin (Republic of Korea) from the World Medical Association (WMA) General Assembly in Bangkok, Thailand. At this event, Myanmar reestablished the WMA membership after 40 years of separation. Reflecting on the past, I remember my Medical Ethics course that had described the WMA and Declaration of Geneva.

In 2013, after I contacted Dr Thorsten Hornung (Germany), I formalized my WMA associate membership and became a JDN member. In May 2013, I attended my first JDN meeting at the WMA General Assembly in France, where I met with JDN members – Dr Thorsten Hornung (Germany), Dr Xaviour Walker (New Zealand/United States), Dr Lawrence Loh (Canada), Dr Ian Pereira (Canada), Dr Jean-Marc Bourque (Canada), Dr Ahmet Murt (Turkey), Dr Fernando Rivas (Spain), Dr Kostas Roditis (Greece), Dr Nivio Moreira (Brazil), Dr Caline Mattar (Lebanon/United States), and Dr Elizabeth Wiley (United States) – and WMA leadership and staff – Dr Mukesh Haikerwal (WMA Chair of Council), Dr Cecil Wilson (WMA President), Dr Otmar Kloiber (WMA Secretary General), Yoonsun (Sunny) Park (WMA Head of Operations), Anna-Marie Delage (WMA Office Secretary), and Lamine Smaali (WMA Associate Member Office Secretary) (**Photo 1**).



**Photo 1.** WMA and JDN delegations to the first pre-World Health Assembly meeting at the WMA General Assembly 2013 in France. Credit: JDN.

By spending over two weeks at this WMA/JDN meeting, we were able to collaborate together to build the WMA statement for the World Health Assembly (WHA), which fostered our professional relationships as colleagues.

In October 2013, I was selected as the JDN Communications Director with the responsibility of preparing the *JDN Newsletter* and maintaining communication with the JDN membership via the website and listserv. After discussing the website with the WMA Secretariat, we agreed that there would be biannual webpage updates after each WMA General Assembly and WMA Council Meeting.

**I was enthusiastic to educate the JDN membership about the incredible work that JDN leaders completed to strengthen the JDN foundation.**

In 2014, I enjoyed working directly with Dr Chiaki Mishima (Japan), Dr Kazuhiro Abe (Japan), and other Japan Medical Association-JDN members on coordination efforts for the WMA Council Meeting in Tokyo, Japan (**Photo 2**). In 2015, I continued to work with the Confederation of Medical Associations in Asia and Oceania (CMAAO) meeting in Myanmar and attend the WMA/JDN meetings in Norway and Russia. As I transitioned out of my position as Communications Director in 2016, I continued to lead the Working Group on Working Conditions with Dr Heng-Hao (Leo) Chang (Taiwan) and attended the WMA/JDN Meetings in Argentina (2016), Taiwan (2016), Kuwait (2016), Zambia (2017), Iceland (2018), and Georgia (2019).



**Photo 2.** WMA and JDN delegations at the WMA General Assembly 2014 in Japan. Credit: JDN.

[Paxton Bach](#), MD  
Deputy Chair (2016–2017)  
Junior Doctors Network  
World Medical Association



It was an honour to be a part of the Junior Doctors Network (JDN) leadership, and it brings me great pride to watch the JDN grow and evolve as an organization. My most memorable moment as a member of the JDN leadership team was chairing the group tasked with the development of a new strategic plan. As this task was finalized at the World Medical Assembly (WMA) General Assembly (October 2017) in Chicago, Illinois (United States), it allowed me to reflect on the JDN history and aspirations for the future.

**Most importantly, I will always remember the incredibly talented friends that I made throughout my JDN tenure.**

These friends continue to inspire me to be a better physician, advocate, and human being. I congratulate the new leadership team and look forward to watching them continue to empower young physicians to work together towards a healthier world.

[Yassen Tcholakov](#), MD MScPH MIH  
 Interim Chair (2019–2020)\*  
 Deputy Chair (2018–2020)  
 Socio-Medical Affairs (2016–2018)  
 Junior Doctors Network  
 World Medical Association  
*\*Interim Chair from June–October 2020*



During the summer of 2010, between my first and second years of medical school, I attended my first International Federation of Medical Students' Associations (IFMSA) General Assembly (GA) in Montreal: IFMSA August Meeting 2010. I had the unusual *pleasure* of attending my first GA while also on the Organizing Committee for the event. I met some colleagues whom I would only meet again many years later, as they were finishing their tenure in IFMSA and working towards the creation of the Junior Doctors Network (JDN). Indeed, only a few months later, unbeknown to me, the 61<sup>th</sup> World Medical Association (WMA) GA was held in Vancouver, Canada. Notably, the JDN was founded at this GA. During the following years, I continued my involvement with IFMSA and assumed a variety of roles, which eventually led me to interacting with my JDN colleagues during the 66<sup>th</sup> World Health Assembly (May 2013) in Geneva, Switzerland.

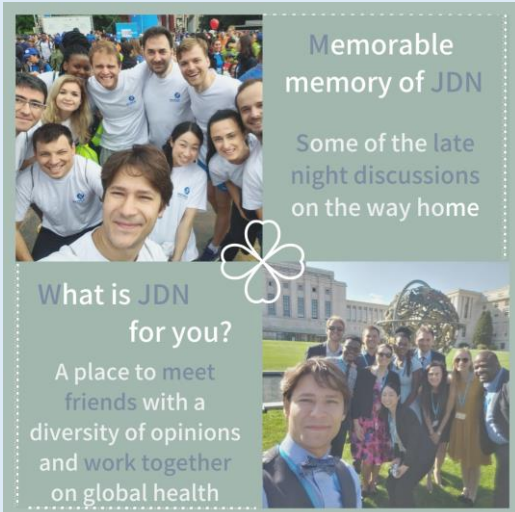
**There is no single path to becoming involved with the JDN, yet I am sure that my story shares similarities with those of my JDN colleagues.**



**Photo 1.** Dr Yassen Tcholakov.  
 Credit: Dr Maki Okamoto.

Throughout medical school, I continued to pursue my global health interests through my IFMSA leadership. However, during this time, I also observed that some colleagues graduated and ended their global health engagements, while others transitioned into the JDN and continued their engagement in similar global policy activities. As I was reflecting on my own future plans in global health, I participated in the first meeting of the United Nations Framework Convention on Climate Change (UNFCCC) group tasked with drafting the Paris Agreement in 2015 in Geneva, Switzerland. At this point, I decided that I wanted to continue participating in global policy processes, selecting a public health residency instead of an anesthesiology residency.





**The JDN has always been an amazing gathering space to meet peers, junior doctors, and senior colleagues who share their diverse experiences in clinical specialties and health systems.**

**Photo 2.** Reflection by Dr Yassen Tcholakov.  
Credit: Dr Maki Okamoto.

In 2015, I continued to attend these climate change negotiations, as I transitioned from IFMSA to WMA membership. As I interacted with JDN members, I observed their same curiosity about global health, same desire to meet colleagues with diverse ideas, and passion to collaborate on important issues to the role of junior doctors in their health systems (**Photos 1-2**). While I know that many JDN members also share similar global health experiences through IFMSA, I have developed key friendships with other junior doctors who were not IFMSA members. While I initially joined the JDN with the instrumental goal of continuing certain global health activities, I have enjoyed the multiple opportunities to meet colleagues with similar global health interests yet different perspectives (**Photos 3-4**). These professional encounters have fostered friendships over time.



**Photos 3-4.** JDN delegation to the 72<sup>nd</sup> World Health Assembly (WHA72) in Switzerland.  
Credit: JDN.

Over the last five years, I have learned to appreciate three elements. First, as the JDN offers numerous opportunities to confront ideas and opinions and learn from others, it is important to allow individual opinions to grow and change. Second, when in a position of power, it is crucial to learn to care about the topics of shared interest with others, in order to work collectively to achieve these goals with the same energy as if they were your own goals. Finally, although professional activities are important, karaoke sessions can serve as valuable entertainment after a long day of meetings, while enhancing connections and fostering teamwork.

**When I finish my tenure in the JDN, I am hopeful that I will still feel the vibrant connections with JDN colleagues and remain impressed by the next leadership of junior doctors across the world.**

In 10 years, I imagine that the JDN will remain as a group with whom I can still feel at home, and which will also continue to impress me. I hope to see even greater diversity than we see today as well as closer interactions between current JDN members and alumni. This network can offer opportunities for commitment and leadership in meaningful long-term projects, positioning the WMA and JDN as key international players in global health.

**Moving into this new decade, I am confident that the JDN will continue to grow and develop robust collaborations on emerging global health issues.**

[Maki Okamoto](#), MD  
Communications Director (2019–2020)  
Junior Doctors Network  
World Medical Association



As the World Medical Association – Junior Doctors Network (WMA-JDN) welcomes the 10th anniversary, I reflect on the moment when I first joined the JDN. I still clearly remember the details of my first international conference as an unforgettable experience in my medical career! These professional experiences and interactions with JDN colleagues have inspired me to the present day **(Photos 1-2)**!

Four years ago, I joined the management team of the Japan Medical Association – JDN (JMA-JDN). I was enthusiastic to form part of this leadership team, where I was able to collaborate on national and international initiatives. At the national level, I aimed to expand the network of junior doctors in Japan and seek opportunities to foster stronger connections between junior doctors and senior doctors. Some of these activities included inviting junior doctors to professional networking events that were hosted or co-organized with the regional medical association.



**Photo 1.** Dr Maki Okamoto.  
Credit: Dr Maki Okamoto.

At the international level, I was able to participate in several WMA conferences – WMA General Assembly 2016 in Taiwan and 2017 in the United States – and was inspired by energetic colleagues and interactive discussions on essential health topics **(Photos 3-4)**. After the conferences, JDN members would continue these discussions during social hours, sharing ed perspectives on the future of medical practice. I was surprised to observe the efficiency of JDN leadership, dynamic discussions on pressing health issues, and energetic junior doctors who aimed to contribute to global health initiatives.

Meeting respectful  
friends from all over the  
world motivates me  
a lot!!

What is JDN  
for you?



Please join us and let's  
make a lifelong  
friendship!!

Message for  
newcomers

**As change agents, our dedicated  
efforts will advance the future of  
medical practice and global health!**

**Photo 2.** Reflection by Dr Maki Okamoto.  
Credit: Dr Maki Okamoto.

Although the world has been changed dramatically due to the emergence of the coronavirus disease 2019 (COVID-19) pandemic, we must continue to develop robust collaborations that allow shared learning and foster professional networks across nations. I dream of a day in the near future when our JDN family can interact with our in-person activities again!



**Photo 3.** JDN delegates at the WMA General  
Assembly 2016 in Taiwan. Credit: JDN.



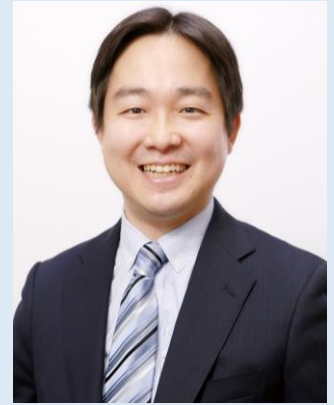
**Photo 4.** JDN delegates at the WMA General  
Assembly 2017 in the United States. Credit: JDN.



## Reflections about the Future and Memorable Experiences by Former JDN Officers

### Dr Kazuhiro Abe (Japan)

As more junior doctors become involved in JDN activities, their global health leadership will be recognized across national health systems. The *JDN Newsletter* will continue to serve as a robust communication platform, which will encourage junior doctors to share their scientific perspectives and experiences in valuable article contributions.



### Dr Gbujie Daniel Chidubem (Nigeria)

The JDN offers junior doctors an opportunity to connect with colleagues across geographic regions and serve as advocates for critical public health issues. During my tenure, our team was able to establish social media platforms to project JDN activities in the African region. Over the next decade, I am sure that the JDN will support the continued growth of the *JDN Newsletter*. This essential resource provides insight on emerging global health issues and dialogue on how nations can take future steps to achieve the targets of the Sustainable Development Goals.



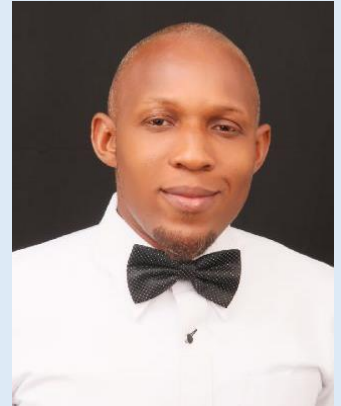
### Dr Mike Kalmus Elias (United Kingdom)

In 10 years, I am confident that the JDN will continue to provide a space for early career physicians to discuss global health issues, with initiatives such as the pre-WHA. The JDN will grow in number and become more diverse in its membership and leadership, with more participating physicians from national organisations. With a scope to shape global health policy-making as a WMA/JDN network, the JDN will be recognized as a global forum for all junior doctors.



**Dr Chibuzo Ndiokwelu (Nigeria)**

The JDN is a network of junior doctors who are passionate about contributing to global health leadership in clinical care, community health, and policy activities. During my tenure, my most memorable experiences were the networking, fraternization, and sharing of medical knowledge at the WMA General Assemblies. In 10 years, I believe that the JDN will serve as an integral branch of the WMA, with speaking rights at the WMA Council and General Assemblies.

**Dr Mariam Parwaiz (New Zealand)**

In 10 years time, I believe that the JDN will continue the amazing efforts related to advocacy on climate change, safer working hours for junior doctors, and research and publications on antimicrobial resistance. The JDN will also strengthen the network and foster relationships with other junior health professional associations. I believe that the current JDN leaders will serve as future WMA leaders and will provide mentorship and support to future JDN leaders. I am excited for the next 10 years of the JDN!

**Dr Fatima Cody Stanford (United States)**

In the JDN, I was enthralled with the cohesion between members and the genuine respect we shared. It gave me hope that there were like-minded individuals ready to engage in optimal patient care.



## Reflections about the Future by the JDN Management Team (2019–2020)



### Dr Yassen Tcholakov (Interim Chair, 2019–2020)

The JDN will be a role model for inclusiveness and equity within the WMA and in front of other global organizations. The breadth and scope of the JDN's influence around the world will expand as the network grows, and alumni remain engaged and contribute their mentorship to current JDN members.



### Dr Julie Bacqué (Secretary, 2019–2020)

I imagine that the JDN will become more engaged in WMA's activities as core representatives and advocates for junior doctors. Due to our professionalism and collaborations over the past decade, our network has continued to expand globally. The JDN founders have instilled a spirit that continues to unite and empower all JDN members, which will perpetuate for the next 10 years!





### Dr Christian Kraef (Socio-Medical Affairs Officer, 2019–2020)

The JDN is a much needed global network of junior doctors to organize dialogue across the world. We share knowledge and ideas and aim to communicate the most pertinent topics within and outside the medical profession. For the next 10 years, I hope for more autonomous structures appropriate to the role and contribution of junior doctors in health systems.



### Dr Uchechukwu Arum (Education Director, 2019–2020)

For me, JDN is a symbol of the youthful enthusiasm towards achieving a healthier world. It represents selfless engagement in advocacy, interaction, and exchange of ideas. In the next 10 years, I would like to see JDN as a strong voice in health advocacy on the global stage.





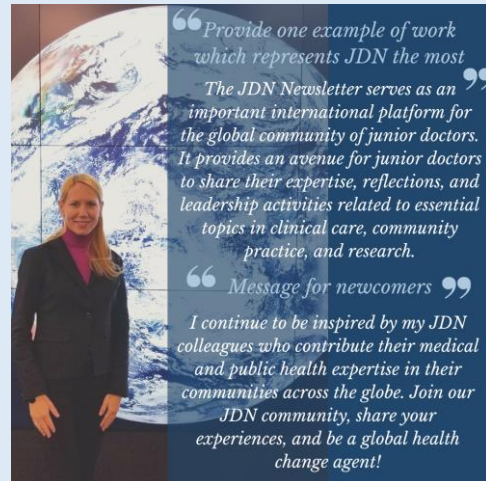
### Dr Lwando Maki (Medical Ethics Officer, 2019–2020)

I imagine that the JDN will reach its full leadership potential, where junior doctors can engage in global activities that address pressing issues across health systems.



### Dr Lyndah Kemunto (Membership Director, 2019–2020)

I envision the JDN as a global leader in advocacy for young physicians and other emerging fields in health care.



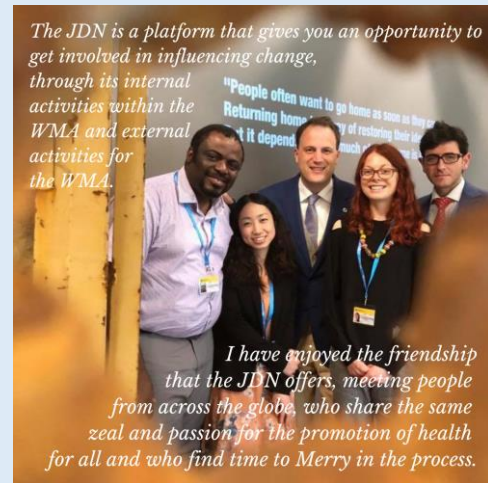
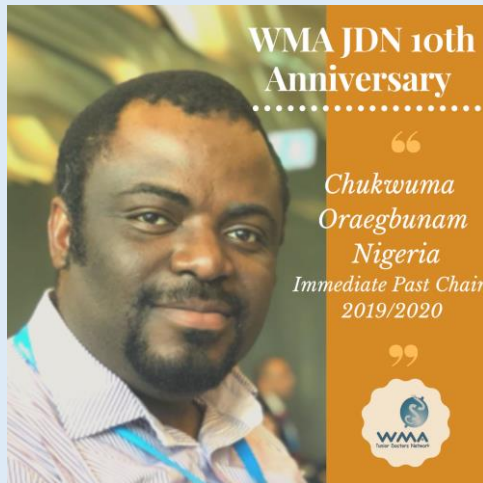
### Dr Helena Chapman (Publications Director, 2019–2020)

Over the next 10 years, the JDN will continue to serve as an international platform for junior doctors to share their significant leadership activities related to clinical care, community health, education, policy, and research. Through JDN working group activities, *JDN Newsletter* issues, and WMA/JDN meetings, junior doctors will showcase their indispensable role in the implementation of local and national initiatives that aim to minimize community risk of endemic and epidemic health threats.



### Dr Maki Okamoto (Communications Director, 2019–2020)

The JDN has allowed junior doctors to connect and collaborate across the globe! I am confident that the JDN will continue to develop collaborations that allow shared learning and foster professional networks across nations!



### Dr Chukwuma Oraegbunam (Immediate Past Chair, 2019–2020)

I would like to see the JDN as a network that continues to expand its reach among junior doctors all over the world. I am confident that the JDN will provide more opportunities for junior doctors to influence change in the WMA and lead global health initiatives that promote health for all citizens.

**Acknowledgments:** Special thanks to Dr Maki Okamoto (Communications Director, 2019–2020) for her dedicated efforts to showcase our JDN leadership in these captivating images!



## Reflections about the Future by the JDN Publications Team (2019–2020)

### Dr Helena Chapman (Dominican Republic)

Over the next 10 years, the JDN Publications Team will continue to offer an important platform for the global community of junior doctors. The *JDN Newsletter* will serve as an avenue for junior doctors to share their expertise, reflections, and leadership activities related to clinical care, community health, education, policy, and research. This network will allow junior doctors to identify knowledge gaps and develop approaches that encourage scientific inquiry and discovery for emerging One Health challenges.



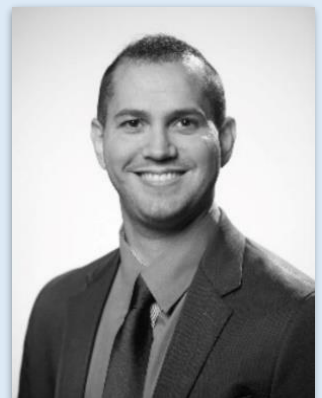
### Dr Victor Animasahun (Nigeria)

In 10 years, I believe that the JDN will gain more popularity and acceptance among junior doctors globally. High-quality information from the *JDN Newsletters* will empower junior doctors to build capacity in global health education and research, emerging One Health issues, and cultural competence. The JDN Publications Team will offer opportunities for JDN collaborations, which will result in a geometric increase in social and human capital and make them agents of positive change in our world.



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

Within the next five or 10 years, I envision the *JDN Newsletter* transitioning into a JDN scientific journal, as a valuable resource produced by junior doctors for the global scientific community. This would provide an opportunity for JDN members to publish their global health activities and learn about the rigorous editorial process of peer review. Since the *JDN Newsletter* provides real-time information about JDN activities, this dynamic platform can strengthen interactions between junior doctors around the world.





### **Dr Suleiman Ahmad Idris (Nigeria)**

The JDN Publications Team constitutes a group of young early-career leaders in global health who work together to strengthen scientific communication. A decade from now, I believe that team members will continue to expand the potential impact of these scientific contributions of junior doctors across the globe.



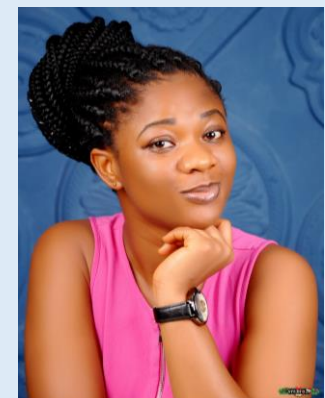
### **Dr Vandrome Nakundi Kakonga (Democratic Republic of the Congo)**

Two years ago, I joined the JDN Publication Team and contributed to the editorial review of JDN articles. Through these article submissions, I observed that junior doctors are prepared to manage real-time health challenges as they are already involved in community health activities in their countries and international organisations. In 10 years, I remain optimistic that the JDN will remain a strong advocate at all levels for the accessibility of the basic health services to all populations.



### **Dr Nneka Okafor (Nigeria)**

In 10 years, I would like the JDN Publications Team to continue promoting high-quality content of junior doctors' global health leadership and activities through the *JDN Newsletters*.



### Dr Mariam Parwaiz (New Zealand)

In 10 years time, I envision the *JDN Newsletter* as a regular and highly-anticipated feature of the JDN calendar. It will continue to be an avenue for junior doctors to share articles, stories, events, and research of note, while also providing a safe and friendly opportunity for junior doctors to learn more about the editorial process. I believe in the next 10 years, the reach of the *JDN Newsletter* will grow even further, and it will be globally recognized across all country-level junior doctor organisations.



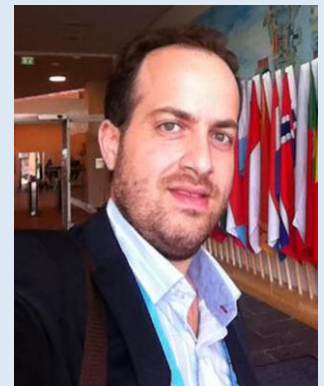
### Dr Jeazul Ponce Hernández (Mexico)

In 10 years, I believe that the JDN Publications Team will expand in size and increase in cultural diversity, uniting more junior doctors from across the globe. Junior doctors will be able to share diverse perspectives on the best approaches to strengthen health initiatives that focus on disease prevention. During the COVID-19 pandemic, we have observed that robust public health and preventive medicine are keys to population health.



### Dr Kostas Roditis (Greece)

I envision the JDN Publications Team serving as a core component of the JDN-WMA structure and the *JDN Newsletter* being read by thousands of junior doctors from all over the world. I believe that junior doctors will have joined forces under JDN-WMA's family by 2030, working together in smaller teams and in unison towards achieving a better tomorrow for future generations. The JDN would then serve as the main conduit for junior doctors to bring on change locally, nationally, regionally, and internationally.



## Accomplishments of the JDN Publications and Communications Teams (2012–2020)

**Table 1.** List of the Publications and Communications Directors (2012–2020) and published *JDN Newsletters*.

Year	Publications Director	Communications Director	<u><a href="#">JDN Newsletters</a></u>
2019–2020	<b>Dr Helena Chapman</b> <i>Dominican Republic</i>	<b>Dr Maki Okamoto</b> <i>Japan</i>	Issue 20 (October 2020) <a href="#">Issue 19</a> (July 2020) <a href="#">Issue 18</a> (April 2020) <a href="#">Issue 17</a> (March 2020)
2018–2019	<b>Dr Helena Chapman</b> <i>Dominican Republic</i>	<b>Dr Anthony Chukwunonso Ude</b> <i>Nigeria</i>	<a href="#">Issue 16</a> (October 2019) <a href="#">Issue 15</a> (April 2019)
2017–2018	<b>Dr Kazuhiro Abe</b> <i>Japan</i>	<b>Dr Chibuzo Ndiokwelu</b> <i>Nigeria</i>	<a href="#">Issue 14</a> (October 2018) <a href="#">Issue 13</a> (April 2018)
2016–2017	<b>Dr Gbujie Daniel Chidubem</b> <i>Nigeria</i>	<b>Dr Mardelangel Zapata</b> <i>Peru</i>	
2015–2016	<b>Dr Ricardo Correa</b> <i>Panama/United States</i>	<b>Dr Wunna Tun</b> <i>Myanmar</i>	<a href="#">Issue 10</a> (July 2016) <a href="#">Issue 9</a> (March 2016)
2014–2015	<b>Dr Ricardo Correa</b> <i>Panama/United States</i>	<b>Dr Wunna Tun</b> <i>Myanmar</i>	<a href="#">Issue 8</a> (October 2015) <a href="#">Issue 7</a> (June 2015)
2013–2014	<b>Dr Hyunyoung Deborah Shin</b> <i>Republic of Korea</i>	<b>Dr Wunna Tun</b> <i>Myanmar</i>	<a href="#">Issue 6</a> (October 2014) <a href="#">Issue 5</a> (August 2014) <a href="#">Issue 4</a> (April 2014) <a href="#">Issue 3</a> (March 2014)
2012–2013	<b>Dr Kostas Roditis</b> <i>Greece</i>	<b>Dr Hyunyoung Deborah Shin</b> <i>Republic of Korea</i>	<a href="#">Issue 2</a> (July 2013) <a href="#">Issue 1</a> (February 2013)

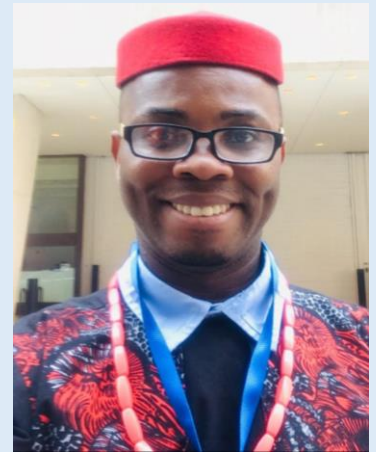
## JDN Publications Directors (2012–2020)



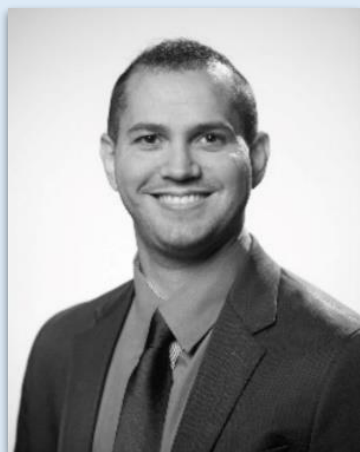
**Dr Helena Chapman  
(2018–2020)**



**Dr Kazuhiro Abe  
(2017–2018)**



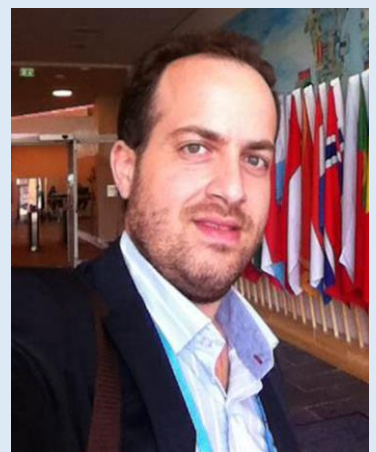
**Dr Gbujie Daniel  
Chidubem  
(2016–2017)**



**Dr Ricardo Correa  
(2014–2016)**



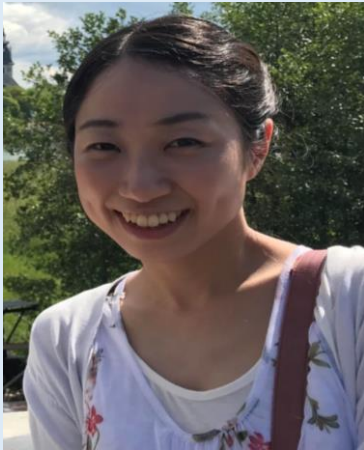
**Dr Hyunyoung  
Deborah Shin  
(2013–2014)**



**Dr Kostas Roditis  
(2012–2013)**



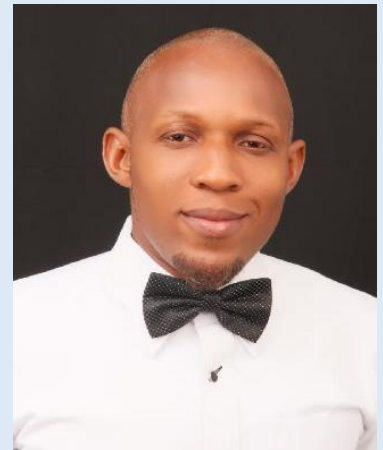
## JDN Communications Directors (2012–2020)



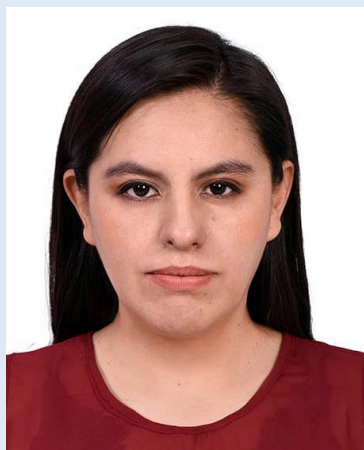
**Dr Maki Okamoto  
(2019–2020)**



**Dr Anthony  
Chukwunonso Ude  
(2018–2019)**



**Dr Chibuzo Ndiokwelu  
(2017–2018)**



**Dr Mardelangel Zapata  
(2016–2017)**



**Dr Wunna Tun  
(2013–2016)**



**Dr Hyunyoung  
Deborah Shin  
(2012–2013)**

## Reflection by a Former Communications Director

[Wunna Tun](#), MBBS MD  
Communications Director (2013–2016)  
Junior Doctors Network  
World Medical Association



**The *Junior Doctors Network (JDN) Newsletter* is a platform for sharing JDN activities around the world between its members and National Medical Associations.**

In October 2013, I was selected as Communications Director (2013–2014) and assumed the responsibility of Editor-in-Chief of the *Junior Doctors Network (JDN) Newsletter*. I followed in the footsteps of Dr Hyunyoung Deborah Shin (Republic of Korea), who served as the first Communications Director (2012–2013). Throughout my tenure as Communications Director (2013–2016), I am appreciative for the support and guidance from previous JDN leadership – Dr Hyunyoung Deborah Shin (Republic of Korea), Dr Kostas Roditis (Greece), Dr Ricardo Correa (Panama/United States), and the JDN Management Team.

The *JDN Newsletter* has seen and weathered many monumental changes to become the current version today. However, the ambition of the World Medical Association (WMA) leadership, JDN Management Team, and JDN founders have helped the *JDN Newsletter* achieve milestones. The publication frequency was typically three times per year, as a realistic and sustainable goal for the editorial team.

**Over my three-year tenure, our team produced a total of eight resourceful *JDN Newsletters*.**

During my first year as Communications Director, I contacted the International Standard Serial Number (ISSN) office to learn the steps to obtain an ISSN, a global identification code used by publishers for the citation of journals, newspapers, and newsletters. As the ISSN would offer international recognition of the *JDN Newsletter* by automatic inclusion in the International Serials Directory Database, our team submitted supporting evidence that the online and paperback versions of the *JDN Newsletter* had a regular publication schedule throughout the year. Subsequently, we received two separate ISSN for the online (2312-220X) and paperback (2415-1122) versions, respectively.

Our team disseminated our call for articles from JDN and National Medical Association (NMA) members on topics related to local and regional meetings, ongoing projects, team updates, interviews, and country or association issues related to junior doctors. We also prepared editorials on pressing health topics to share with JDN members. Notably, we received support for the layout (similar to WMA documents) and printing by Dr Nivio Moreira (JDN Chair, 2013–2014) and the Brazilian Medical Association, and the *JDN Newsletter* was distributed online via the WMA/JDN listserv and in paperback format at the WMA General Assembly and JDN meetings each year. On behalf of our team, we are grateful for the combined leadership efforts – JDN Management Team, Communications Team, and JDN authors and readers – toward achieving the established goals of the *JDN Newsletter*.

**The *JDN Newsletter* continues to serve as a high-quality resource for junior doctors and demonstrates this successful collaboration between authors and editors.**

After my tenure, other JDN members led the development of the *JDN Newsletter* – Dr Mardelangel Zapata (Communications Director, 2016–2017), Dr Kazuhiro Abe (Publications Director, 2017–2018), and Dr Helena Chapman (Publications Director, 2018–2020). I am inspired by our JDN Publications and Communications Directors as they contribute their expertise to developing this essential publication, even in times of limited schedules. Notably, Dr Helena Chapman led the JDN Publications Team as they developed the COVID-19 Special Edition of the *JDN Newsletter*, in efforts to showcase the dedicated efforts of junior doctors during the global COVID-19 response efforts.

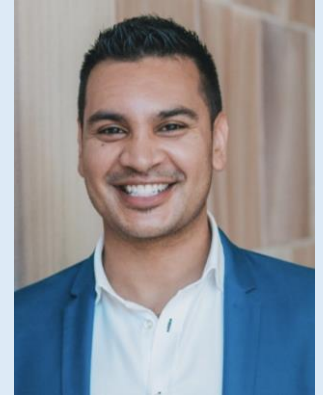
**Over the next 10 years, I am confident that the *JDN Newsletter* will continue to offer valuable insight, leadership experiences, and scientific updates for junior doctors worldwide!**

*My memories will always include my inspirational interactions with my JDN family!  
Stay safe everyone!*

## Reflections about the Future by JDN Members

### Dr Hashim Abdeen (Australia)

In 10 years, I hope to see the JDN continue to build upon its strong links and networks with global National Medical Association's Junior Doctor Committees and aid those countries looking to create their own JDN to support junior doctors in their countries. The WMA and JDN should continue to be the peak representative body of junior doctors worldwide, supporting their education, training, and overall well-being. I see the JDN as a group of motivated and empowered junior doctors who foster an environment of collaboration and ultimately a network which builds lifelong colleagues.



### Dr Vyom Agarwal (India)

Although new to the JDN, I have observed high enthusiasm and warm interactions over the past few months. I am confident that in the coming decade, JDN members would scale greater heights and play a fundamental role in fostering shared information exchanges, supplementing global expertise, and influencing policy making.



### Dr Victor Animasahun (Nigeria)

Over the next decade, I am confident that the JDN will provide more opportunities where junior doctors can participate in skill-building activities that strengthen their expertise in an array of medical and public health topics. As a JDN family, our continued collaborations across borders will advance scientific knowledge and offer insight to national health systems. After all, we are proud to be global agents of positive change!



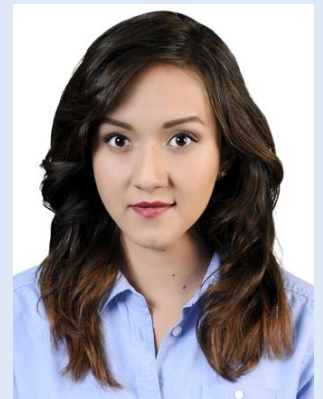


**Dr Dabota Yvonne Buowari (Nigeria)**

In the next decade, I expect the JDN membership will increase and include all junior doctors and medical students from developing countries. The JDN should be involved in collaboration with junior doctors' national medical associations across different countries. I believe that new JDN working groups will include research, medical education, and mentoring. I also foresee the JDN to serve as a platform for medical exchange programmes, where junior doctors can connect with colleagues, share essential scientific information, and produce high-quality resources such as manuscripts and books.

**Dr Fabiola Ruth Castedo Camacho (Bolivia/Uruguay)**

The JDN is a solid bridge that will contribute to advance access and quality of health care services, connecting the expertise of our predecessors and enthusiasm of new generations. Junior doctors will continue to collaborate on research and community initiatives that promote the development of ethical and timely health policies that can guide health systems to improve health promotion and disease prevention programs.

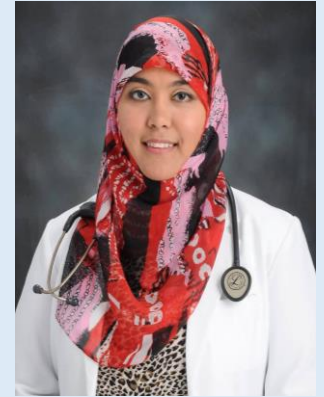
**Dr Sejin Choi (Republic of Korea)**

I imagine that the JDN will become more global, united in health collaborations, and strong in advocacy for pressing health issues. Through technological advancements, borders and geographic distance will no longer present barriers in global collaborations. By encouraging active participation of junior doctors across different countries, the JDN can exercise its innate power from its representation – diverse, unique, and innovative junior doctors – over the next 10 years.



### **Dr Maymona Choudry (Philippines)**

I think that the WMA-JDN will continue to unite young doctors from around the globe in order to collaborate and share concepts and ideas toward creating solutions to pressing health challenges. In the next 10 years, I think that the JDN will expand membership across countries and create sustainable and innovative solutions to current health challenges to meet community needs. Junior doctors will continue to inspire future colleagues to actively participate and engage in community health projects that aim to achieve the SDGs.



### **Dr Pablo Estrella Porter (Ecuador)**

In 10 years, I imagine the JDN as one of the most relevant global networks for young doctors who are passionate about global health. This network will continue to offer a platform for sharing ideas and collaborating on essential community projects, regardless of cultural, geographical, and language barriers. Together, we can keep encouraging junior doctors from across the globe to contribute their expertise to WMA-JDN activities.



### **Dr Suleiman Ahmad Idris (Nigeria)**

In the next 10 years, I believe that the JDN will continue to unite junior doctors who strive to collaborate on critical health topics and make a sustainable impact on health policies on a larger scale.



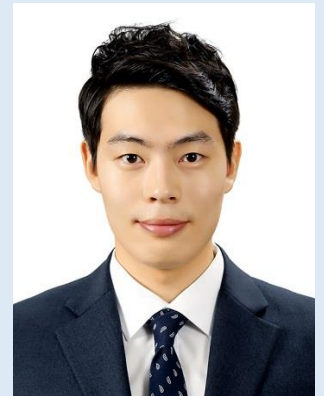
### **Dr Yamen Jabr (United Kingdom)**

As we move closer to 2030, the JDN will continue to support junior doctors around the world, in their individual and collective efforts, to ensure global health equity and sustainability toward achieving the SDGs!



### **Dr Jaehyeon Jang (Republic of Korea)**

Since the beginning of the JDN, more junior doctors across the world have joined and actively participated in JDN meetings and activities. Over the next 10 years, I expect that more junior doctors will join the JDN family, which will expand country representation, strengthen activities and initiatives, and enhance the representation of junior doctors' voices.



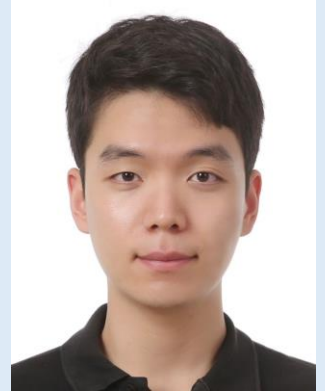
### **Dr Arturo Julca (Peru)**

As an institution with active participation and advocacy across countries and national medical associations, I believe that the JDN will continue to participate in international conferences, promote professional exchanges and scientific collaborations, and organize advocacy campaigns to inform national decision-makers and stakeholders.

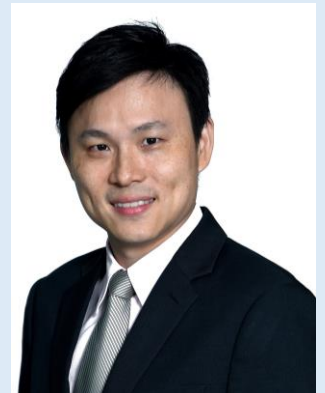


**Dr Keyhoon Kim (Republic of Korea)**

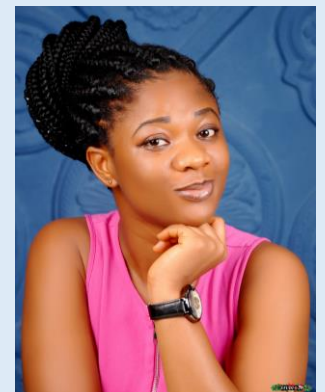
I believe that the JDN will increase its membership and scientific activities. Over the past few months, we have observed that sharing expertise and resources across our global networks – especially firsthand experiences and challenges of frontline healthcare professionals – has been crucial to enhance COVID-19 response efforts. For this reason, the JDN serves a fundamental role as the hub for information and resource sharing across the globe.

**Dr Benny Loo (Singapore)**

In 10 years, I imagine that the JDN will have member representation from more countries, and together, JDN members will have a stronger voice in international medical affairs. The JDN offers junior doctors an array of opportunities to engage in the discussion of national and international health topics.

**Dr Nneka Okafor (Nigeria)**

The JDN gave me a sense of belonging, especially when I discovered that I was not alone in the struggles of being a newly recruited soldier in the field of medicine. In 10 years, I would like the JDN to have maintained the highly acclaimed status and become more organized, where all newly inducted junior doctors would immediately be incorporated into the JDN network.





**Dr Kristina Mihajlovski (United States)**

Joint efforts of medical doctors from all around the world during the COVID-19 pandemic have indicated the importance of international collaborations in the medical field. Therefore, the significance and beauty of the JDN relies on strong collaborations between young physicians globally. In the future decade, I perceive the JDN as a growing, sustainable, and inspiring organization that young doctors can rely on for new learning opportunities, support, resources, fellowships, and creative international projects.

**Dr Larisa Mihoreanu (Romania)**

On this celebratory occasion of the 10<sup>th</sup> year anniversary, I would like to wish the JDN to grow and to create new opportunities of collaboration across borders. Diversity is the incredible strength of this network and could also pave the way for new global solutions for future medical specialists. As the SARS-CoV-2 pandemic is an unprecedented global challenge, it provides an opportunity for specialists to accelerate exchanges between disciplines and learn from each other by providing and implementing appropriate solutions. With all its energy and creativity, the JDN can be a global driving force of the present generation to make historic contributions to safeguard global health and design the future of health care systems.

**Dr Hsu Myat (Myanmar)**

I expect that the JDN will create more opportunities to learn, share experiences, and encourage innovative brainstorming for junior doctors. In addition to online activities, I hope that the JDN can extend their network across more countries and implement high-impact healthcare-related projects within global communities.



### **Dr Kingsley Ojeikere (Nigeria)**

In 10 years, I envisage a JDN with thousands of active members who work together and contribute to the development of essential health initiatives across global communities.



### **Dr Rujvee Patel (India)**

Over the past decade, the JDN has had a period of exponential growth, where JDN leadership and working groups have contributed high-quality work for their global health activities. Over the next 10 years, the JDN will undoubtedly grow in terms of membership, networking, and successful projects. I share my warm wishes to all JDN members as we celebrate our 10<sup>th</sup> Anniversary and hope for brighter years coming ahead!



### **Dr Manon Pigeolet (Belgium)**

I believe that the JDN has clearly shown the power of junior doctor engagements and initiatives in the field of medicine and public health. For me, the next 10 years will help us consolidate this position and enable us to address more important topics to junior doctors all over the world. I wish to see the JDN as a brand of junior doctor engagement – a brand known across the entire global health arena and among residents across the world.



### **Dr Mineyoshi Sato (Japan)**

Over the next decade, I hope to see the JDN continue to grow with more representation from young doctors across the globe. The JDN serves as an essential platform for young doctors' voices to advocate for ethical and appropriate policies that mitigate risk for emerging global health risks.



### **Dr Chiang Kuan Yu (Taiwan)**

Over the next 10 years, the JDN will continue to provide a global platform for junior doctors to strengthen their leadership and networking skills. They can also collaborate on innovative health initiatives – such as the After Action Review –and participate in national calls to action for enhanced global health security measures. Together, as enthusiastic junior doctors, we can advocate for essential health initiatives and resolutions that strengthen health policies across the globe.



## Reflections about the Impact of Global Health Contributions by JDN Members

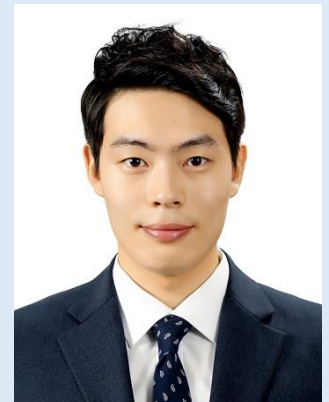
### Dr Dabota Yvonne Buowari (Nigeria)

With the existence of the JDN, Nigerian Association of Resident Doctors (NARD) members have expanded their network and developed global health programs. First, the Doctors Reach Out Program (T-DROP) promotes good health for the Nigerian populace and offers a gratuitous community clinic after each NARD General Assembly to offer primary health care services to vulnerable populations. Second, the NARD Medical Education Committee provides continued professional development activities. Last year, committee members published the book, *“Emergency Handbook: A Spot Guide”*. Finally, the Research Collaborative Network fosters research collaborations among Nigerian junior doctors.



### Dr Jaehyeon Jang (Republic of Korea)

The JDN has served as an essential network for Korean junior doctors. Even for junior doctors living at far distances, the JDN has offered opportunities to connect colleagues and expand collaborations to enhance our global health career development.



### Dr Arturo Julca (Peru)

The JDN is a global platform that has allowed professional networking across geographic regions. It will continue to allow junior doctors in Peru and the Americas region to strengthen our knowledge and experiences within the global health sector.





### **Dr Lyndah Kemunto (Kenya)**

The WMA and JDN continue to provide an avenue for experienced and junior professionals to become involved in the global health agenda. I am incredibly pleased with the network and the opportunities. We are in a new era, when junior doctors seek non-clinical career options, recognizing that healthcare is more than service delivery in a hospital setting. The WMA-JDN network facilitates this exploration into emerging career options. The JDN has provided young doctors in Kenya an opportunity to attend global health events such as the World Health Assembly, WMA Council Meetings, and NMA conferences. Kenyan doctors have had the chance to present scientific papers and share local health experiences with the world. Kenya is excited to host the WMA 224th Council Meeting and JDN Meeting in 2023! #KaribuKenya



### **Dr Mineyoshi Sato (Japan)**

The JDN has offered Japanese junior doctors with opportunities to collaborate with junior doctors across the globe, regardless of the selected medical specialty. These collaborations have been especially evident over the COVID-19 response efforts. This network is key to foster shared learning and participation in global health advocacy.



## Reflections about Memorable Collaborations by JDN Members

### Dr Dabota Yvonne Buowari (Nigeria)

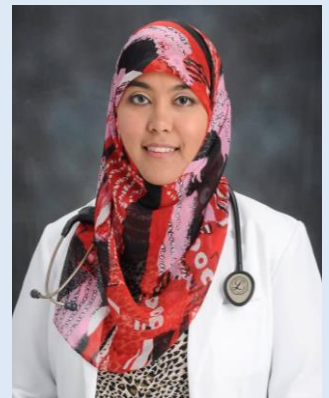
I have gained significant insight and expanded my expertise through collaborations with JDN members. Through one of these collaborations, I met Dr Shiv Josh (India) who invited me to serve as a panelist for the “MED MEET” International UG Medical Conference (*World Amidst Pandemic: Will the Human Race Fight it Down?*) (August 2020). As an international platform for junior doctors, I encourage JDN members to participate in all JDN activities as they focus on health promotion, advocacy, and continuous learning.



### Dr Maymona Choudry (Philippines)

As a recent member, I am inspired and motivated by all JDN activities, especially the development of COVID-19 Working Group and COVID-19 Special Edition of the *JDN Newsletter*, where junior doctors shared their experiences on COVID-19 response efforts.

As these events highlight the dedicated efforts of JDN members, their leadership continues to empower other junior doctors like myself to actively participate in future initiatives.



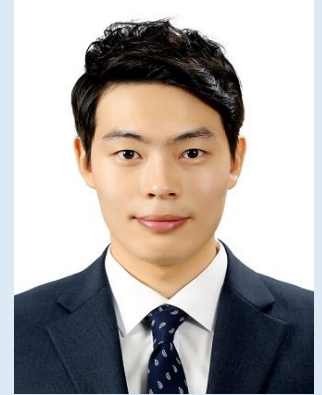
### Dr Sejin Choi (Republic of Korea)

Sharing our junior doctors' experiences with COVID-19 response efforts was memorable. It was empowering and inspiring to witness the comradery of JDN members in this global response to mitigate transmission. I was inspired by the leadership of JDN members in the COVID-19 Working Group, reflecting on the indispensable role of JDN in the global health sphere.

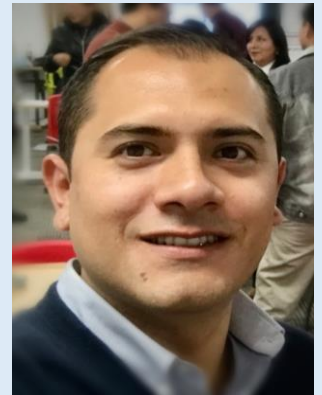


**Dr Jaehyeon Jang (Republic of Korea)**

Without a doubt, organizing the COVID-19 Working Group and the related survey was the most exciting collaboration. Since the Republic of Korea was one of the countries that experienced early COVID-19 transmission, many Korean junior doctors were enthusiastic to launch the Working Group to share information across countries. As frontline health care providers, junior doctors have a pivotal role in COVID-19 response efforts!

**Dr Arturo Julca (Peru)**

I remember that junior doctors from the Peruvian Medical College participated in the WMA General Assembly and JDN Meeting (April 2016) in Argentina. This meeting offered valuable professional networking for our Peruvian junior doctors!

**Dr Benny Loo (Singapore)**

Without a doubt, the most exciting collaborations have been the current COVID-19 projects – ranging from the COVID-19 Working Group, the COVID-19 Special Edition of the *JDN Newsletter*, and the COVID-19 discussions at the JDN Meeting 2020. These activities are fundamental resources for global junior doctors.



### **Dr Mineyoshi Sato (Japan)**

The most exciting collaborations have been the opportunities to invite JDN members – both in-person and virtually – to share their expertise on global health agendas and career development with junior doctors in Japan. Without the JDN, sharing valuable scientific information and expanding these professional networks would not have been possible!





## Junior Doctors Lead COVID-19 Response Efforts: Session at the JDN Virtual Meeting 2020

[Dabota Yvonne Buowari](#), MD

Department of Accident and Emergency  
 University of Port Harcourt Teaching Hospital  
 Port Harcourt, Rivers State, Nigeria

[Wunna Tun](#), MBBS MD

Fellow in Medical Education  
 Founder, Myanmar Medical Association  
 Young Doctor Society  
 Yangon, Myanmar



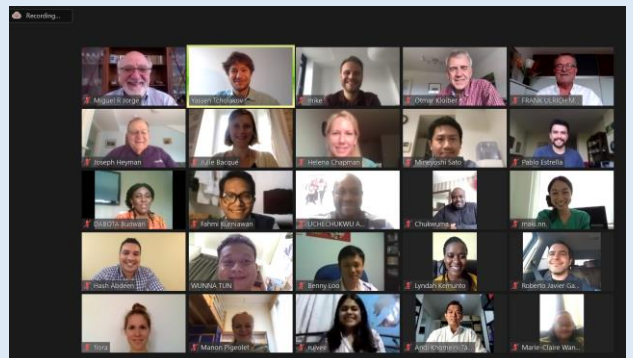
***“In honour of junior doctors who have been and still are on the  
 frontline fighting the COVID-19 pandemic as well as to the  
 colleagues who lost their lives in this fight”***

**– Dr Wunna Tun**

Due to the coronavirus disease 2019 (COVID-19) pandemic, most international conferences have transitioned to virtual platforms or have been postponed until 2021. The World Medical Association (WMA) and Junior Doctor Network (JDN) meetings were no exceptions.

With the dedicated efforts by junior doctors to contribute and lead COVID-19 response efforts in their communities, the JDN Publications Team prepared a [COVID-19 Special Edition](#) of the *JDN Newsletter* in July 2020. This issue included 21 articles from JDN members, highlighting their inspirational leadership efforts across the globe.

As the JDN Management Team planned the agenda of the WMA-JDN meeting on October 3-4, 2020, Dr Dabota Yvonne Buowari (Nigeria) and Dr Wunna Tun (Myanmar) were enthusiastic to continue sharing these unique efforts of junior doctors and developed a special session for this virtual meeting: *“How COVID-19 Impacts Junior Doctors”*. They coordinated this session, which was open to all JDN members who wanted to share their personal experiences from their work during the COVID-19 pandemic (**Photo 1**).



**Photo 1.** WMA and JDN delegations at the JDN Meeting 2020. Credit: Dr Yassen Tcholakov.

In this session, “*How COVID-19 Impacts Junior Doctors*”, brief talks were presented by junior doctors from 11 countries – Australia, Canada, Greece, India, Indonesia, Malaysia, Myanmar, Nigeria, Philippines, Republic of Korea, and the United States (**Table 1**). After the country presentations, Dr Dabota Yvonne Buowari (Nigeria) and Dr Wunna Tun (Myanmar) displayed a special video that included inspiring words, photographs, and videos of junior doctors in their clinical and community activities during the COVID-19 response efforts.

**Table 1.** List of country presentations and presenters during the *How COVID-19 Impacts Junior Doctors* session.

Title	Presenter
COVID-19 Response Efforts of Junior Doctors in the Republic of Korea	Dr Sejin Choi
Junior Doctors Combat COVID-19: The Nigerian Experience	Dr Dabota Yvonne Buowari
Impacts of COVID-19 on Junior Doctors in Myanmar	Dr Wunna Tun
Junior Doctors Contribute to Expanding Scientific Networks for COVID-19 Response Efforts in the United States	Dr Kristina Mihajlovski Dr Helena Chapman
Impacts of COVID-19 on Junior Doctors in the Philippines	Dr Maymona Choudry
COVID-19 in Greece: The Junior Doctors' Perspective	Dr Kostas Roditis
Junior Doctors in Indonesia: A Susceptible Group during the COVID-19 Pandemic	Dr Andi Khomeini Dr Takdir Haruni
Impacts of COVID-19 on Canadian Junior Doctors	Dr Whenzhen (Jen) Zuo
Impacts of COVID-19 on Junior Doctors in Malaysia	Dr Myelone Tharmaseelan
Australian Medical Association Council of Doctors in Training 2020	Dr Hash Abdeen Dr Gavin Wayne
Impacts of COVID-19 on Junior Doctors in India: Impact and Proposing Solutions	Dr Rujvee Patel Dr Bharat Sharma

***“This JDN session – to better understand the COVID-19 experiences of junior doctors – aligns with the JDN objectives of encouraging professional networks and sharing expertise toward scientific advancement”***

**– Dr Dabota Yvonne Buowari**

## JDN Offers an Optimal Platform for Collaboration

[Dabota Yvonne Buowari](#), MD

Department of Accident and Emergency  
University of Port Harcourt Teaching Hospital  
Port Harcourt, Rivers State, Nigeria



***“Individual commitment to a group effort – that is what makes a team work”***

**– Vince Lombardi**

Networking represents one of the objectives of the Junior Doctors Network (JDN) which can foster the development of collaborations, made easier by globalization and technological advancements. Collaboration is key in health professions and can be achieved through efficient teamwork to support the preparation of manuscripts, technical reports, and educational resources. Leadership and enthusiasm of junior doctors are symbols of collaboration as this encourages members to share their reflections and experiences (1). Collaboration involves coordination, cooperation, and partnership. All the collaborators benefit from the collaborative partnership (2). This was the sentiment that prompted Dr Ahmet Murt (JDN Secretary, 2013–2014) to write the article, [A Commentary for International Collaboration among Junior Doctors](#), in the *JDN Newsletter* of October 2014.

***“Alone we can do so little, together we can do so much”***

**– Helen Keller**

### **Collaborations among JDN Members**

Since JDN was founded a decade ago, JDN members have developed several working groups in an array of topics including antimicrobial resistance, global surgery, medical ethics, primary healthcare, postgraduate medical exchanges, and the coronavirus 2019 (COVID-19). This article will describe selected achievements by JDN members, including scientific manuscripts (**Table 1**) and educational webinars and videos (**Table 2**).

## Scientific Manuscripts

**Table 1.** List of selected scientific manuscripts published from 2011–2020.

Year	Title
2011	<a href="#">Social Media and Medicine</a> ( <i>WMA/JDN White Paper</i> )
2012	<a href="#">Junior Doctors Network</a> ( <i>World Medical Journal</i> )
2014	<a href="#">Junior Doctors' Work Hours: From Regulations to Reality</a> ( <i>World Medical Journal</i> )
2015	<a href="#">Health in Intended Nationally Determined Contributions (INDCs)</a> ( <i>WMA Technical Report</i> )
	<a href="#">Beyond Chlor Hühner &amp; Nürnberger Bratwürste: The Case for Physician &amp; Organized Medical Advocacy to Promote Health in Trade Agreement Negotiations</a> ( <i>World Medical Journal</i> )
	<a href="#">Health and Asylum Seekers in Europe</a> ( <i>World Medical Journal</i> )
	<a href="#">The Climate/Health Nexus at COP21 &amp; Beyond</a> ( <i>World Medical Journal</i> )
2016	<a href="#">Physician Wellbeing: A WMA-JDN Priority</a> ( <i>JDN Newsletter</i> )
	<a href="#">One Health and Antimicrobial Resistance</a> ( <i>World Medical Journal</i> )
2017	<a href="#">Antibiotic Stewardship: Future Steps to Reduce Antimicrobial Resistance in the Global and Clinical Setting</a> ( <i>World Medical Journal</i> )
2018	<a href="#">World Antibiotic Awareness Week 2018</a> ( <i>JDN Newsletter</i> )
	<a href="#">Intellectual Property: Who Owns the Right to Good Health?</a> ( <i>World Medical Journal</i> )
	<a href="#">Global Surgery: A New and Emerging Field in Global Health</a> ( <i>JDN Newsletter</i> )
2019	<a href="#">The Role of Physicians in Fighting Climate Change</a> ( <i>World Medical Journal</i> )
2020	<a href="#">Sharing Binational Experiences during the COVID-19 Response: Collaboration between the Republic of Korea and Japan</a> ( <i>JDN Newsletter</i> )
	<a href="#">Challenges and Opportunities in Providing Primary Health Care during the COVID-19 Pandemic in Six Countries</a> ( <i>JDN Newsletter</i> )



## Educational Webinars and Videos by the JDN Global Surgery Working Group

**Table 2.** List of selected educational webinars and videos by JDN Global Surgery Working Group from 2019–2020.

Year	Title	Speaker
2019	Webinar: An Introduction to Global Surgery – How Can Residents and Junior Doctors Participate in and Contribute to Global Surgery?	Dr Kathleen Casey (United States)
2019	Video: <a href="#">Advocacy of Global Surgery on the Challenges of being a Physician</a>	Panelists from Belgium, Morocco, Nepal, Nigeria, Russia, Uruguay, and Venezuela
2020	Webinar: Global Surgery Policy	Dr Emmanuel Malabo Makasa (Zambia)

### Other Activities

Over the past decade, the JDN Working Group leads – including Antimicrobial Resistance, Climate Change, Global Surgery, and Medical Ethics – have contributed updates to the biannual issues of the *JDN Newsletters*. Notably, over the past year, the JDN Publications Team collaborated with the Medical Ethics Working Group (Dr Lwando Maki, Chair) to develop a Medical Ethics Special Section (October 2019) and Special Edition (March 2020) of the *JDN Newsletter*.

In light of the COVID-19 pandemic, junior doctors from the Japan Medical Association and the Republic of Korea designed the Binational Collaborative Virtual Teleconference to discuss response efforts across nations in April 2020 (3). Likewise, to showcase the leadership efforts of junior doctors during the COVID-19 response efforts, the JDN Publications Team prepared a COVID-19 Special Edition of the *JDN Newsletter* in July 2020.

## Conclusion

Over the past 10 years, JDN members have been actively involved in robust collaborations. Currently, JDN members of several working groups are collaborating on research projects and scientific projects. It is timely that JDN also launches a formal research working group to encourage collaborative research among JDN members from different countries and specialties. All these collaborations have highlighted the words on the *JDN Newsletter* cover page: “*Empowering young physicians to work together towards a healthier world through advocacy, education and international collaboration*”.

## References

- 1) Chapman H. [Words from the publications director](#). *JDN Newsletter*. 2020;17:9.
- 2) Green BN, John CD. Interprofessional collaboration in research, education and clinical practice: working together for a better future. *J Chiropr Educ*. 2015;9:1-10.
- 3) Sato M, Okamoto M, Choi S. [Sharing binational experiences during the COVID-19 response: collaboration between the Republic of Korea and Japan](#). *JDN Newsletter*. 2020;19:56-58.

## Fostering Global Health Collaborations among Junior Doctors: Eight Years of Achievements

[Helena Chapman](#), MD MPH PhD  
Publications Director (2019–2020)  
Junior Doctors Network  
World Medical Association

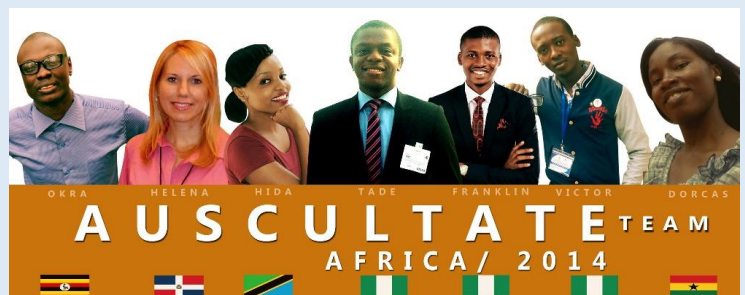
[Victor Animasahun](#), MBChB MPH  
Member, Publications Team (2019–2020)  
Junior Doctors Network  
World Medical Association



***“Never doubt that a small group of thoughtful, committed, citizens  
can change the world. Indeed, it is the only thing that ever has.”***  
– Margaret Mead

As we reflect on the year 2020, we realize more than ever before that distance is not a barrier to communication and collaboration. Due to limited international travel during the coronavirus disease 2019 (COVID-19) pandemic, global societies have adapted to using virtual platforms for the organization of relevant meetings and summits to achieve their respective goals. As junior doctors, we can be the driving force for global health action, using virtual technology to prioritize remote collaborations that highlight knowledge gaps in medical education, emerging One Health topics, and global health research and practice. As junior doctors from the Dominican Republic and Nigeria, we describe our fruitful collaborations over the past eight years – without the opportunity to meet in person – that highlight the value of global health collaborations among junior doctors.

As physicians-in-training, we served on the editorial board of the *Auscultate Magazine* of the Africa Region of the International Federation of Medical Students' Associations (IFMSA) from 2012 to 2014 (Photo 1).



**Photo 1.** The *Auscultate Magazine* of the International Federation of Medical Students' Associations (IFMSA). Credit: IFMSA.

As we represented IFMSA-Dominican Republic (Organización Dominicana de Estudiantes de Medicina, ODEM) and IFMSA-Nigeria (NiMSA), we formed a collegial relationship that unknowingly matured our connection as significant research collaborators, authors, and lifelong friends. From 2016 to date, we have published 10 articles in nine medical journals, averaging two publications per year. Our publication record has included two letters to the editor, two research publications on cross-sectional designs, two research publications on reviews, and four publications on scientific perspectives in these nine medical journals (**Table 1**). We have also collaborated to present one poster presentation, *Innovative strategies to educate urban communities about Ebola: The case in Sierra Leone and Guinea*, at the XII Central American & Caribbean Congress of Parasitology & Tropical Medicine in the Dominican Republic in 2015.

**Table 1.** List of the collaborative publications and their respective medical journals.

Journal name	Article title
<i>Academic Medicine</i>	<a href="#">More on Medical Education in Africa</a>
<i>African Health Sciences</i>	<a href="#">Psychosocial Health Challenges of the Elderly in Nigeria: A Narrative Review</a>
<i>International Journal of Adolescent Medicine and Health</i>	<a href="#">Prevalence of Communication between Mothers and Daughters on Sexuality and Associated Factors in Sagamu, Southwest Nigeria</a>
<i>Lancet</i>	<a href="#">Lassa Fever in Nigeria: The Tale of a Reactive Health System</a>
<i>MEDICC Review</i>	<a href="#">Increasing Research Productivity across Africa</a>
<i>Perspectives in Public Health</i>	<a href="#">Medical Students as Human Resources for Health to Promote Effective Physician-patient Communication</a>
<i>Perspectives on Medical Education</i>	<a href="#">Addressing the Role of Medical Students using Community Mobilization and Social Media in the Ebola Response</a>
<i>PLoS One</i>	<a href="#">A Survey on the Effectiveness of WhatsApp for Teaching Doctors Preparing for a Licensing Exam</a>
<i>The Clinical Teacher</i>	<a href="#">Tobacco Use in Nigerian youth: A Systematic Review</a> <a href="#">Social Media to Guide One Health Initiatives</a>

Over the past eight years, although we have gained tangible outcomes for our professional development, most importantly, these valuable collegial interactions have resulted in a supportive friendship during our formidable years of medical specialty training. Hence, we highlight three specific lessons that have allowed us to strengthen our roles as physicians, researchers, and global health leaders.



### Contributing Expertise for Shared Learning

*“To raise new questions, new possibilities, to regard old problems from a new angle, requires creative imagination and marks real advance in science”* (Albert Einstein). As junior doctors representing different geographic regions and cultures, we contribute our unique clinical, community health, and research training to our global health collaborations. We have shared our personal strengths, medical and public health expertise, and perspectives on how national and global health systems can be strengthened. Since we represent different academic institutions, we were able to offer an array of resources – such as access to scientific journals, connections to professional networks, and waiver applications for article processing charges – for these successful collaborations. Using virtual platforms like video teleconferencing and electronic communications, our regular communication has supported significant contributions that prioritize shared learning.

### Gaining Supportive Friendships

*“Coming together is a beginning; keeping together is progress; working together is success”* (Henry Ford). Our consistent, transparent communication and empathetic understanding have offered a safe space to share personal and career goals and express challenges and hardships. As trust was developed over time, mutual accountability and peer mentoring were key to learn together and encourage our continued contributions to global health education, practice, and research. As colleagues and friends, physical distance was not a barrier but rather served to acknowledge the fact that we are *siblings* of the same global health family.

### Providing Encouragement and Inspiration

*“I can do things you cannot, you can do things I cannot; together we can do great things”* (Mother Teresa). Our mutual collaborations have provided numerous opportunities to challenge each other to “*be more*” and “*do more*” in our respective medical specialty training. By sharing career success stories with each other, we continue to ignite our *global health passion* as we strive to make a positive difference in the health of our local, national, and global communities. Although the path can often be lonely, when we avail ourselves of the many brilliant colleagues across the world, we can stimulate positive energy and continue our journey of pursuing excellence in global health education, practice, and research.

Together, as junior doctors, we can stress the importance of global health collaborations in an array of disciplines – clinical care, community health, medical education, and research – to strengthen our medical and public health training, gain new insight and tangible skills, and expand our professional networks. Sharing perspectives with one another, collaborating and learning from each other and leveraging on each other's strength are exceptional strategies to develop social and human capital as a framework to building a strong and impactful global health family.

## Personal Experiences of Public Health Doctors in the Republic of Korea

[Keyhoon Kim](#), MD

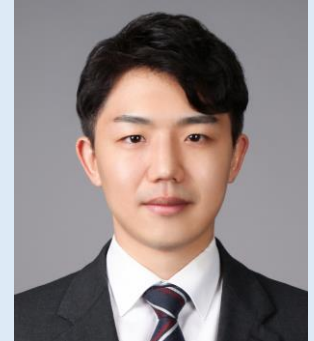
Public Health Doctor

Director of International Relations  
 Korean Association of Public Health Doctors  
 Seoul, Republic of Korea

[Sejin Choi](#), MD

Public Health Doctor

Vice President, Korean Association of Public  
 Health Doctors  
 Seoul, Republic of Korea



In the Republic of Korea, public health doctors (PHDs) have always served a cardinal role in the national scheme for universal health coverage. As an alternative to completing the 18-month compulsory military service, they choose to provide primary care services and promote community health in medically underserved communities for three years. In this article, we aim to share some experiences of working as PHDs in rural communities and correctional facilities, which are the two most common locations for PHD placements (Figure 1).

### Placements in Rural Communities

In rural communities, PHDs serve as primary care physicians at public health centers located in the areas with limited private medical facilities. On some occasions, PHDs are assigned to the public health centers of small islands with less than 1000 residents, often as the only medical experts on the island. They immerse in civic events and gain community trust as an integral part of the primary care services. In their clinics, most patients are of elder age (70-80 years old) and require chronic disease management for diabetes, hypertension, and dyslipidemia. They educate patients about the importance of balanced nutrition, physical activity, and preventative immunizations like influenza to optimize health and well-being. In addition to these primary care services, PHDs provide other socio-medical consultations, including regular visits to the homes of immobile residents and medical support at local town festivals.



**Figure 1.** Traditional emblem of the Korean Association of Public Health Doctors. [Translation: *Today and always, we are filling the gap in medical services of Korea*]. Credit: KAPHD, 2020.

### **Placements in Correctional Facilities**

In the Republic of Korea, there are a total of 52 federal prisons and jails with an estimated 54,000 incarcerated inmates. Under the Republic of Korea's Ministry of Justice, the Correctional Service has estimated that a minimum of 116 correctional physicians (besides PHDs) are needed to provide adequate correctional health services. To date, however, only 94 positions are filled, which are frequently aligned with urban prisons and jails. This human resource gap for correctional facilities is currently covered by 37 PHDs across the nation (1). Notably, PHDs are the only physicians within some rural prisons or jails (1).

As PHDs provide primary care services, their patient population differs from their colleagues with placements in community placements. Many inmates have been diagnosed with psychiatric disorders (e.g. substance abuse of illegal and prescribed drugs) and an array of infectious diseases (e.g. tuberculosis). Geriatric inmates (older than 65 years) constitute more than 10% of the total population, and hence have an increased risk of chronic diseases including cancer and cardiovascular complications.

### **Challenges and Potential Solutions**

National authorities state that fewer physicians seek employment in public health centers and correctional facilities due to lower salaries and fewer incentives, when compared to employment at hospitals and private health institutions. However, although financial compensation cannot be overlooked, it is not the sole career motivator for the majority of physicians. Based on their expertise and training, we believe that physicians seek the opportunity to offer high-quality clinical services to patients, perform their daily clinical duties in a respectful work environment, and receive medical-legal protections for their clinical decision-making and management strategies.

**To encourage physicians to seek employment in primary care services, national authorities should recognize these described challenges and implement specific measures.**

First, national authorities can provide proper and continuous training and education programs for physicians. For example, the Certified Correctional Health Professional (CCHP) is a certification program that aims to help correctional physicians expand their medical and public health expertise and skills. Second, they can facilitate a national dialogue to strengthen medical curricula and motivate medical students to pursue primary care specialties. Third, they can offer leadership incentives to PHDs who dedicate more than three years to medically underserved communities.



**These initial steps can empower physicians to explore work experiences in primary care services where they can feel rewarded and contribute positively to clinical care management.**

During the ongoing coronavirus disease 2019 (COVID-19) pandemic, junior doctors' roles have expanded beyond primary healthcare services, especially since PHDs are now serving across all levels of the national quarantine system (**Figure 2**). The majority of PHDs work regular shifts at local COVID-19 screening centers and larger quarantine centers. Other PHDs are assigned to the Korea Centers for Disease Control (KCDC) headquarters as Epidemic Intelligence Service officers.



**Figure 2.** New emblem of the Korean Association of Public Health Doctors. [Translation: *We are fighting at the frontline of the pandemic*]. Credit: KAPHD, 2020.

As the pandemic becomes controlled over time, we believe that national authorities will observe the valuable role of junior doctors – including PHDs – and encourage their continued contribution to the national health system.

**Moving forward, the national dialogue should highlight the essential roles of all healthcare workers across public and private sectors, which can enrich community health initiatives and public health advocacy.**

Reference

- 1) Ministry of Justice (Republic of Korea). [Korea Correctional Service Statistics 2020](#). 2020 [cited 2020 Oct 1]. Korean.

## My JDN, My Passion

[Dabota Yvonne Buowari](#), MD

Department of Accident and Emergency  
University of Port Harcourt Teaching Hospital  
Port Harcourt, Rivers State, Nigeria



A network of junior doctors  
Creating professional relationships  
A centre of research collaboration  
A global scientific network  
A platform for showcasing  
Junior doctors' leadership  
Distributing informative newsletters  
Producing wellness guidelines  
A meeting of like minds  
Linking colleagues together  
On international scientific panels  
A decade of existence  
You have passed the teething stage  
It is time to run  
Run, run, run  
You shall soar on eagles' wings

## My Face Mask

[Dabota Yvonne Buowari](#), MD

Department of Accident and Emergency  
University of Port Harcourt Teaching Hospital  
Port Harcourt, Rivers State, Nigeria



COVID-19 has changed the world  
No more handshakes as greetings  
No more hugs with close acquaintances  
I am scared any day I go to work  
I learn about colleagues who have contracted  
COVID-19

Facemasks are key to our protection  
Compulsory in public places  
Made of vivid colours to match dresses  
This accessory is now fashionable  
It protects me

This difficult time marks history  
Our global community will be resilient  
Strengthening community support is key  
Let's fight this pandemic together  
Wearing the face mask always



**Photo 1.** Face masks are protective and fashionable with vivid colours.  
Credit: Dr Dabota Yvonne Buowari.

## Challenges of Residency Training and Early Career Doctors in Nigeria

[Ugo Enebeli](#), MB.BS

University of Port Harcourt Teaching Hospital  
Port Harcourt, Nigeria

[Oladimeji Adebayo](#), MB.BS

University College Hospital  
Ibadan, Nigeria

[Okhuaihesuyi Uyilawa](#), MB.BS

Delta State University Teaching Hospital  
Ogharra, Nigeria

[Aliyu Sokomba](#), MB.BS

Ahmadu Bello University Teaching Hospital  
Zaria, Nigeria

[Olusegun Olaopa](#), BChD

University College Hospital  
Ibadan, Nigeria



In February 2019, the Challenges of Residency Training and Early Career Doctors (ECDs) in Nigeria (CHARTING) study was developed to explore demographic (e.g. migration, placement), workplace (e.g. leadership challenges, career satisfaction, training and skills acquisition, conflict resolution), and psychosocial health risks (e.g. burnout) among ECDs in Nigeria (1-3). ECDs represent medical or dental graduates who are pursuing postgraduate service, residency training or internship after their medical or dental education. This large multi-centre and multi-disciplinary study was developed by the Research Collaboration Network (RCN), a sub-structure of the Research and Statistics Committee (RSC) of the Nigerian Association of Resident Doctors (NARD).



As a two-phased, two-year observational study, the CHARTING I study was conducted between April and December 2019, with a total of 795 ECD participants from 10 centres. The CHARTING II study was tentatively scheduled with ECD participants to be completed between May and December 2020, but due to the coronavirus disease 2019 (COVID-19) pandemic, data collection is currently ongoing. Data are stored in a NARD administrative database and managed by study staff and investigators.

### **Key Findings and Implications**

To date, CHARTING I study has been completed, and research findings have been published in numerous peer-reviewed journals. The list is available on the [RSC/RCN](#) website. In this article, we describe the relevant findings and implications related to ECDs as they pursue postgraduate residency training in Nigeria (4).

### **Demographic Factors**

*Migration.* Researchers reported that a high proportion of participants (51.6%), derived from a population of mainly young males, had stated their intention to emigrate out of Nigeria after their postgraduate residency training. These findings suggest that many ECDs represent a migration-predisposed population.

**Health authorities should consider the implementation of concrete policies and incentives to encourage the retention of the ECD workforce in Nigeria.**

### **Workplace Challenges**

*Skills Acquisition.* Results showed a lack of up-to-date knowledge, small contingent rewards, vast workload distribution, limited mentorship, and unequipped training facilities during residency programs. Similarly, participants believed that residency programs currently prioritize service delivery rather than postgraduate residency training. These findings suggest that innovative organizational strategies – such as the revised policies on job descriptions, increased remuneration and benefits, standardized curricula for medical school and residency training programs, and increased funding for research laboratories and grants – should be implemented to mitigate these observed challenges in postgraduate residency training.

*Leadership and Management Training.* Although the majority of participants considered leadership and management skills as essential skills in clinical practice, only 55.9% had ever received training on management and leadership, and 38.1% received this training during medical school.

**These findings imply that the integration of leadership training into medical school curricula has the potential to improve leadership and management skills among ECDs in Nigeria.**

### **Psychosocial Health Risks**

*Burnout.* One systematic review demonstrated that the prevalence of burnout in Nigerian physicians ranged from 23.6% to 51.7%, with the key predictor of young age. Other predisposing factors included low doctor-patient ratio, extended work hours (over 80 hours per week), limited availability of supportive services in the department, vague descriptions of work responsibilities, and observed abuse of power by trainers. Since burnout is recognized as a severe challenge among ECDs in Nigeria, strategies for mitigating their risk of burnout should include the development of policies that protect ECDs' health and well-being, such as policies with appropriate work schedules, provision of gratuitous annual medical physicals and mental health counseling, capacity development, and roundtable discussions with stakeholders.

**These findings identify the need for robust mental health programs at clinical workplaces that can identify, manage, and reduce risk of burnout and other stressors.**

### **Future Directions**

The CHARTING II study aims to further explore the described elements of demographic factors, workplace challenges, and psychosocial health risks. Researchers intend to examine the placement and distribution of ECDs across Nigeria and impacts on family life (*demographic factors*); academic and professional performance, influence of social media technology on training, workplace environment for learning, reasons for attrition, and perceived satisfaction of training programs (*workplace challenges*); and psychological health stressors on clinical performance and other mental health issues (*psychosocial health risks*).

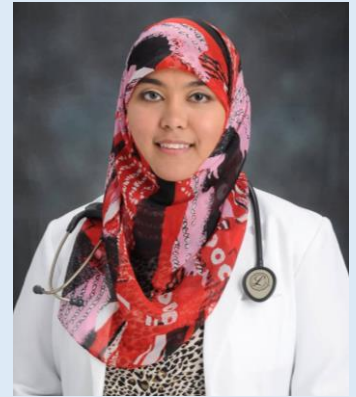
**Continued scientific research can provide insight to health authorities, stress the need to revise current policies to enhance ECDs' health and well-being in the workplace, and encourage the regular evaluation of this essential health workforce for the Nigerian health system.**

#### References

- 1) Kanmodi K, Ekundayo O, Adebayo O, et al. Challenges of residency training and early career doctors in Nigeria study (CHARTING STUDY): a protocol paper. *Nigerian Journal of Medicine*. 2019;28:198-205.
- 2) National Association of Resident Doctors of Nigeria. [\*Initiating trainee research collaboration network: a NARD initiative in Nigeria\*](#). Abuja, Nigeria: NARD; 2019.
- 3) Igbokwe M, Babalola I, Adebayo O. [\*CHARTING Study: a trainee collaborative research study\*](#). *JDN Newsletter*. 2019;16:23-24.
- 4) Adebayo O, Ogbonna V, Igbokwe MC, et al. *Challenges of residency training and early career doctors in Nigeria*. Abuja, Nigeria: National Association of Resident Doctors of Nigeria; 2020.
- 5) Ogunsuji OO, Adebayo O, Olaopa O, et al. Burnout among Nigerian doctors: a systematic review. *Nigerian Medical Practitioner*. 2019;76:24-29.

## Transition to Telehealth and Telemedicine: The “New Normal” in the Training of Surgical Residents in the Philippines

[Maymona Choudry](#), MD MPH  
General Surgery Resident  
Vicente Sotto Memorial Medical Center  
Cebu City, Philippines



***“Telemedicine is the natural evolution of healthcare”***  
– Andrew Watson, MD

Medical training programs have been carefully crafted to meet the needs of medical practice and health systems over time. Each residency training program is unique to its specialty, including the academic curriculum, work environment, on-call schedules, and clinical workload. Each specialty branch – Internal Medicine, General Surgery, Pediatrics, and Obstetrics-Gynecology – has applied the latest technology to practice, aiming to improve patient outcomes and provide high-quality health care.

**With the emergence of the coronavirus disease 2019 (COVID-19) pandemic, significant disruptions were seen across global health care systems.**

Health care workers (HCWs) are on the frontline of this battle against this novel infection. The limited availability of resources, such as personal protective equipment, has placed HCWs at a higher risk of infection via direct and indirect exposure to infected patients. The COVID-19 pandemic has forced health systems to consider the integration of telemedicine and telehealth consultations in medical practice.

In the Philippines, the surge in clinical and surgical patient care services has not only increased the workload, but it has also disrupted the residency training programs for surgical specialties such as General Surgery (1,2). The academic curriculum that was designed to enhance surgical skills has faced significant challenges in career mentorship



and physician-patient encounters. In efforts to ensure the health and safety of team members, there are fewer team meetings and limited clinical and hands-on exposure (2,3). The loss of normalcy and the added element of fear within their personal and professional lives have led to physical, mental, and emotional exhaustion of HCWs (4).

This global health crisis has served as an eye-opener to health systems, motivating the integration of innovative technology into medical practice. Instead of traditional face-to-face consultations, a “new normal” has emerged using the virtual platform. In our hospital, our General Surgery department integrated telemedicine as part of the normal clinical routine. To continue our clinical and theoretical learning, traditional large group conferences and presentations are held on the Zoom virtual platform (**Photo 1**). Currently, with the decreasing incidence of COVID-19 cases in Cebu City, we have returned to our traditional workload within the “new normal” lifestyle. Notably, we are now more adept in conducting virtual daily endorsements, weekly conferences, journal appraisals, tumor board or clinical case presentations, and symposia.



**Photo 1.** Pre-operative and post-operative weekly conference via Zoom. Credit: Dr Moapon.

### **Telehealth and telemedicine have opened a path for regional and international collaborations across clinical disciplines.**

As a resident, I have always been enthusiastic to attend national and international conferences, learn about scientific updates on surgical techniques, and expand my professional network. However, with limited financial support for these travel expenses, I have been unable to strengthen my medical training with these professional development opportunities. Hence, these virtual webinars have offered me the ability to participate in an array of conferences and symposia, where I can enhance my understanding of surgical concepts and clinical management focusing on holistic patient-centered care (**Photos 2-3**).

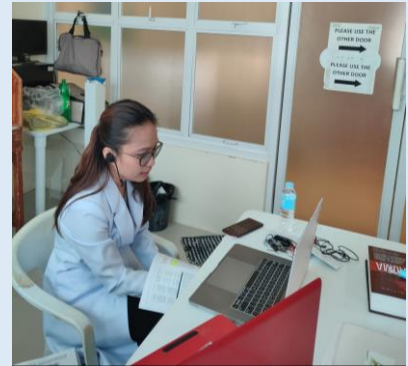
MiS on the FRONTLINES:  
Strategies & Fluorescence in Laparoscopic Colon Surgery



**MARIZ JANE SALDAÑA, MD**

Chief Resident, Department of General Surgery, Vicente Sotto Memorial Medical Center

**Photo 2.** Presentation of Dr Saldana via Zoom in an inter-hospital case conference among three participating hospitals from three different regions in Philippines. Credit: Dr Maderazo.



**Photo 3.** Presentation of Dr Saldana in an inter-hospital case conference. Credit: Dr Moapon.

The “new normal” policies and workplace environments have shown the resilience and resourcefulness of all HCWs – including surgical residents – when providing high-quality health care and ensuring patient safety. This pandemic has provided surgical residents with an outlet to explore more efficient methods of didactic learning and physician-patient communication during their training, which may reduce health care expenditure and risk of burnout (5).

**Moving forward, evidence-based research should continue to evaluate the efficiency of virtual versus traditional formats for residency training and health care service delivery.**

#### References

- 1) Liang ZC, Wang W, Murphy D, Hui JH. Novel coronavirus and orthopaedic surgery: early experiences from Singapore. *J Bone Jt Surg Am.* 2020;102:745-749.
- 2) Nassar AH, Zern NK, McIntyre LK. Emergency restructuring of a general surgery residency program during the coronavirus disease 2019 pandemic: the University of Washington experience. *JAMA Surg.* 2020;155:624-627.
- 3) Potts JR, III. Residency and fellowship program accreditation: effects of the novel coronavirus (COVID-19) pandemic. *J Am Coll Surg.* 2020;230:1094-1097.
- 4) Xiang YT, Jin Y, Cheung T. Joint international collaboration to combat mental health challenges during the coronavirus disease 2019 pandemic. *JAMA Psychiatry.* 2020;77:989-990
- 5) Osama M, Zaheer F, Saeed H, Anees K, Jawed Q, SyedSH, Sheikh BA. Impact of COVID-19 on surgical residency programs in Pakistan: a residents' perspective. Do programs need formal restructuring to adjust with the "new normal"? A cross-sectional survey study. *International Journal of Surgery (London, England).* 2020;79:252-256.

## Doctors' Well-being: Igniting the Light Inside You

[Uchechukwu Arum](#), MD  
Education Director (2019–2020)  
Junior Doctors Network  
World Medical Association



***“Everything can be taken from a man but one thing: the last of the human freedoms—to choose one’s attitude in any given set of circumstances, to choose one’s own way”***  
– Viktor Frankl

After a distressing work shift, a medical registrar went to purchase a drink from the vending machine. He noted that there was an inscription on the vending machine: *“The light inside me is off, but I am still working”*. After reading this message, he shook his head and thought, *“So am I, vending machine!”* (1).

Starting from medical school, doctors experience long work hours, passing through different crucibles, burning the late-night candles to complete their medical training. When they graduate from medical school, the clock restarts as their postgraduate training begins. As their training is demanding, the bar is always too high, expectations are set on the clouds, and there is zero tolerance for mistakes. However, these expectations cannot be realistically met all the time. This perceived failure drastically affects the well-being of many doctors (2).

As a doctor, there is need to pause and *ignite the light inside the soul*. For example, is the light bright, is it becoming dim, or is it completely off? This answer is not binary, but rather remains on a spectrum.

**Reflecting on this answer will allow doctors examine their own well-being and seek appropriate supportive services that can boost their satisfaction with personal and professional accomplishments.**

Doctors should regularly conduct the “*light check*” and gauge the brightness of the lightbulb. Problematic mindsets serve as a significant driver to poor mental health outcomes. Although doctors may experience feelings that affect their well-being during their training, they should seek help early when they perceive that their light has dimmed. As such, doctors should consider the following elements, which may lead to feelings of inadequacy, embarrassment, or shame as well as lead to anxiety or depression.

- ❑ **Self-criticism:** When doctors perceive their performance as their identity, they may view themselves as a “bad doctor”. However, missing questions during clinical rounds or failing to follow-up on a laboratory result does not equate the definition of a “bad doctor”.
- ❑ **Personalisation and Self-blame:** Doctors may blame themselves if any unexpected event happens in the workplace, rather than evaluating the event and learning from the experience.
- ❑ **Maladaptive Perfections:** By the nature of the profession, most doctors are high achievers. However, they may occasionally set high expectations and blame themselves if their goals are not achieved.
- ❑ **Impostor Phenomenon:** Doctors may feel that they are an impostor or fraud, believing that in a matter of time they will be discovered. This feeling might emanate because they did not answer a question correctly during clinical rounds or they have not yet mastered a clinical procedure.
- ❑ **Negativity Bias and Pessimistic Explanatory:** Doctors may experience negative interactions and perceive their weight as greater than the positive events. Being filled with pessimism and cynicism.

Additionally, many doctors may experience the *Stanford duck syndrome* (3). This syndrome is described when trainees appear to be gliding effortlessly across this “*Lake of Residency*”, but below the surface, their feet are actually paddling furiously. As doctors tend to hide this struggle as not to be perceived as bad doctors, this experience can be self-isolating and emotionally draining.



## Way Forward

If doctors are experiencing any of the described feelings, they are not alone. There is hope, but it starts with identifying the problem and understanding the experience. This introspection can be achieved through five strategies.

- ❑ **Cultivating Metacognitive Skills:** Doctors should be able to reflect on their own cognitive and emotional reactions to events and modify their reactions that would be more appropriately served. After all, the final feeling is a result of the cognitive and emotional reaction of an adverse event. This cognitive restructuring forms the basis for cognitive behavioural therapy.
- ❑ **Mindful Awareness:** Doctors can practice mindful awareness and meditation of their emotions. These techniques can include focusing on breathing patterns like taking deep breaths and holding for five seconds before exhalation.
- ❑ **Combating Negative Bias:** Doctors can modify how they manage stressful situations during their daily activities. The overall goal is to have a proportionate and functional reaction when faced with adverse effects.
- ❑ **Cultivating Optimism and Positive Emotions:** Doctors can be active in creating optimism by simple techniques like writing three actions that were performed well before sleeping.
- ❑ **Emotional Self-regulation:** Doctors should try to remain positive and engage in positive thinking. They should engage in the practice of saying positive words and being kind to themselves.

Finally, the journey through medical career has always been a bumpy road. However, as junior doctors, we should be kinder and allow ourselves to make mistakes along our journey. We should always take care of ourselves by checking the “*light inside us*”.

## References

- 1) Blaber M. [Supporting trainee well-being](#). Academic lecture from Department of Palliative Medicine at the Sandwell and West Birmingham NHS. 202 [cited 2020 Oct 8].
- 2) Accreditation Council for Graduate Medical Education. [AWARE: well-being resources](#). 2020 [cited 2020 Oct 8].
- 3) Stanford University. [Why does the duck stop here?](#) n.d. [cited 2020 Oct 8].

# Telemedicine Applications during the COVID-19 Pandemic in Myanmar

[Hsu Myat](#), MBBS  
Founder, Youth Doctors Healthcare Group  
Yangon, Myanmar



In Myanmar, positive cases of the coronavirus disease 2019 (COVID-19) are increasing daily, and a total of 2,009 cases have been confirmed as of September 10, 2020 (1). The return of migrant workers from foreign countries, coupled with local transmission initiated in Rakhine State, increased the number of COVID-19 cases across the country. More than 80% of cases have been detected in the capital of Myanmar, Yangon.

**Myanmar is now facing the second wave of COVID-19 cases, and citizens are concerned about increased community transmission and mortality rates.**

As of mid-September 2020, the Myanmar Ministry of Health and Sports announced strict stay-at-home policies, although a nationwide lockdown policy has not yet been implemented. Restrictions on festivals and gatherings of more than five individuals have remained have been prohibited since March 2020. Although these prohibitions have impacted the daily lives of Myanmar citizens, frontline healthcare workers at public and private hospitals continue to experience increased workload responsibilities.

Starting from April 2020, Yangon General Hospital reduced the number of in-patient admissions, elective surgeries, and out-patient services. Fever clinics were opened in different regions to provide screening and early detection services, and healthcare workers were attentive for patients who may present fever, cough, and respiratory difficulties.

**However, there are many patients with non-communicable diseases – such as hypertension, diabetes, post-cancer treatment, and ischemic heart disease – who require regular follow-up through out-patient services.**

However, individuals with seasonal flu symptoms, acute viral infections, and asthmatic attacks are *reluctant* to seek healthcare services at out-patient clinics or emergency departments, since fever and cough are generalized symptoms. According to Ministry of Health and Sports policy, they would have to visit the fever clinic first, take the COVID-19 swab test, and quarantine themselves as indicated.

From doctors' perspectives, they also want to reduce the duration of contact with patients as they can be asymptomatic spreaders of COVID-19. As a result, many primary healthcare clinics have closed to avoid quarantine measures if in contact with positive COVID-19 patients.

**To address this challenge, private healthcare sectors and junior doctors have attempted to develop solutions using innovative technology.**

According to a report of the Myanmar health system, telecommunication facilities such as internet and e-mail services were first introduced to government agencies including public hospitals in 2002 (2). However, these services have not been widely used by doctors and patients since face-to-face consultations have been preferred for healthcare service delivery. Now, during the COVID-19 pandemic, telemedicine has been highlighted as a solution for follow-up patient care. Platforms such as Z-waka, On Doctor, and MyanCare have been introduced among physicians and patients for convenience. These online platforms deliver healthcare services using virtual technology – such as direct instant messaging (DIM) and video conferencing – that can facilitate direct interactions between doctors and patients in virtual clinics. This is remarkably effective as smartphones are becoming cheaper each day, and 4G internet data are more available, even in marginalized communities across the country (3).

However, challenges still exist in the widespread use of telecommunication platforms. Healthcare professionals need to be qualified in their professional skills to provide effective healthcare services with the evolution of advanced medicine and technology. Some physicians prefer certain telecommunication applications that are less useful as they cannot instantaneously save patients' medical records. However, language barriers, mobile data unavailability, connection instability, and technical errors still prevent patients from using telemedicine platforms. Therefore, we still need to advocate more for telemedicine applications among doctors and patients, as we can advance the medical profession and enhance how doctors can provide medical consultations to patients.

As a junior doctor and freelance teleconsultation doctor, I believe that telemedicine applications will result in improved outcomes on digitalization in healthcare across all urban and rural communities in Myanmar. Doctors and patients should exert their efforts on upcoming changes and try to transform healthcare services from paper to digital records. Medical histories, including prescriptions and laboratory results, can be recorded on the web-based technologies and can be easily sharable with other specialists for multidisciplinary care. In remote areas, where secondary or tertiary care services are not readily available, primary care doctors and other health professionals (e.g. trained nurses, midwives) can record medical histories, conduct the medical examination, and contact specialists through teleconsultation.

**The use of teleconsultation will bring more effective and convenient ways for conducting medical consultations and maintain patients' medical records during the COVID-19 pandemic as well as increase access and availability in remote areas.**

#### References

- 1) Ministry of Health and Sports (Myanmar). [Coronavirus disease 2019 \(COVID-19\) situation reports](#). 2020 [cited 2020 Sep 10].
- 2) Hlaing PM, Nopparatjamjomras TR, Nopparatjamjomras S. Digital technology for preventative health care in Myanmar. *Digital Medicine*. 2018;4:117-121.
- 3) Z-Waka. [Welcome to Z-Waka](#). 2020 [cited 2020 Sep 10].



## COVID-19 and Children: Global Dialogue for Junior Doctors

[Rujvee P. Patel](#), M.B.B.S  
Medical Officer, COVID-19  
Surat Municipal Corporation  
Surat, India



Since November 2019, the coronavirus disease 2019 (COVID-19) pandemic has impacted the daily activities, social interactions, and health and well-being of global citizens. Although all age groups have been affected, scientists and clinicians are still learning about the transmission dynamics and short- and long-term health effects of COVID-19 in children.

**As the scientific evidence continues to inform the rapidly changing clinical guidelines, junior doctors are valuable leaders during the COVID-19 pandemic response efforts in their institutions and national health systems.**

As the COVID-19 pandemic emerged, junior doctors were pursuing their residency training or working in their respective specialty. Often, they were assigned to COVID-19 response efforts in their institution or community, and hence provided clinical care for all age groups. With limited information about the acute- and long-term effects of COVID-19 in children, junior doctors initially sought guidance from specialist physicians in their department or institution. Now, as clinical guidelines have been adapted to incorporate novel research findings, junior doctors should remain up-to-date on the clinical management approaches, especially as caring for COVID-19 patients is becoming more routine in clinical practice. This article aims to present three topics – clinical presentation, disease severity and risk of hospitalization, and immune response – that can encourage junior doctors to remain abreast of the rapidly evolving scientific literature that influences clinical practice guidelines.

*Clinical Presentation.* As the clinical presentation and prevalence of acute and chronic illnesses can be different in children, when compared to other age groups, scientists have studied the impact of COVID-19 on pediatric health and observed this same trend. To date, children have presented with milder symptoms and have been less likely to be hospitalized, when compared to adults. One national epidemiological study in China reported that fever was a clinical presentation of 41-56% of pediatric patients, when compared with 88.7% of adult patients (1). One systematic review of 18 studies (n=1,065 children with confirmed COVID-19) concluded that children acquire severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection from family members and appear to experience mild symptoms with rapid recovery with two weeks, when compared to adults (2).

*Disease Severity and Risk of Hospitalization.* The CDC COVID-19 Response Team published an epidemiological report on a sample of COVID-19 cases (n=149,760 total laboratory confirmed COVID-19; 146,510 adults and 2,572 children) in the United States. When comparing adults (18-64 years) to children (<18 years), fever was reported in 56% of children (vs 71% of adults), cough in 54% of children (vs 80% of adults), and shortness of breath in 13% of children (vs 43% of adults) (3). Hospitalization occurred in 5.7-20% of children (10-33% of adults) and admission to intensive care was reported in 0.58-2% of children (vs 1.4-4.5% of adults) (3). Likewise, one national epidemiological study in China concluded that the 728 children with laboratory confirmed COVID-19 were classified as asymptomatic (12.9%), mild (43.1%) or moderate (41%) infection (1). Severe and critical infections were reported in 2.5% and 0.6% of children, respectively, which was substantially lower than statistics reported among adults with COVID-19 (1).

*Immune Response.* Although research to determine the specific mechanism for immune response in children is ongoing, several hypotheses have been described to explore why children infected with SARS-CoV-2 have reported less severe symptoms (4). First, children may have a stronger innate immune response due to an elevated number of total lymphocytes and absolute numbers of T and B cells. Second, the lower prevalence of comorbidities may have offered protected immunity. Third, as fewer children have experienced a previous beta coronavirus infection with potential for preexisting immunity, they may have a lower risk of cross-reacting antibodies to SARS-CoV-2. Finally, children may have fewer angiotensin-converting enzyme 2 (ACE2) receptors, and hence lower affinity for SARS-CoV-2 entry.

To date, available scientific resources clearly and unanimously indicate that pediatric patients tend to have a milder clinical presentation, rapid resolution of symptoms, and better prognosis of COVID-19. This leads to the suggestion that children have a stronger immune response against SARS-CoV-2, when compared to other age groups.

**By remaining up-to-date on the scientific literature – such as clinical presentation and pharmaceutical regimen – junior doctors on the frontline can utilize this information for their clinical practice and management activities for COVID-19 patients.**

References:

- 1) Dong Y, Mo X, Hu Y, et al. Epidemiology of COVID-19 among children in China. *Pediatrics*. 2020;145:e20200702.
- 2) Castagnoli R, Votto M, Licari A, et al. Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection in children and adolescents: a systematic review. *JAMA Pediatr*. 2020;174:882-889.
- 3) CDC COVID-19 Response Team. Coronavirus disease 2019 in children – United States, February 12 – April 2, 2020. *MMWR Morb Mortal Wkly Rep*. 2020;69:422-426.
- 4) Zimmermann P, Curtis N. COVID-19 in children, pregnancy and neonates: a review of epidemiologic and clinical features. *Pediatr Infect Dis J*. 2020;39:469-477.

## International Collaborations in the Post-Pandemic Era: Focus on the After Action Review

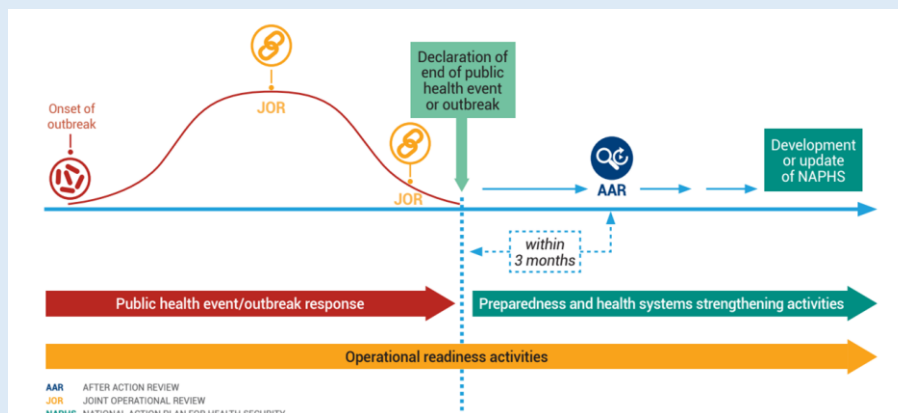
[Chiang Kuan Yu](#), MD  
 Hospitalist, Taipei City Hospital  
 Deputy Chief Executive, Global Taiwan Medical Alliance  
 Taipei, Taiwan



Over the past year, global response efforts to control community spread of the coronavirus disease 2019 (COVID-19) have affected all sectors. National leaders have taken significant actions by mandating stay-at-home restrictions, which have impacted the daily routine and lifestyle of citizens. Local businesses have temporarily closed, unemployment rates have increased, and nations have experienced economic crises. Citizens may be confused by mixed messages on health and safety from national authorities, and hence decrease their trust in federal actions.

**Significant action is required to promptly address the challenges faced during this pandemic and protect population health.**

After any public health event or outbreak, health professionals should reflect on their response actions, identify limitations or unexpected events, and develop potential solutions to strengthen future response efforts. According to the World Health Organization (WHO), one such approach is the **After Action Review (AAR)**, where health professionals comprehensively review an event within three months of the incident and establish short- and long-term action goals (**Figure 1**).



**Figure 1.** Timeline for Joint Operational and After Action Reviews. Credit: WHO, 2019 (1).



To conduct an AAR, health authorities should follow the recommended five-step approach by the WHO (**Figure 2**). First, in the pre-AAR phase, health professionals collaborate and form the AAR team with appropriate scientific experts. Interdisciplinary discussions with regional, national, and international authorities and stakeholders can guide the development of potential solutions to reduce the impact of identified challenges. They can also develop a checklist with essential questions:

- ☐ Are there limited resources, confusion or institutional barriers that have hindered the efficiency of public health measures?
- ☐ Are there any socioeconomic factors that have prevented regional or national authorities from implementing the established response efforts?



**Figure 2.** After Action Reviews roadmap. Credit: WHO, 2019 (1).

Second, during the AAR, health professionals can identify key expertise, build group consensus, and coordinate an appropriate timeframe with specific goals. These steps are essential to foster teamwork and establish milestones to reach these established goals. Finally, in the post-AAR phase, health professionals can summarize and document their results and develop a database for follow-up learning. They can incorporate debriefing sessions where team members can discuss the real-time positive and negative results from the implemented actions.

**The AAR may serve as an innovative framework for international communication between medical and public health experts to connect and coordinate future initiatives on emerging health topics.**

During the COVID-19 pandemic, global dialogue has questioned the actions by the WHO to promptly identify the source of the outbreak, establish the mode of transmission, and develop prompt recommendations to curb community transmission (2). For this reason, international platforms – like the International Hospital Federation – can offer key information exchanges between national experts, where they can develop novel solutions to complex public health challenges across countries. Regional alliances – like the Asia-Pacific Academic Consortium for Public Health (APACPH) – can strengthen professional networks across Japan, Malaysia, Republic of Korea, Singapore, and Taiwan (3).

Future national studies can assess lessons learned, including the efficiency of resource distribution at health institutions (e.g. availability of isolation units, sufficient supply of appropriate personal protective equipment). Epidemiological studies and systematic reviews can examine how citizens have perceived the societal changes due to the COVID-19 pandemic – such as citizens’ knowledge, attitudes, and behaviors about COVID-19 transmission and citizens’ psychological stressors during the isolating stay-at-home restrictions (3-6). Qualitative studies can further explore the psychological experiences and challenges faced by health professionals who managed frontline efforts to curb disease spread.

**During the COVID-19 pandemic, the global community has enhanced professional networks, collaborated on essential initiatives, and recommended appropriate prevention strategies to safeguard the population.**

Moving forward, as global health authorities continue to evaluate the short- and long-term effects of the COVID-19 pandemic on all sectors of society, they should consider the implementation of innovative approaches – like the AAR – to evaluate current response efforts. After a thorough review of implemented national action plans, they can evaluate the strengths and limitations of these actions and collaborate with international colleagues, in order to strengthen global initiatives that aim to effectively mitigate health risks to citizens across the globe.

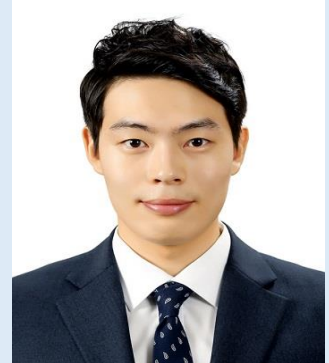
#### References

- 1) World Health Organization. [Guidance for after action review \(AAR\)](#). 2019 [cited 2020 Oct 1].
- 2) Baud D, Qi X, Nielsen-Saines K, Musso D, Pomar L, Favre G. Real estimates of mortality following COVID-19 infection. *Lancet Infect Dis*. 2020;20:773.
- 3) Asia-Pacific Academic Consortium for Public Health. [APACPH Education Webinar on Post-COVID-19, 11 Sept 2020](#). 2020 [cited 2020 Oct 1].
- 4) Delgado D, Wyss Quintana F, Perez G, et al. Personal safety during the COVID-19 pandemic: realities and perspectives of healthcare workers in Latin America. *Int J Environ Res Public Health*. 2020;17:2798.
- 5) Kamate SK, Sharma S, Thakar S, et al. Assessing knowledge, attitudes and practices of dental practitioners regarding the COVID-19 pandemic: a multinational study. *Dent Med Probl*. 2020;57:11-17.
- 6) Moccia L, Janiri D, Pepe M, et al. Affective temperament, attachment style, and the psychological impact of the COVID-19 outbreak: an early report on the Italian general population. *Brain Behav Immun*. 2020;87:75-79.

## Junior Doctors Advocate for Justice: The 30-Day Record

[Jaehyeon Jang](#), MD Msc

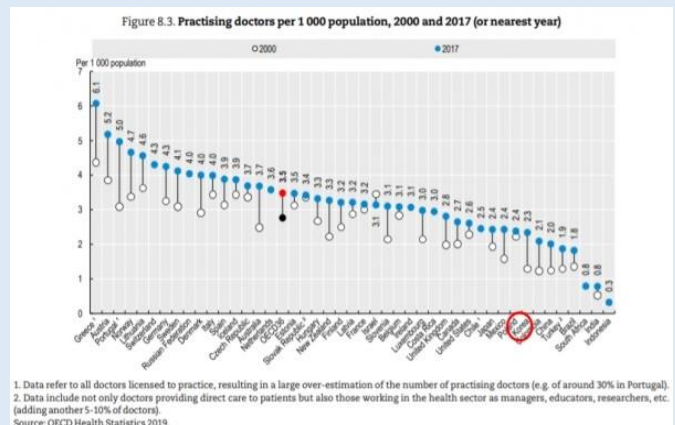
Public Health Physician, Anseong Public Health Center  
 Director, Korean Intern and Resident Association  
 Anseong, Republic of Korea



The Daegu province in the Republic of Korea experienced a great cluster outbreak of coronavirus disease 2019 (COVID-19) in March 2020. Due to the robust epidemic mitigation measures, there was a five-month period where the incidence of COVID-19 plateaued. However, as we approached August 2020, the incidence of COVID-19 skyrocketed, causing anxiety and fear across the country. On August 7, 2020, thousands of junior doctors from over 100 hospitals marched out, raising their voices for the *justice of citizens' health*.

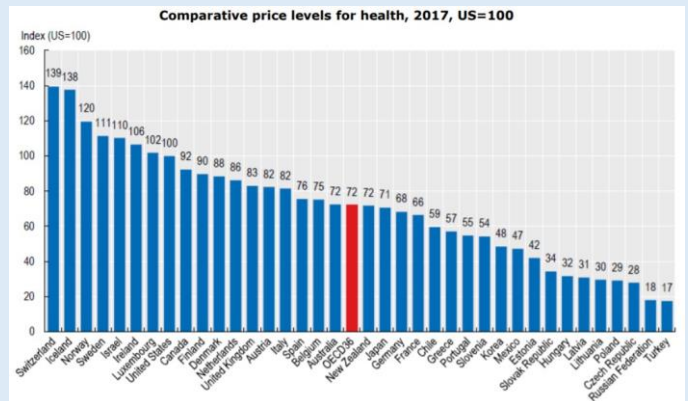
**A number of junior doctors in the Republic of Korea felt that they had faced one of the most challenging moments in their career: the COVID-19 pandemic and an unexpected government policy.**

On August 23, 2020, national health authorities abruptly announced a health care workforce reform plan to expand health care coverage through three efforts. These efforts included increasing the admission quotas at medical schools by 4,000 over the next 10 years, opening a new public medical school, and modifying the national health insurance to cover Korean herbal medicine as an eligible treatment. This plan appeared to utilize data from the Organisation for Economic Co-operation and Development (OECD), reporting that the number of doctors practicing in the Republic of Korea per 1,000 population was 2.3, which was lower than the global average of 3.5, between 2000 and 2017 (1) (**Figure 1**).



**Figure 1.** Practicing doctors per 1,000 population (2000 and 2017). Credit: ©Health at a Glance 2019/CC-BY.

Unfortunately, several elements to this plan were unclear. First, the government concluded that there was a shortage of physicians without further exploring the reported positive health indicators. For example, according to the OECD data, the number of doctor consultations per person was 16.6 (OECD average: 6.8), comparative price levels for health was 48 (OECD average: 72) (**Figure 2**), and mortality from treatable cases per 100,000 population was 47 (OECD average: 75), between 2000 and 2017.



**Figure 2.** Comparative price level for health (2000 and 2017). Credit: ©Health at a Glance 2019/CC-BY.

It also did not consider the increase of medical expenses as a result of physician demand. Second, there were concerns that the admission of new medical students would be based on personal recommendations from government officials or civil organisations, rather than based on the principles of merit, equity, and justice. Third, funding oriental potions under the national health insurance, without any scientific evidence to verify their safety and effectiveness, was believed to be unsafe for community health. Finally, the policy formulation process did not include medical experts or associations.

**Health plans should not be a sole authoritative decision from government, but rather a multi-faceted approach that involves all stakeholders to strategise on how best to achieve health care service delivery.**

Physicians have the right to consult about health policy and advocate for ethical policies and practices. Therefore, they asked the government to re-examine this health plan. The Korean Intern Resident Association (KIRA) expressed their disapproval of this health plan to the government and planned to meet with health authorities on July 29, 2020 and August 6, 2020, to present critiques to policies and provide recommendations on future steps (2).



Unfortunately, government authorities unilaterally canceled the proposed meeting prior to the first scheduled meeting, which KIRA regarded as unacceptable and unjust. Hence, KIRA set up an emergency committee meeting on August 1, 2020, and promptly mobilized all junior doctors to swing to action. On August 7, 2020, the first protest of junior doctors occurred (**Photo 1**).



**Photo 1.** Junior doctors march to dispute the government policy on August 7, 2020. Credit: © KIRA/ CC-BY.

After this first strike, since authorities took no further action, junior doctors staged a walkout on August 14, 2020. After this general strike, junior doctors planned another indefinite strike starting on August 24, 2020. Negotiation meetings to resolve this conflict were scheduled for August 23, 2020 and August 25, 2020, but every negotiation ended in a deadlock. The law enforcement authorities (police and judicial officials) took a firm stand to crackdown on doctors participating in the strike.

On the third day of the strike (August 26, 2020), instead of proposing a means for constructive communication and dialogue, the government responded to junior doctors with oppressive and violent measures including on-site inspections in hospitals nationwide. The government filed criminal charges against junior doctors who participated in the strike and did not comply with back-to-work orders (3). As the government increased their crackdown, junior doctors strengthened their determination to continue the strike (**Photo 2**).



**Photo 2.** Emergency committee president, Dr Jihyeon Park, confirms the position of junior doctors at a press conference on September 1, 2020. Credit: © KMA/ CC-BY.

On September 4, 2020, the Korean Medical Association (KMA) and the government reached a compromise. KIRA representatives were not invited to the negotiation, and the contents of the agreement did not include the phrase, “*withdrawal of plan*”, which junior doctors had requested. After all, both sides accepted the agreement that contained a statement, “*We shall hold every policy-making process until getting out of the pandemic. We shall resume the discussion thereafter leaving the door open*”. Through this procedure, the tension was toned down, and all physicians returned to the hospitals.

At a time when the world was experiencing significant challenges during the COVID-19 pandemic and everyone needed to collaborate, this unwarranted health policy forced junior doctors, who have always stood by their patients, to leave their duty post. Junior doctors understood that any erroneous policy has the potential to cause as much damage as observed during the COVID-19 pandemic. As such, junior doctors in the Republic of Korea will continue to monitor the current situation and balance the ethical principles of *beneficence* (acting in the best interest of the people) and *non-maleficence* (“do no harm”). However, if junior doctors perceive any threat to the justice of citizens’ health and the integrity of the health system, they remain dedicated to engage in negotiation and dialogue to preserve the national health system. If these means fail, they are resolved to raise their voices in unison to advocate for justice, equity, and ethical conduct.

#### References

- 1) Organisation for Economic Co-operation and Development. [Health at a glance 2019: OECD indicators](#). Paris: OECD Publishing, 2019.
- 2) Bahk E. [Why do doctors oppose raising medical student quota?](#) *The Korea Times*. 2020 [cited 2020 Sep 15].
- 3) Kim A. [Government files criminal charges against striking junior doctors](#). *The Korea Herald*. 2020 [cited 2020 Sep 15].

## Managing COVID-19 Contact Tracing Teams in Las Vegas, Nevada

[Kristina Mihajlovski](#), MD MPHc  
University of Nevada, Las Vegas  
Las Vegas, Nevada, United States



I vividly remember the start to my internship rotation at the Southern Nevada Health District (SNHD) in January 2020. One day, an experienced Infectious Disease specialist emphasized the importance of being alert about the novel respiratory virus infection causing the coronavirus disease 2019 (COVID-19). As a public health professional working in the prevention and control of infectious diseases, I have been following the world's news and official public health reports regarding this emerging virus.

### **The moment when Nevada's patient zero of COVID-19 was detected in the state, public health professionals were prepared to act promptly.**

As the number of cases in southern Nevada started increasing, the SNHD reached out to the School of Public Health at the University of Nevada, Las Vegas (UNLV), for assistance regarding disease investigation and contact tracing. I received an email about this public health collaboration, and I was eager to help the Las Vegas community that unconditionally welcomed me to their city two years ago. Along with six other UNLV public health students, I was selected to complete the disease investigation and contact tracing training at the SNHD. Immediately after the training, our team started making our first calls from the office located at the UNLV campus.

As scientists were learning more about the virus each day, it was initially challenging to interview patients who were infected with the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). We observed that they were afraid of the short- and long-term implications of their infection and potential transmission to family members.

**During our meetings, our team shared up-to-date scientific findings and provided empathetic listening and support.**

For the next four months – March 31, 2020 until August 1, 2020 – our team conducted more than 2,000 case investigations within the community and reached out to their contacts to identify time and place of exposure. We shared additional resources with community members, including isolation and quarantine guidance, testing site locations, food and medication delivery options, mental health support services, and unemployment assistance. Unfortunately, although we wanted to help all COVID-19 cases, time was the limiting factor. Team members often consulted a community member who had lost a family member or close friend, and we quickly responded to console them through expressed empathy and support during these difficult times. Sometimes, we learned that they just needed to speak to someone, and we were present to let them know that they were not alone.

When scientists confirmed that contact tracing slowed the spread of COVID-19 (1) – and our contract tracing activities were effective to date – our team received a grant from the state of Nevada to expand our contact tracing activities. As such, we restructured our team as there was a need for additional management positions. Along with my two co-workers, I became a UNLV COVID-19 Contact Tracing Team Manager. After receiving more than 1,100 job applications, we hired six supervisors and 137 contact tracers. Our hardworking contact tracing team played a key role in reducing community spread of COVID-19.

**Our team contributed individual expertise to strengthen our contact tracing activities and make a significant impact in our local community and state.**

As a junior doctor from Serbia, I am truly honored to work along an amazing UNLV team at the forefront of COVID-19 prevention and control (**Photo 1**). This unique experience has provided me the opportunity to gain hands-on skills regarding disease investigation and outbreak control. I am humbled to represent junior doctors working in COVID-19 response efforts and proud to serve as a manager of this hardworking and responsible public health team in one of the most visited cities: Las Vegas.



**Photo 1.** Dr Kristina Mihajlovski works as COVID-19 contact tracing team manager in Nevada.  
Credit: Josh Hawkins/UNLV Photo Services.

Reference

- 1) Centers for Disease Control and Prevention. [Contact tracing](#). 2020 [cited 2020 Oct 11].



## Inclusive Participation in Global Surgery at the UN General Assembly during the COVID-19 Pandemic

[Manon Pigeolet](#), MD MSc

Université Libre de Bruxelles, Brussels, Belgium  
Harvard T.H. Chan School of Public Health  
Boston, Massachusetts, United States

[Fabiola Ruth Castedo Camacho](#), MD

Neonatology Resident, Universidad de la República  
Montevideo, Uruguay  
Junior Country Lead for Uruguay, Global PaedSurg



The year 2020 marks the 75th anniversary of the United Nations (UN). Established in 1945, the UN is an intergovernmental body with a mandate to uphold international peace, protect human rights and international law, work towards sustainable development, and deliver humanitarian aid. Every September, the UN convenes in New York City to hold their UN General Assembly with delegations representing each nation, and they evaluate progress made in established domains and commit to new interventions or funding. Unfortunately, the celebration of a new decade with a recommitment to multilateral future engagements has become a time of political turmoil and inconsistent action by health systems during the coronavirus disease 2019 (COVID-19) pandemic.

**Taking a silver lining perspective of these lockdown measures, this unprecedented time can offer new opportunities, unavailable before COVID-19, as innovative analyses will be required for future actions across health systems.**

On September 19, 2020, the Program in Global Surgery and Social Change (PGSSC) at Harvard Medical School, InciSioN Global, and the Junior Doctor Network (JDN) of the World Medical Association (WMA), co-hosted a virtual UN General Assembly side event. Using the theme, *The Future of the Operating Room (OR): Youth in Global Surgery*, the event hosted a panel of six experts and two moderators from diverse professional and geographic backgrounds (**Photo 1**). In fact, 75% of these speakers were from low- and middle-income countries (LMICs), which is a higher percentage of delegates who attend UN General Assembly side events.



**Photo 1.** “Youth in Global Surgery: The Future of the OR” panel, hosted by the PGSSC, InciSioN, and WMA/JDN at the UN 75<sup>th</sup> General Assembly. Credit: Dr Fabiola Castedo Camacho.

This same shift was observed in the registration and attendee list. Of the 800 individuals who registered for this event, predominantly from LMICs, a total of 250 individuals actually attended the virtual sessions. For the first time, when attending UN-related events, we believe that we have expanded our global reach, where voices representing diverse geographic, language, and socioeconomic areas were present to raise pertinent questions. After all, we are the future of the OR, the UN, and our national health systems.

**Albeit challenges, we must develop innovative ideas that can increase availability and access to essential preventive health care services to all global citizens.**

Listening to panelists’ experiences, it is clear that many factors contribute to unequal access to surgical services. Although trauma and obstetric emergency care services are considered basic surgical needs, they remain unavailable in many countries. Other chronic conditions, often debilitating, are equally at risk of progressing due to a lack of safe surgery and anesthesia services.

Other panel discussion points included the need for gender equality in surgery, the shared responsibility with non-surgical specialties for surgery advocacy, and the need for surgical care for the neonatal and pediatric populations. Affordable, accessible, and high-quality basic health services for pediatric populations can permanently determine the quality of life of the new generations. Neonates may require surgical interventions as their first need for medical assistance in life, as observed in cases of congenital malformations and other complications due to premature birth. Children and adolescents may need surgical procedures for reconstructive purposes to prevent disability or minimize complications later on in life. Many interventions are expensive, which further creates a high financial and economic burden on families affected and national health systems.

Despite the challenges that global surgery still faces, health leaders have been able to turn those difficulties into opportunities. Moving forward, future steps should include actions to:

- ☐ Advocate for improved surgical care with national health systems;
- ☐ Develop research solicitations that examine patient outcomes, barriers to care, specialty training in global surgery, and cost-effective innovative technologies;
- ☐ Build an effective hospital surveillance system with regional and national data; and
- ☐ Support a regional and national registry system for patient outcomes related to surgical care that can guide health policy initiatives.

**It is our responsibility to research and showcase relevant information to multidisciplinary stakeholders in order to support and facilitate this paradigm shift in global health.**

As health professionals, we need to assure that surgery, obstetrics, and anesthesia care receive the appropriate investment. In 2015, the Lancet Commission on Global Surgery recommended one path forward in efforts to obtain accessible, affordable, and qualitative surgery, obstetrics, and anesthesia care by 2030 for all individuals.

As junior doctors, we truly hope that COVID-19 will incite positive change and innovative practices – like virtual conferences – in our global society. By organizing conferences and community events, voices from youth and leading leaders from LMICs can be incorporated to facilitate a wider discussion about new approaches and best practices to reduce disparities in healthcare service delivery. The inclusion of these panels and discussions will offer an insightful dialogue with the goal of accessible, affordable, and high-quality surgical, obstetrics, and anesthesia care by 2030 for all global citizens.