

# World Medical Journal

Official Journal of The World Medical Association, Inc.

Nr. 1, April 2023

vol. 69

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**Publisher****Latvian Medical Association**

Skolas Street 3, Riga, Latvia

ISSN 0049-8122

Opinions expressed in this journal – especially those in authored contributions –  
do not necessarily reflect WMA policy or positions



## Editorial

As we welcomed the new year, our global medical community remains eager and prepared to develop prompt and appropriate strategies, policies, and interventions to combat emerging health risks and enhance health system resiliency. Multiple health system challenges exist, including an aging population, antimicrobial resistance, the global health workforce shortage, increased prevalence of non-communicable diseases, reported injuries and violent acts, and various work-related stressors. We are now year closer to navigating a post-pandemic world and reaching the deadline of the 2030 Agenda for Sustainable Development. To date, WMA members have supported those colleagues working in conflict and emergency settings (e.g. Ukraine Medical Help Fund, earthquake disaster areas in Turkey and Syria) and mentored junior doctors throughout their career path (e.g. Junior Doctors Network).

As the World Health Organization commemorates its 75th anniversary on 7 April 2023, health leaders recognize the significant achievements – including drug discovery, pathogen identification, and vaccinations – which were driven by evidence-based science and collaborations to address urgent global challenges (<https://www.who.int/campaigns/75-years-of-improving-public-health/milestones>). As this day represents World Health Day, the “Health for All” theme highlights the call to action toward strengthening existing and building new initiatives and partnerships that promote health equity across global communities. One element, however, is of utmost concern: the effects of climate change on public health. To address the climate crisis, WMA members have a unique lens to leverage their clinical expertise and lead national and global efforts to advocate for stronger political commitment to health system preparedness and response for climate action.

We are overjoyed to support the 222nd World Medical Association (WMA) General Assembly will be held in Nairobi, Kenya, from 20-22 April 2023. This meeting will provide opportunities for WMA members to contribute to scientific discussion on WMA statements and resolutions as well as expand global health networks with colleagues. We hope that you can connect with WMA members and share information about your NMA priorities and activities.

In this issue, Dr. Otmar Kloiber, Dr. Bruce Kaplan, and Dr. Ashraf Nizami shared personal reflections about WMA milestones, emerging One Health risks, and challenges facing the Pakistan medical community, respectively. Mr. Bjørn Hoftvedt and Dr. Reidun Førde presented an example where key ethical principles were violated in health care delivery and research. Dr. César Eduardo Fernandes, Dr. José Eduardo Dolci, and Dr. Wanderley Bernardo

prepared a commentary on the value of evidence-based medicine in clinical education and practice. Dr. Lwando Maki, Dr. Ankush Kumar Bansal, Dr. Muha Hassan, Dr. Ahmed Taha Aboushady, Dr. Mahesh Prasad Bhatt, Dr. Lars Rocksén, Dr. Johanna Schauer-Berg, and Dr. Lekha Rathod offered their perspectives on the 27th Conference of Parties (COP27). Dr. Marie-Claire Wangari described the recent release of the New Public Health Order for Africa. Dr. Ogechukwu Mary-Anne Isokariari, Dr. Vivian Ifeoma Ogbonna, Dr. Utchay Agiri (Jr), Dr. Chizaram Onyeaghala, Dr. Taagbara Jolly Abaate, Dr. Celine Ude Osi, Dr. Glory Ovunda Worgu, Dr. Chinenye Precious Anuonyeh, and Dr. Dabota Yvonne Buowari provided a report on a webinar that focused on research collaborations in Nigeria. Dr. Marie-Claire Wangari, Dr. Brenda Obondo, and Dr. Ruby Osweire highlighted the use of media training for Kenyan junior doctors. Dr. Todd Sack shared the WMA's My Green Doctor resource as a free continuing medical education on environmentally sustainable practices.

We are pleased to share this issue of the *World Medical Journal*, which presents the highlights from the revision process of the WMA International Code of Medical Ethics (by Dr. Ramin Parsa-Parsi, Ms. Siobhan O'Leary, Dr. Urban Wiesing), the WMA Declaration of Venice (by Dr. Gerald Harmon), the WMA Declaration of Helsinki (by the American Medical Association's Office of International Relations), and WMA Statement on Violence in the Health Sector by Patients and Those Close to Them (by Dr. Leonid Eidelman, Ms. Malke Borow, Dr. Baruch Levi, and Ms. Tali Rayn-Aloni). Notably, WMA members representing seven countries described their national perspectives and timely national initiatives that support Earth Day 2023 and the adoption of environmentally sustainable practices. We hope that you can take a moment to review this fifth collaborative article and be inspired by these exciting NMA activities.

As we look forward to our upcoming annual activities, we encourage WMA members reflect on how we – as individuals and collectively as WMA members – can strengthen our contributions to the WMA and the global community. We look forward to connecting in-person and participating in valuable conversations and discourse in Nairobi!

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## Interview with the WMA Secretary General



*Otmar Kloiber*

*For this interview, Dr. Otmar Kloiber, the World Medical Association (WMA) Secretary General, shares his perspectives on WMA activities as well as his leadership achievements over his tenure with Dr. Helena Chapman, the WMJ Editor in Chief.*

***Over your WMA tenure, what are the four most significant milestones that have left a permanent contribution for the global medical community?***

The past two decades have proven to represent significant achievements for WMA membership, which represents 116 countries and territories to date. As the WMA was founded to be the platform to build universal medical ethics, national member associations (NMAs) share expertise and perspectives on priority ethical issues at our meetings. We have observed remarkable unity in respectfully debating issues and reaching consensus on many complex topics, including medical ethics. However, it is important to note that although NMAs and WMA members widely share view and opinions, divergent views remain, especially concerning the ethics at the beginning and end-of-life topics. We utilize this platform to widely debate priority issues in order to develop and update WMA resolutions and statements at our meetings.

Second, our WMA membership has maintained our heritage, by supporting ethical rules and guidelines that have shaped medicine in the 20th century: the Declaration of Geneva, the Declaration of Helsinki, and the International Code of Medical Ethics. As we reference the relevance of these ethical guidelines in our daily clinical and public health practice, we also prepare new guidelines as well as develop updates, as deemed necessary for our medical community. Our efforts, which ultimately respect the sacred relationship with patients and society, recognize that the development of new technologies, methods, and procedures influence the need to prepare up-to-date guidelines for the global medical community.

Third, we have built strong relationships with partners, especially other health professionals, in order to best serve our patients and communities. For example, the World Health Profession Alliance is a global reflection on medicine and health care, which depends on strong cooperation, mutual respect, and joint advocacy for all health professionals.

Finally, we constantly strive for professional autonomy and clinical independence. As physicians, we contribute to an environment that is increasingly prone to commoditisation and command and control approaches, whether a private, social insurance or state-run health care system. We stand firm in fighting attempts to de-professionalize medicine and remove our autonomy, in efforts provide the best treatment for our patients.

***What do you consider to be your most important leadership achievements over the past decade? Please share a few challenges that you have experienced and how have you addressed them.***

Over the past two decades, we have achieved remarkable milestones in our WMA initiatives. Our collective efforts have been the most significant achievement to date. First, we have become a strong community, reinforcing unity in our policy development as well as our interactions with international bodies, governments, and private institutions. We have demonstrated our leadership in protecting and maintaining our policies, which enshrine the core values and traditions of the medical profession. Key examples of the successful development and renewal of the WMA core policies include the Declaration of Geneva, the International Code of Medical Ethics, and the Declaration of Helsinki.

Second, we have expanded our outreach efforts to encourage other NMAs to contribute to WMA activities. Our leadership activities have resulted in stronger representation from WMA members across Asian and African countries. The WMA has increased visibility on the African continent, with continued engagement with NMAs, led by the current WMA president, Dr. Osahon Enabulele.

Third, the WMA created the first and only global platform for young physicians recognized as the Junior Doctors Network (JDN). This network has stimulated strong engagement of the WMA Associate Members as well as Past Presidents and Chairs. This youth engagement has boosted our work on global health issues, including climate



and health, antimicrobial resistance, and pandemic preparedness. The WMA Associate Membership represents a valuable resource for expertise and outreach across geographic regions.

Finally, as we are practicing in the 21st century, digitisation, social media, data banks, and artificial intelligence remain part of our toolkit. As the WMA has always relied on science and technology, we have adopted these new technologies and provided guidance on how to best use them in clinical and community health practice. In 2016, we adopted the Declaration of Taipei, which extends the Declaration of Helsinki into virtual environments, allowing simultaneous scientific advancement with participant protection.

***How can national medical associations best support junior doctors in their professional education?***

Many of our WMA members are involved in developing the structure and regulation of post-graduate education and continuing professional development. Regarding post-graduate education, as physicians decide to pursue residency programs in primary care or speciality disciplines, several factors should be improved to support their career path:

1. Working conditions, including compensation and work hours, are often intolerable. How can these working conditions be improved to support physicians' health and well-being?
2. Education is often measured in terms of quantity (not quality) of time. How can medical education be evaluated by quality rather than quantity of time?

3. Medical knowledge is constantly renewed in very short cycles, due to scientific advancements in research and technology. Where is the logic of adapting education just by extending the length of it?

4. As junior physicians have become more flexible to technological developments, they are considering other fields of medicine. For example, the overlaps between interventional radiology, cardiology, and surgery show that our medical disciplines are dynamic. Why should medical specialists be passive in their career path?

5. Post-graduate education is influenced by the commercialisation of health care. Medical education and training are often seen as a burden rather than an investment. How can we strengthen medical education with less influence from the commercialisation of health care?

As our NMAs will experience more challenges over time, we recognize that extending the length of specialisation is not the answer anymore. To support the next generation of health leaders, we should collectively develop policies that reflect a more flexible and dignifying shape of post-graduate education, complemented with better opportunities for professional development.

***Aside from the ongoing COVID-19 pandemic, what are the key priorities that WMA members should address in the next five years?***

Our WMA community continues to tackle several priorities that affect global physicians and our patients. As a global organisation, we have observed the clash of systems

and ideologies that have raised conflict across countries as well as experienced the effects of climate change, disruptive technology, and supply chain demands in a globalised economy. For this reason, our medical expertise and insight are needed to address complex global challenges in the clinical and community setting.

First, we should emphasise the need for better emergency preparedness, including our demands for improved workforce staffing, appropriate equipment and supplies, and higher reserves. The COVID-19 pandemic was a sudden wake-up call for our global community to improve our national and global preparedness measures.

Second, we observe challenges in human resources in health, noting the brain drain of talents from low- to high-income countries. While we are firmly in favour of the freedom to work in other countries and, we wish to foster exchange and the chance to gain experience abroad, one-directional movements along a money gradient are alarming. In high-income countries, the need for physicians is aggravated by an increasing frustration of senior physicians over an increased bureaucracy, resulting in a desire for early retirement.

Third, our young generation demands a better work-life balance. This movement often means fewer work hours in societies that have an increasing medical demand.

Fourth, we support the World Health Organization's call for Universal Health Coverage, which can expand access to quality health care for all people. This movement underlines the indispensable role of health professionals across health systems.

*As WMA Secretary General, which ongoing or new WMA initiatives are top priorities for this year?*

Certainly, we must promptly address multiple challenges affecting our global medical community as well as reinforce our core in medical deontology and medical ethics. In October 2022, the WMA adopted the revised International Code of Medical Ethics, as a result of one complete cycle of policy revisions. We recently have initiated the next revision cycle with the Declaration of Helsinki, where we aim to reflect on values related to new procedures, technologies, and social movements. For example, do our principles still serve the purpose of protecting humans in research, and do they still facilitate ethical research?

We recognize that the global speed of digitisation has influenced the medical discipline. With the Declaration of Taipei, we have established the first set of rules for the large-scale use of health databases and biobanks. Our collective work on artificial – or better “augmented intelligence” – will continue and focus on the ethical questions raised by the use of those technologies. The underlying question remains: how can we promote ethical policies within our value system albeit rapid technological advancements in digitisation?

Finally, we continue to support the Ukraine Medical Help Fund, as a partnership with WMA, the Standing Committee of European Doctors, and the European Forum

of Medical Associations, to provide medicines and resources to the medical community. We appreciate the continued financial support from the Japan Medical Association, the French Medical Association, the Royal Dutch Medical Association, the Danish Medical Association, and member societies, partner organisations, companies, and individuals.

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## Interview with the Co-founder of the One Health Initiative



**Bruce Kaplan**

*For this interview, Dr. Bruce Kaplan, [1] the co-founder of the One Health Initiative (OHI), shares his training as a veterinarian and epidemiologist, his leadership on the development of the OHI (<https://onehealthinitiative.com/>), perspectives on emerging One Health challenges, and how World Medical Association (WMA) members can contribute to One Health initiatives, with Dr. Helena Chapman, the WMJ Editor in Chief.*

Special Note: The OHI Autonomous pro bono Team includes: Laura H. Kahn, MD, MPH, MPP; Bruce Kaplan, DVM; Thomas P. Monath, MD; \*Lisa A. Conti, DVM, MPH; Thomas M. Yuill, PhD; Helena J. Chapman, MD, MPH, PhD; Craig N. Carter, DVM, PhD; Becky Barrentine, MBA, and Richard Seifman, JD, MBA

\*Deceased 6 November 2020

***Please describe three key learning moments during your training in veterinary medicine and epidemiology.***

My initial “One Medicine-One Health” enlightening-learning experiences came during the first two years of basic science curriculum at the Auburn University’s School of Veterinary Medicine (1959-1963). Between quarters, I returned

home to Louisville, Kentucky, and attended some classroom lectures and laboratory sessions in human anatomy and pharmacology at the University of Louisville School of Medicine with student friends and colleagues. After having completed veterinary medical oriented training (e.g. animal anatomy classroom lectures and laboratory sessions), it became apparent that basic science coursework (including pharmacodynamics and pharmacokinetics) in human and animal sciences were didactically similar. For example, I was also able to easily identify and translate most analogous anatomical structures (e.g. limb musculature names with origins and insertions) on the human cadaver vis-à-vis that of the canine species. The only caveat was the occasional notable technical scientific difference, such as species variations.

My subsequent epidemiology training as an Epidemic Intelligence Service Officer (1963-1965) at the U.S. Centers for Disease Prevention and Control (CDC) reinforced and corroborated the significant academic comparative features of human and animal science curricula. This training offered opportunities to network with physician and veterinarian colleagues, including two individuals who had earned doctorates in veterinary medicine (DVM) prior to receiving their doctorate in medicine (MD). For example, understanding and appreciating epizootic principles of herd health and herd immunity taught in veterinary school proved applicable and analogous to human epidemiologic public health prevention and control procedures [2].

***What were the driving factors that led to your collaborative efforts to develop the One Health Initiative in 2006? Since this date, what challenges***

***has your team faced in leveraging One Health expertise across global networks?***

As discussed in History of the OHI team and website, the following events transpired: “In April 2006, Dr. Laura H. Kahn [MD, MPH, MPP] published the CDC article, ‘Confronting Zoonoses, Linking Human and Veterinary Medicine’ ([https://wwwnc.cdc.gov/eid/article/12/4/05-0956\\_article/](https://wwwnc.cdc.gov/eid/article/12/4/05-0956_article/)), which prompted [me] Dr. Bruce Kaplan [DVM] to contact her. Together they [we] started the One Health Initiative team, and Dr. Thomas P. Monath [MD] joined them [us] in March of 2007 to establish the OHI triumvirate. Dr. Kahn, Kaplan and Monath [One Health Initiative website owner and his “brainchild”] initiated the OHI website ([www.archive.onehealthinitiative.com/](http://www.archive.onehealthinitiative.com/)) on October 1, 2008. Dr. Kaplan was designated as the primary OHI website contents manager/editor” [3].

Since 2006, the primary challenges to acceptance and implementation of the One Health concept have come from a commonly displayed tribalism, whereby some prominent global networks set up ‘*silo*’ oriented programs and websites that were reticent to acknowledge other One Health oriented individuals, groups, and organisations. More broadly, One Health leaders throughout history should be recognized for their scientific achievements [4]. Although this gap has been a major hindrance to elevating meaningful dialogue and cooperative participation, the One Health movement has become internationally recognized with exponential growth that continues expanding worldwide.



From the beginning, the OHI team members (<https://onehealthinitiative.com/contact/>) and our first-ever international OHI website embraced a strategic policy, asserting a concerted all-inclusive “ecumenical” educational effort to help promote each reputable supportive player in the nation and global One Health community. Frankly, international institutional implementation of the One Health concept and approach has been dangerously short-sighted, incredibly slow, and long overdue.

***What are the four most significant contributions of the One Health Initiative for the global community?***

The One Health movement per se has demonstrated numerous monumental documented societal clinical biomedical research, global public health, and environmental impacts. Since the early 21st century, the three most popular and prominent News and Publications of the One Medicine-One Health’s reignition [5] have included the webpages of the OHI (<https://onehealthinitiative.com/>), CDC One Health Office (<https://www.cdc.gov/onehealth/index.html>), and the One Health Commission (OHC) (<https://www.onehealthcommission.org/>).

The OHI team reported that “The One Health concept has been successfully applied to many clinical health and public health milieus during the 19th, 20th and early 21st centuries.” Over the past centuries, some significant examples of clinical health advancements were noted through comparative medical and surgical endeavors as well as academic journal issues (e.g. heart disease, cancer, obesity, anesthesiology, global

Infectious diseases, food safety, immunizations, antibiotic use and resistance, emergency and disaster preparedness [6].

The escalating detrimental climate changes occur within our global ecosystem, representing a threat to safe shelter, clean air, food security, and safe potable drinking water for humans and animals. Therefore, these issues are inseparable and fundamental prerequisites for insistently adopting a One Health approach for humans, animals, plants, and the environments in which they all co-exist.

***What are three One Health challenges that WMA members should better understand?***

First, multidisciplinary-interdisciplinary professional collaborations are critical towards achieving more expeditious and efficacious results in many clinical comparative medicine research issues and epidemiology. Second, it is important to build upon the momentum from the 2012 WMA and World Veterinary Association (WVA)’s One Health recognition statement and the 2015 WVA/WMA Global Conference on One Health [10,11]. This physician and veterinarian ‘meeting-of-the-minds’ represented essential building block elements to appreciate and understand the value of these robust collaborations. Third, WMA members are challenged to help promote, encourage, and educate current human health providers and their future medical school student colleagues [12].

***As first steps, how can WMA members contribute their expertise to One Health collaborations and become more involved in local and national initiatives?***

First, WMA members can contact and interact with health care professionals in other health-related disciplines. This sentiment is expressed in the One Health Initiative’s mission as follows: “forge co-equal, all-inclusive collaborations between physicians, osteopathic physicians, veterinarians, dentists, nurses and other scientific-health, and environmentally related disciplines” (<https://onehealthinitiative.com/mission-statement/>).

Second, consider joining university and national One Health clubs and organisations (e.g. OHI, OHC) as well as attending national and international One Health meetings to establish liaisons. Third, expand communication efforts with deans of various schools of medicine and public health. Fourth, prepare One Health op-eds in local and national newspapers and magazines. Finally, contact your local and national political representative and encourage their participation and support (e.g. grassroots standpoint).

It cannot be repeatedly emphasised enough that, without any doubt or reservations: “One Health is the collaborative efforts of multiple disciplines working locally, nationally, and globally to attain optimal health for people, animals, plants and our environment” and “One Health implementation will help protect and/or save untold millions of lives in our generation and for those to come.”

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## Interview with the President of the Pakistan Medical Association



**Muhammad Asbraf Nizami**

*For this interview, Dr. Asbraf Nizami, the President of the Pakistan Medical Association and Additional Standing Committee Member of the World Medical Association (WMA), shares insight on challenges facing Pakistan physicians and citizens, with Dr. Helena Chapman, the WMJ Editor in Chief.*

***Please share a brief summary of key facts about Pakistan, including the economy and health system.***

Pakistan is a low-income country in South Asia that is comprised of 796,095 km<sup>2</sup> and 242.92 million residents. As the fifth-largest country in the world, the population is divided into urban (40%) and rural (60%) communities. Bordering China, India, Afghanistan, and Iran, Pakistan has diverse topography of mountains, fertile plains, plateaus, deserts, lakes, rivers, and beaches. Pakistan, which gained its independence in 1947, has a parliamentary democracy as well as a 75-year history of four military governments.

The Pakistan government spends 1.2% of its gross domestic product on the health system, where there is one doctor and 0.6 available beds per 1,000 people [1,2]. The urban populace

relies on private health services, while rural communities seek health services with traditional healers. Inadequate nutrition and living conditions are largely contributing to the spread of an array of non-communicable (e.g. diabetes) and communicable (e.g. malaria, tuberculosis, typhoid) diseases.

***How have the catastrophic floods impacted Pakistan?***

In 2022, the unprecedented rains and floods in Pakistan have impacted more than 33 million people, causing colossal damages to the economy (US \$30 billion), crops (9.4 million destroyed acres), properties (2 million houses destroyed), infrastructure (440 bridges, 13,000 kilometres of roads, hospitals, and schools destroyed), animal lives (loss of more than 1.1 million farm animals), and human lives (1,700 deaths, 15,000 injuries) [3]. The majority of flood victims were agriculture labourers, small farmers, street dwellers, and daily wagers, living in extreme poverty in communities of mud houses. According to the Pakistan government estimates, 8 million people have lost their economic livelihoods, and an additional 8.4 – 9.1 million people will be pushed into poverty, as a result of these significant floods [4].

As the phases of rescue and relief are complete, the Pakistan government will need US \$16 billion for the rehabilitation and reconstruction of flood-affected areas over the next few years [4]. With the current national economic crisis – and lack of promised aid from other nations and international financial institutions – the government cannot initiate

reconstruction activities of houses, hospitals, and schools.

***How has the Pakistan health system managed these challenges?***

The catastrophic floods primarily affected populations in Sindh and Balochistan communities, and residents are still living in the temporary shelters [3]. These local health systems are challenged with damage to the health infrastructure, shortages of health personnel, and limited health supplies, which ultimately disrupt health service delivery especially for vulnerable persons like children, pregnant women, and breastfeeding mothers. In addition to the ongoing coronavirus disease 2019 (COVID-19) pandemic and endemic infections (e.g. cholera, human immunodeficiency virus, leishmaniasis, measles, polio, typhoid fever), enteric and respiratory infections, dermatologic manifestations, and vector-borne diseases (e.g. malaria, dengue) are prevalent in these flood-affected areas.

***How does climate justice affect Pakistan?***

Climate justice, which is a concept that emerged as the result of the fast-growing global climate crisis, highlights the anthropogenic source of the climate crisis, reckless exploitation of nature, and the labour force benefiting wealthy individuals, businesses, and nations. Industrialised rich nations, who have largely contributed to this global crisis, are ill prepared to share the responsibility and burden of the crisis that severely affects low-income nations. Future



actions should focus on investments in climate-friendly modern infrastructure and technology.

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## WMA International Code of Medical Ethics: Highlights from the Revision Process



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One notable achievement at the World Medical Association (WMA)'s General Assembly in October 2017 was the adoption of the revised Declaration of Geneva: The Physician's Pledge (DoG) [1]. As the next logical step, the WMA focused on another seminal document – the International Code of Medical Ethics (ICoME) – which had not been

amended since 2006 [2].

The DoG and ICoME have always been strongly interrelated, as they were adopted by the WMA's second and third General Assemblies in 1948 and 1949, respectively [3]. By addressing the ethical failings of the medical profession during the Second World War [4], the WMA solidified its mission as a platform for establishing professional guidelines for physician conduct and developing a global consensus on medical ethics. As the compatibility of these two documents has been warranted over the years, the WMA would need to align the ICoME with the newly revised DoG.

A large and inclusive workgroup was established in 2018, with the mandate to begin a long-term review of the ICoME. This ICoME revision workgroup, representing 19 countries covering all the WMA's geographic regions, participated in regularly scheduled workgroup meetings, contributing their unique insights to the revision process. Workgroup members included representatives from the German Medical Association (chair), American Medical Association, Japan Medical Association, Brazilian Medical Association, Australian Medical Association, South African Medical Association, British Medical Association, Kuwait Medical Association, Nigerian Medical Association, and Danish Medical Association. Active observers also included the Standing Committee of European Doctors (CPME), Royal Dutch Medical Association, Chinese Medical Association, Swedish Medical Association, Israeli Medical Association, Federazione Nazionale degli Ordini dei Medici Chirurghi e degli Odontoiatri (FNOMCeO),

Conseil National de l'Ordre des Médecins (CNOM), Norwegian Medical Association, Consejo General de Colegios Oficiales de Médicos (CGCOM), WMA Associate Members, Junior Doctors Network, International Committee of the Red Cross, Confederación Médica Iberoamericana y del Caribe (CONFEMEL), and Chairs of the WMA Medical Ethics Committee.

As a first step, workgroup members provided feedback on a list of strategic considerations developed with Professor Urban Wiesing (WMA Ethics Advisor). These considerations served to structure the revision process by analysing the physician's duties toward certain individuals and groups (starting with the individual patient, but also including relatives, other physicians, members of other professions, and society). Workgroup members were able to indicate how these professional relationships were addressed in their respective national codes, if at all, and which aspects should be prioritised for inclusion in the revised ICoME.

As part of this initial phase of the revision process, the workgroup also reviewed the principles in the 2006 version of the ICoME, to ensure compatibility with the full spectrum of the WMA policy, focusing especially on the newly revised DoG and the Declaration of Helsinki. Dr. Otmar Kloiber (WMA Secretary General) participated in the workgroup meetings and helped confirm that the content of the revised ICoME would not contradict existing WMA policy. Key concepts that had been added to the DoG – physician well-being, patient autonomy, duty to share knowledge, and mutual respect between medical students and teachers – were prioritised

for inclusion in the ICoME [3]. Initial comments proposed by the workgroup included physicians' duties with regards to maintaining medical records, disclosure of commercial and other interests, advertising, and the "fair, just, and prudent stewardship" of shared health resources.

In addition to addressing the content of the ICoME, the workgroup also reviewed the format of the document and concluded that the language should be modernised and adapted to be more gender inclusive. Once a list of priority topics had been determined by the workgroup, with input from WMA constituent members, a preliminary revised ICoME draft was prepared and subsequently approved by the WMA Medical Ethics Committee (MEC) and Council for further deliberation at the Eastern Mediterranean and Latin American regional conferences held in early 2020, which were organised by the Kuwait and Brazilian Medical Associations in Kuwait City and in São Paulo, respectively.

The WMA has traditionally held a series of regional meetings during such high-profile revision processes to ensure that not only constituent members, but also stakeholders and experts from all of its regions, had an opportunity to share their observations and increase global awareness of key WMA documents. Topics highlighted during these initial regional conferences included informed consent, patient confidentiality, obligation to report cases of violence as a member of the medical profession, ethics of remote treatment, and physician conscientious objection.

On the heels of the regional meeting in Brazil, the coronavirus disease 2019 (COVID-19) pandemic threatened to impede the progress of the workgroup. However, the workgroup

adhered to the established workplan and timeline through regular virtual meetings. While several regional meetings were postponed during the height of the pandemic, the International Association of Bioethics virtual meeting was held in June 2020, and provided the workgroup with an opportunity to gain feedback from world-renowned medical ethics experts, including Dr. Ruth Macklin (Albert Einstein College of Medicine, United States) and Professor Alex John London (Carnegie Mellon University, United States). Notably, two topics dominated the discussion. First, although informed consent as it relates to decisional capacity had been discussed in the existing ICoME, the consensus was that further clarity was needed in the revised Code. Second, ethical duties of physicians in the case of a conflict between a physician's personal moral beliefs and professional obligations toward the patient (including physician conscientious objection) had not been addressed in earlier iterations of the Code.

Around the same time, the WMA Associate Members hosted a webinar focused on the ICoME, featuring a discussion among several members of the workgroup led by Dr. Joseph Heyman (Chair, WMA Associate Members). The COVID-19 pandemic took front and centre during the webinar, with discussions highlighting the tension between the physician's duty to the individual patient and to society, as well as the ethical duty of the physician to help in emergency situations and how their duties are directly impacted (e.g. shortages of protective equipment).

The workgroup continued to finetune the language of the existing draft in regular virtual meetings, leading up to the public consultation held in May 2021. The public consultation represented an important opportunity

for the workgroup to gather feedback from the international medical ethics community and assess whether the revision was heading in the right direction. Notably, there was a tremendous response from physicians and ethics experts throughout the world, particularly with regards to the paragraph focused on physician conscientious objection. At the time, the paragraph called for an objecting physician to ensure undelayed continuity of care through effective referral. This clause was met with resistance among some physicians and medical organisations, who called for stronger protection of the physician's right to exercise conscience and rejected the wording on the grounds that a physician who morally objects to a certain intervention might see such a referral as an act of complicity. Due to the volume of comments received on this one paragraph, the workgroup decided to postpone further in-depth discussion on this issue until a dedicated in-person conference could be held.

After reviewing feedback received during the public consultation in three virtual meetings, the workgroup developed and circulated a revised draft version to WMA constituent members for comments. Thereafter, the workgroup carefully assessed each comment received from members, before developing and sharing a revised draft with the MEC, and subsequently the Council, requesting approval to use the draft version as the basis for further discussion. While preparations were underway for the final regional meetings, the workgroup held a virtual meeting with CONFEMEL members to offer a forum to provide further context for submitted proposed content revisions of the Code. Following this discussion, the workgroup incorporated some proposed revisions into the draft, including a clause on the physician's duty to never participate in or



facilitate acts of torture.

In March 2022, the latest revised draft was presented at the 14th World Conference on Bioethics, Medical Ethics and Health Law, which was held in Porto, Portugal. In April 2022, at the WMA Council session, which was held in Paris, France, the MEC and Council approved the revised version for use as the basis for discussion in the remaining regional meetings. As many travel restrictions due to the COVID-19 pandemic were lifted in mid-2022, the WMA supported regional meetings in Asia, graciously hosted by the Medical Association of Thailand in Bangkok, and Africa, generously hosted by the Nigerian Medical Association in Abuja. Major discussion topics at both meetings included patient autonomy and informed consent, the duty to share knowledge, the duty to help in medical emergencies, the duty to report unsafe working conditions, violence against physicians and health personnel, and other unsustainable stress factors. Conference attendees reviewed each paragraph and provided their assessments, which were submitted to the workgroup for careful review.

Between these two regional meetings, the Indonesian Medical Association hosted a high-level two-day dedicated conference on physician conscientious objection, which brought together local and international experts in Jakarta to analyse what had become the most contentious paragraph in the revised ICoME draft. Professor Wiesing provided an overview on addressing physician conscientious objection in a pluralistic society. Dr. Henry Okwukenye (Medical Council of Nigeria) called attention to the unique implications of physician conscientious objection in resource poor settings. Professor Angela Ballantyne (University of Otago, New Zealand) presented on

mandated referrals or other limits to physician conscientious objection. Dr. Alberto Giubilini (Oxford Uehiro Centre for Practical Ethics, United Kingdom) defended the argument against conscientious objection in the medical profession. Dr. Daniel Sulmasy (Kennedy Institute of Ethics, United States) countered with a presentation in defense of permitting physicians with a moral objection to an intervention permitting physicians not to refer patients.

A more moderate approach to physician conscientious objection was presented on the second day of the meeting, followed by an in-depth panel discussion. Professor Robert Card (State University of New York Oswego, United States) and Professor Mark Wicclair (University of Pittsburgh Center for Bioethics and Health Law, United States) added to the spectrum of perspectives on this contentious issue with their presentations. WMA members contributed insightful responses, including Leah Wapner (Secretary General, Israeli Medical Association), Dr. Jung Yul Park (Chair, WMA Finance and Planning Committee), Dr. René Héman (President, Royal Dutch Medical Association, Netherlands), Dr. Patrice Harris (Past President, American Medical Association). Also, Dr. Marit Hermansen (Chair, WMA Medical Ethics Committee), Dr. Mvuyisi Mzukwa (Chair, Board of the South African Medical Association), and Dr. Kar Chai Koh (President, Malaysian Medical Association) helped moderate and chair the meeting. Workgroup members then held a hybrid meeting to share their first impressions of the meeting outcome.

In July 2022, the latest revised draft was presented during a session at the World Congress of Bioethics in Basel, Switzerland. Later that month, the

workgroup held an extensive virtual meeting to develop a new compromise draft of the conscientious objection paragraph for the final regional meeting in Washington, D.C., which offered one final evaluation of the revised ICoME draft.

In August 2022, this final meeting, hosted by the American Medical Association in Washington, D.C., featured an impressive lineup of the world's top medical experts, including Professor James Childress (University of Virginia, United States; co-author of "Principles of Biomedical Ethics"), Dr. Susan Bailey (Past-President, American Medical Association) as well as Professors London, Sulmasy, and Wiesing, who had presented on the ICoME draft in previous meetings. The meeting was co-chaired by Dr. Jesse Ehrenfeld (President-Elect, American Medical Association) and representatives of the Council on Ethical & Judicial Affairs (CEJA), which is responsible for maintaining and updating the American Medical Association's Code of Medical Ethics. After incorporating feedback from this workgroup's meeting, the final draft was circulated among WMA constituent members, and then submitted to the MEC with a request to forward the document to the Council and, upon approval, to the General Assembly for adoption.

The extensive and inclusive global effort that contributed to the preparation of the revised ICoME, led by an engaged workgroup, was rewarded with the unanimous adoption of the document at the WMA's General Assembly in October 2022 in Berlin. The final discussions and approval of the document were accompanied by a high-profile scientific session focused on "Medical Ethics in a Globalized World", moderated by Dr. Robert Golub (Executive Deputy Editor, JAMA), and featured presentations

by Professor Childress and Professor Tom Beauchamp (co-author of “Principles of Biomedical Ethics”), workgroup member Professor Raanan Gillon (Professor of Medical Ethics, Imperial College London, United Kingdom), Professor Ames Dhai (Chair, UNESCO International Bioethics Committee), Professor Wiesing, and Dr. Helen Eboreime (Director of Medical Services, Edo State Ministry of Health, Nigeria). Responses were received from Kawaldip Sehmi (CEO, International Alliance of Patient Organizations) as well as representatives of the Japan Medical Association, Brazilian Medical Association, Chinese Medical Association, and Kuwait Medical Association.

With the completely revised Code, the WMA’s advocacy work will certainly continue with intensified and concerted efforts to increase the global visibility of the ICoME, by translating the Code into other languages, citing the Code in other policy and literature documents, and applying this Code as a blueprint for national codes of conduct, where appropriate.

**Acknowledgments:** The authors would like to thank to the workgroup members and observers, as well as the hosts of the regional meetings, who have devoted much time, energy, and expertise into this rewarding four-year revision process.

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Photo 1. Members of the ICoME revision workgroup, following the adoption of the document during the WMA General Assembly in October 2022, in Berlin, Germany. Credit: WMA

## WMA Declaration of Venice: Revision Process and Outcome



*Gerald E. Harmon*

Few situations in the lives of physicians are as difficult as dealing with the death of their patients. Maintaining the highest standards of medical care and ethical treatment at the end-of-life may present clinical, emotional, and even ethical dilemmas. Through its policy development process, the World Medical Association (WMA) seeks to guide and inform physicians on this topic as well as other difficult subjects in order to ensure the highest ethical and clinical standards for medical care.

As stated in the WMA Code of Medical Ethics, “the primary duty of the physician is to promote the health and well-being of individual patients by providing competent, timely, and compassionate care in accordance with good medical practice and professionalism.” As such, physicians have an obligation to relieve pain and suffering and to promote the dignity and autonomy of dying patients in their care. The WMA Declaration of Venice (<https://www.wma.net/policies-post/wma-declaration-of-venice/d-1983-01-2006-over/>) and the WMA Declaration on End-of-Life Medical Care (<https://www.wma.net/policies-post/wma-declaration-of-venice/>) are two such policies that instruct on and reinforce these core principles.

### Revision History of the WMA Declaration of Venice

The WMA Declaration of Venice on Terminal Illness (<https://www.wma.net/policies-post/wma-declaration-of-venice-on-terminal-illness/>) was scheduled to undergo the customary 10-year revision process in 2016. At this time, it was decided to hold the revision until the related Declaration on Euthanasia and Physician-Assisted Suicide (<https://www.wma.net/policies-post/declaration-on-euthanasia-and-physician-assisted-suicide/>) was revised. In October 2019, the revised WMA Declaration on Euthanasia and Physician-Assisted Suicide was adopted with new wording that required a revision and adaptation of the existing the Declaration of Venice on Terminal Illness. The WMA Secretariat made minor edits to the Declaration of Venice to align it with the WMA's updated position on euthanasia.

However, the initial modifications were deemed incomplete. In February 2021, the WMA Policy Review Committee recommended that a third policy, the WMA Declaration on End-of-Life Medical Care, undergo revisions and be combined with the WMA Declaration of Venice. The Council asked the American Medical Association (AMA) to manage this consolidation. Due to its comprehensive nature, it was determined that the WMA Declaration of Venice should remain as the “base” document with incorporated elements of the end-of-life care policy. The consolidated draft was first circulated in late 2021, with additional language on palliative care from the WMA's end-of-life policy and a paragraph on sedation to unconsciousness, a topic that had not previously been addressed.

There was a significant amount of disagreement about the terminology used in the draft, and several members believed that the documents should not be combined. A well-considered point was made that pain management is not exclusive to the end-of-life or for terminal illness. Indeed, palliative care should be routinely available not only to dying patients, or those in the end-stage of terminal conditions, but also to patients suffering with chronic, debilitating diseases that are not immediately life threatening, but whose symptoms can and should be addressed.

The AMA again revised the draft based on the comments received, noting the objective of resolving issues with presumed consent in organ donation. A revised draft based on comments was submitted at the WMA General Assembly held in Berlin in October 2022. The title of the Declaration was then updated to reflect its broader applicability. Retitled as the “Declaration of Venice on End-of-Life Medical Care”, the revised draft was then adopted by the WMA General Assembly. The previous Declaration on End-of-Life Medical Care was then rescinded and archived.

We would like to thank everyone who submitted comments. We believe that the most important elements were included in the new Declaration and that the WMA's objectives were accomplished. It is our hope that the revised WMA Declaration of Venice will provide sound guidance to all physicians for years to come.

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## Update on the Revision of the WMA Declaration of Helsinki

On 5 April 2022, the 220th Council Session of the World Medical Association (WMA) approved a motion by the American Medical Association (AMA) to form a Workgroup to revise the Declaration of Helsinki (DOH).

The Chair appointed the workgroup, made up of constituent members from the United States (Chair), Bangladesh, Belgium, Brazil, China, Denmark, Finland, Germany, Israel, Italy, Japan, Malaysia, the Netherlands, Nigeria, South Africa, Taiwan, United Kingdom, Uruguay, the Vatican, and the Associate Members. The workgroup is unusually large, but justified by the importance of the Declaration and its content. The workgroup is expected to operate in subgroups, including a core group responsible for drafting new language. The first organisational meeting was held by videoconference on 3 August 2022, and was led by the Chair, Dr. Jack Resneck, Jr.

### Rationale for Revision

The DOH was last updated in 2013, and it was due for a routine revision in 2023. Given the importance of this policy and the attention it has received in the context of vaccine testing during the coronavirus disease 2019 (COVID-19) pandemic, it was decided that the Declaration should be reviewed and revised, if necessary, on a schedule beginning one year early. The Declaration requires WMA's regular attention to address new topics and schools of thought and situations, and this revision demonstrates ownership by the WMA.

Some of the areas suggested for revision and new topics to consider include:

- Patient driven research
- Potential undue patient pressure
- "Open Science" approaches
- Inclusiveness of research
- Prevention trials and the concept of "vulnerable" groups vs. "concerned" groups
- Real-world data use for control groups
- Virtual patient data
- Coherency between the DOH and the Declaration of Taipei
- Adaptive trial designs
- Branched trial designs
- Dynamic consent
- Challenge trials, especially given the COVID-19 pandemic
- Compassionate use and misinterpretation of the current DOH to justify the use of questionable medicines

### Terms of Reference

The workgroup is encouraged to invite participation by WMA partner organisations such as the Council for International Organisations of Medical Sciences (CIOMS), International Federation of Associations of Pharmaceutical Physicians and Pharmaceutical

Medicine (IFAPP), and other international organisations like the WHO Office of Compliance, Risk Management and Ethics (CRE), and the Council of Europe.

Under its guiding Terms of Reference, the workgroup is invited to:

- Prepare a workplan and schedule for the revision process, which is expected to last until October 2024.
- Present findings and suggest areas for revision and amendments to the Medical Ethics Committee (MEC) at its regular meeting in April 2023.
- Prepare an amended draft for discussion in Council and later for discussion with the public, experts, scholars, and interested organisations.
- Synthesise comments received and produce a refined draft for the Council.
- Hold open discussions in multiple regional conferences with interested individuals and organisations and produce a final draft for the MEC to accept and present to the General Assembly for adoption.

### Regional Meetings

The first regional meeting of the workgroup was held in conjunction with a regional expert meeting from 9-11 December 2022, in Tel Aviv, Israel, and was sponsored by the Israel Medical Association. Invited experts contributed information and participated in open discussions on the purpose of codes of medical ethics and the history of the DOH revision process. Later, experts from Israel

and Finland presented talks, and the meeting shifted to the topics of big data and augmented intelligence, with particular focus on consent, use of patient data, and risks to participants.

In the workgroup meeting, topics emphasised for discussion were the relationship between the Declaration of Taipei and the DOH, and the aforementioned expert presentations on consent, patient data, and risks to participants. The workgroup also exchanged views on the goals and process for a public consultation period later in 2023.

The second regional meeting took place at the invitation of the Brazilian Medical Association (Associação Médica Brasileira, AMB) from 24-25 February 2023, in São Paulo, Brazil.

The regional meeting focused on the use of placebo in clinical trials and included speakers from Latin America, CIOMS, and the United States Food and Drug Administration. Its program primarily focused on the history of previous DOH revisions and the use of placebo, the role that placebo plays in clinical trial design, and the ethical issues involved. The final day of the meeting also explored commonalities and differences across geographies and national authorities on the use of placebo, as well as how to ensure the DOH and CIOMS guidelines are well aligned on the topic.

The associated workgroup meeting discussed where the DOH stood on the use of placebo in relation to other partners and ethics documents,

potential edits that might clarify its use of placebo language, and how potential edits could be interpreted and received by the DOH's global audience if implemented. The meeting also agreed upon the revision's scope of topics and issues, as well as next steps to offer suggested edits following the completion of the two regional meetings.

The next regional meeting will be hosted by the Danish Medical Association on 21-22 September 2023, in Copenhagen, Denmark.

*Submitted by the AMA Office of International Relations*

## Proposed Revision of the WMA Statement on Violence in the Health Sector by Patients and Those Close to Them



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According to the World Health Organization, between 8% and 38% of health professionals are victims of physical violence during their careers and even more are victims of threats or verbal aggression [1]. The professions at higher risk are those involved in direct patient care such as nurses, paramedics, and emergency room staff. In the United States, recent studies have revealed that the incidence of violence in health care facilities has increased by more than 60% between 2011 and 2018 – from 6 to 10 intentional injuries by another person per 10,000 full-time health professionals [2]. The U.S. health care and social service industries have experienced the highest rates of injuries caused by workplace violence, and employees are five times as likely to suffer a workplace violence injury than those in other workplace

environments [2].

Since the start of the coronavirus disease 2019 (COVID-19) pandemic, violence against health personnel has increased worldwide [3]. One research study concluded that although all participants reported verbal aggression, a total of 58% of the respondents perceived an increase in violence against health professionals, and 9% said that such violence rates had not occurred before the COVID-19 pandemic [3]. Also, an estimated 82% had experienced threats and physical aggression, 27% reported being threatened by weapons, and 21% reported the death or severe injury of a health professional or patient [3].

In Israel, about 3,500 cases of violence against health professionals – 20% as

physical violence and 80% as verbal violence – are reported every year [4]. One national survey conducted among physicians and other health personnel in Israel found that 80% of respondents reported that they had experienced some form of violence in their workplace, and 75% had experienced verbal violence at least once a year [4]. Another study conducted in a general hospital reported that one-third of hospital personnel reported experiences of physical or verbal violence within the six months preceding the study [4]. According to the Association of American Medical Colleges, the reasons for violence against health professionals include patients' anger and confusion about their medical conditions and care, patients' dissatisfaction and frustration amid staffing shortages, mental health disorders, political and social issues, and perceived gender and race discrimination [5].

### WMA Statement on Workplace Violence in the Health Sector

Violence against health professionals cannot be tolerated, as there are clear negative impacts on the physical and psychological well-being of staff, including emotional stress, anger, helplessness, and anxiety. In addition, it affects their job motivation and compassion when interacting with co-workers as well as patients and their families. Consequently, violence can impair the quality of care and cause significant economic damage to health care systems.

In October 2010, the Israeli Medical Association (IMA) first proposed the draft World Medical Association (WMA) Statement on Workplace Violence in the Health Sector for review and discussion by the WMA

members. The statement, which was formally adopted by the 63rd WMA General Assembly in Bangkok in October 2012, was the result of the concerning trend of increasing violence against health professionals by patients and their family members [6]. Since its adoption, however, data have shown that violence has not ebbed, and if anything, has worsened. Furthermore, over the last decade, the widespread development of social networks has led to observations of new threats – harassment and verbal violence on the Internet.

To address this gap, the IMA proposed a revision of this original statement, and the revised statement was adopted during the 73rd WMA General Assembly in Berlin in October 2022. This statement applied the broad WHO definition of workplace violence: *“The intentional use of power, threatened or actual, against another person or against a group, in work-related circumstances, that either results in or has a high degree of likelihood of resulting in injury, death, psychological harm, mal-development, or deprivation”* [6]. This statement also calls for taking steps to create a violence-free cyber-environment, such as strengthening policies to protect user data, ensuring the ease and accessibility of submitting reports of violence, and engaging law enforcement for proper legal action when warranted.

Notably, the WMA Statement on Workplace Violence in the Health Sector expresses the WMA’s firm position against any form of violence against health personnel and facilities. Such acts include but are not limited to, cyber violence, physical violence or verbal violence by co-workers, aggressive behaviours exhibited by patients and companions, and acts of malicious intent from individuals in the general public. Therefore, the WMA calls on its constituent

members, health authorities, and other relevant stakeholders to support a collaborative approach to develop appropriate policies (e.g. laws and regulations), prepare relevant protocols for situations of violence, build education and training programs to raise public awareness, enhance security within health care facilities and support for victims, and conduct investigations and data collection through appropriate reporting systems.

The WMA statement intends to help support national authorities’ and national medical associations’ ongoing efforts to combat violence against health professionals. Some countries, including Australia, Canada, United Kingdom, and the United States, have taken measures aligned with the WMA statement to enhance protection for health professionals. First, in the state of Victoria, Australia, according to a legislative amendment from 2018, courts must impose a custodial sentence on any offense against injuring doctors or nurses [7]. Second, Canada announced a tougher approach in 2021, where any intimidating conduct against health professionals or any obstruction of access to health care facilities may result in imprisonment of 10 years [8]. Third, the United Kingdom launched the “zero-tolerance” approach in 2018, following the Assaults on Emergency Workers Act 2018, which doubled the maximum prison sentence for assaulting an emergency health personnel from six months to one year [9]. Finally, the United States has developed and implemented strategies of risk identification and assessment as well as mental health support for health professionals who have suffered from acts of violence [10].

Furthermore, the WMA statement may play a dual role in global efforts

to address the issue of violence and reduce risk among health professionals. As it aims to increase community awareness of this issue and the need for timely solutions, it also serves as a general framework or “blueprint” for guiding policy makers in the development of local and national strategies to fight violence against health professionals. The adoption, implementation, and expansion of such policies can ultimately prioritise health and well-being of the medical profession.

## The Role of the Israeli National Medical Association

The IMA actively engages in ongoing national campaigns to raise public awareness among policy makers and the general community, in efforts to lead systematic action against violence in the health care system. The WMA Statement on Workplace Violence in the Health Sector has an important role in encouraging the implementation of necessary measures on global levels to end violence across health institutions. These local efforts, when combined with more global efforts, have increased impact on the problem of violence worldwide.

The IMA has successfully promoted two national legislative initiatives through deliberation and cooperation with Israeli legislators and ministries. First, the 2011 legislation for preventing violence in health care institutions supported the institution’s role to prevent aggressors’ entrance to their premises on certain conditions [11]. In addition, a 2010 amendment to the Penal Code expanded the punishment for attackers of medical personnel [11].

The IMA has also participated in an inter-ministerial committee on violence in health institutions that published general recommendations for the government, police system,



and medical institutions for the eradication of violence in health care settings. Among other things, these recommendations promoted collaborations with the police department, in order to formulate guidelines for handling incidents of violence across the health care system. Notably, the IMA operates a call centre for physicians who experience violence and encourages physicians to report and file complaints on incidents of violence [12].

Throughout 2022, the IMA promoted the theme, “The time has come for action”, in a community campaign that increased awareness about reducing violence against medical staff. The association declared a labour dispute and supported a physicians’ strike in protest of escalating violence against physicians and other health personnel [12]. These actions aimed to spur the government to take the necessary measures stipulated by the inter-ministerial committee and subsequent ministerial circular on prevention of violence in health institutions [13].

To date, however, although national leadership has discussed and agreed with an action plan to eradicate the rampant violence across health institutions, the financial and organisational resources have not yet been directed. Some pending measures include adding security guards in health care facilities and expanding their authority, establishing police stations in emergency rooms and psychiatric hospitals, placing cameras in hospitals and clinics, further promoting “zero-tolerance” legislation (e.g. imposition of significant fines), and training medical teams in managing violent behaviours of patients and their companions. The IMA continues to formulate new ideas and support further legislation that will assist in

reducing violence in the health care setting.

## Conclusion

Violence against health professionals continues to represent a widespread global phenomenon, and it has been on the rise since the start of the COVID-19 pandemic. Although some countries are implementing prompt actions against violence in health care systems, more robust national policies are needed to increase awareness of this issue. The IMA is convinced that national medical associations, with the support of the WMA, possess a key role in creating a safer and healthier workplace environment in our health care systems. We hope and believe that the adoption of the revised WMA Statement on Workplace Violence in the Health Sector will contribute to strengthening these important global efforts and fostering safe workplace environments for health professionals.

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## Safeguarding Patients' Rights through WMA Declarations



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Improving ethical consciousness among doctors within medical research and clinical practice has been one of the most important contributions of the World Medical Association (WMA). Previously, medical training was perceived as a sufficient ethical safeguard, and that ethics was unnecessary among doctors [1]. Here, we present a story which illustrates how key ethical principles were violated in Norway, resulting in devastating negative effects on the patient and his family. This example illustrates the importance of systematic work with ethics and human rights in medicine.

### Case Study of Bronchoscopy and Consent to Medical Examination

A child (first author) was admitted to a Norwegian sanatorium for tuberculosis in the 1950s (Figure 1). He was discharged from Oslo University Hospital after 11 months of hospitalisation, where he had minimal contact with his family according to hospital rules. His family lived in their own house in the countryside outside Oslo, and he had two brothers. Notably, he was the only family member who had contracted the disease.

At that time, bronchoscopy with a rigid tube was a common method to diagnose pulmonary diseases. For children, this procedure was conducted under full ether narcosis, but it could still be painful, risky, and with side effects. When the senior consultant at the sanatorium decided to perform the bronchoscopy, he wrote to the child's parents to obtain consent to conduct the procedure. The parents, who dreaded serious complications, did not give consent. Subsequently, the senior consultant communicated with their family doctor and asked her to persuade the parents for consent, stating that if they did not consent to the procedure, then the child would be discharged from the hospital and sent home.

However, for the parents, it was impossible to take the responsibility for a seriously ill child, so they eventually gave their consent for the procedure. The bronchoscopy was performed, and due to complications, the child became seriously ill with fever (over 39°C), vomiting, weight loss, and painful herpes zoster. His parents were very worried about the child's health and dissatisfied with the treatment that he had received at the sanatorium. Then, nine months after

the admission to the sanatorium and two months after the bronchoscopy, they transferred the child to the new paediatric department at the Oslo University Hospital.

### Research on Bronchoscopy on Children

In 1960, the senior consultant at the sanatorium published an article entitled, "Diagnosis and treatment of primary tuberculosis in children" (in Norwegian only), in the *Journal of the Norwegian Medical Association* [2]. The study consisted of 934 bronchoscopies conducted on 223 children from 1954 to 1960, where most of the children were examined more than once. The author did not elaborate on ethical dilemmas that used clinical findings in medical research. As the patient of our case study was examined on three occasions, it is important to note that the child's medical record had no trace of parental consent to include these clinical data in a research project.

### The Nuremberg Code – Declaration of Geneva

The first version of the Declaration of Helsinki was published in 1964. However, the Nuremberg Code from 1947 clearly states that in research, "The voluntary consent of the human subject is absolutely essential" [3]. We have systematically reviewed the *Journal of the Norwegian Medical Association* index from years 1947 to 1960, and we could not find the publication of the full version of the Nuremberg Code. This journal published reports from the WMA General Assemblies, but the 1948 version of the Declaration of Geneva was not published until 1958.

## Discussion

In the 1950s, the main medical resource for Norwegian physicians was the Journal of the Norwegian Medical Association. Although the Declaration of Geneva was not published in the Journal of the Norwegian Medical Association until 1958, the declaration builds on the Hippocratic Oath, which was well recognized among physicians in the 1950s. One quote from the Hippocratic Oath includes: "I will offer those who suffer all my attention, my science and my love. Never will I betray them or risk their well-being to satisfy my vanity" [4].

*Medical treatment and consent.* Threatening to discharge a seriously ill child from the hospital because the parents did not provide consent for an intervention with serious side effects and few positive consequences was a violation of basic medical ethics. The parents felt that they did not have any choice. New tuberculosis treatment was introduced in the 1950s, notably the continuous 24-month treatment of the "triple therapy" consisting of streptomycin, para-aminosalicylic acid, and isoniazid [5]. Mortality rates were high without this life-saving treatment. According to the Norwegian Ministry of Health, 95 children under the age of 15 died of tuberculosis in the five years period from 1951 to 1955 [6]. In our case study, if the child had been discharged home, then his health situation would probably have worsened as he would not have had access to the new treatment.

*Combining clinical work and medical research.* Until the late 1950s, the difference between clinical practice and research was often poorly understood by physicians. Physicians could "try out" new interventions in their practice without having

to follow today's research ethics requirements such as informed consent. The Nuremberg Code, resulting from unethical research conducted on prisoners during the World War II concentration camps, represents a set of rules that require informed consent from subjects participating in medical research [7]. Even if Norwegian physicians had heard of the Nuremberg Code, they probably associated it only with evil medical experiments.

Since the late 1940s, robust frameworks for patient's rights have been developed. In 1948, the WMA prepared the Declaration of Geneva, which was adopted by the 2nd WMA General Assembly, which described general ethical rules in medicine. In 1964, the WMA Assembly adopted the Declaration of Helsinki, regulating medical research on human beings. The WMA has constantly updated these two declarations in response to new clinical and surgical technologies as well as society's expectations of patients' and research subjects' rights. Over time, history has shown the importance of the WMA's work in medical ethics and human rights through the Declaration of Geneva (revised in 2017) and the Declaration of Helsinki (under revision). Furthermore, national member associations hold the responsibility to disseminate these declarations and statements adopted by the WMA among their members.

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## Evidence-Based Medicine: The Role of Education to Promote High-Quality Clinical Practice



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Evidence-based medicine (EBM) has an indispensable role in medical education and training across global settings. EBM was formally defined by Sacket et al. (1996) as “the conscientious and judicious use of current best evidence from clinical care research in the management of individual patients” [1]. It prepares and enables health care professionals

to think critically and utilise all available scientific information and tools toward shared decision-making between health professionals and patients [2]. Some examples include clinical practice guidelines and recommendations on patient safety, risk of surgical procedures, and clinical outcomes, including the length of hospitalisation or surgery, quality of life, pain, weight loss, and death. These resources can guide future practice by preparing the health workforce with robust tools to conduct comprehensive individual health assessments, enhance clinical diagnosis and management, and ultimately promote high-quality, patient-centred health care [3,4].

Applying EBM in clinical practice must be guided by an open, social, and transparent decision process, which can capture confidence levels of risk assessments [5]. The educational methodology is based on the general concept of clinical inquiry and its subparts, such as the detailed information about patients and interest populations, types of intervention or prognostic indicators, and relevant outcomes [6,7]. The judicious selection of the scientific evidence is not limited to the qualitative assessment of methodologies in retrieved studies (internal validation), but rather is mediated by identifying barriers to translate research findings to daily practice (external validation) [8]. This approach demands that health professionals understand medical practice, patient care, and the existing conflicts and dilemmas among participating stakeholders.

However, the current global understanding and application of EBM in clinical and community practice has been challenged by

two factors: workplace schedules and stakeholders’ interests. First, health professionals experience rapid information sharing and institutional pressure to complete clinical and research tasks. They have limited time to conduct comprehensive literature reviews and participate in journal club activities that foster critical analyses of current practices. For example, due to the surge in ambulatory and hospitalisation care during the coronavirus disease 2019 (COVID-19) pandemic, health professionals’ shifts were physically and mentally exhausting, leaving minimal time to keep up-to-date with the scientific literature.

Second, sharing evidence-based information for diverse audiences and settings may be influenced by stakeholders’ interests. Audiences may be resistant or untrusting upon learning new information or unaware that scientific findings are constantly changing and updated with new research. For example, public health messaging on COVID-19, disease transmission, utilization of facial masks, and vaccinations was confusing and even debated on public platforms (e.g. community townhalls, political debates).

Although clinical practice guidelines aim to streamline health care service delivery, health professionals do not always incorporate these evidence-based recommendations in practice. This heterogeneity, which can significantly impact decision-making and clinical outcomes, has resulted from a new global movement that incorporates marketing principles with rapid information sharing. It fosters an environment where priorities and objectives are poorly outlined, epidemiologic assessments on health risks for marginalised

populations are limited, and health initiatives are not patient-centred. Notably, this movement is starkly different from the traditional approach, which focuses on reflection and critical thinking during the learning process [9].

The evidence-based learning experience, which does not limit expenditure for medicines and other materials (e.g. prosthetic devices, technological instruments), compels us to evaluate the recommended health procedures and practices and their impact on clinical outcomes. In clinical practice, health professionals regularly analyse whether they should utilise the best available evidence in their diverse tasks. If they understand that the study findings are aligned with patients' health status, then they may promote this evidence for the clinical management of their patients [10].

As next steps, global medical institutions can use asynchronous and synchronous formats to develop EBM education initiatives that increase awareness of EBM concepts for diverse audiences within the health system. EBM can support original work to prevent plagiarism, timely patient education to combat misinformation, physician-patient decision-making to minimise patriarchal care, and patient-centred care to improve health outcomes.

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## Health in Climate Change at the COP27



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The 27th Conference of Parties (COP27) to the United Nations Framework Convention on Climate Change (UNFCCC) was held in Sharm El Sheikh, Egypt, from 6-18 November 2022. Eight physicians from South Africa, Egypt, India, Finland, Austria, Sweden, and the United States represented the World Medical Association (WMA) at

the COP27. Dr. Ankush Kumar Bansal (United States) and Dr. Lwando Maki (South Africa) led the delegation during the first and second weeks, respectively. The delegation represented WMA's views and position toward climate change, as expressed through the adoption of WMA climate change and environment policies [1-7].

Delegates followed the negotiations closely throughout the COP27 and focused on four key areas of health impacts:

- Nationally Determined Contributions (NDCs)
- Financing and capacity-building
- Loss and damage including review of the Warsaw International Mechanism for Loss and Damage (WIM)
- Mitigation and adaptation

In addition to the COP27 negotiations, delegates also attended the daily health community debrief and strategy meetings as well as several health-related side events organised by United Nations



Framework Convention on Climate Change (UNFCCC), World Health Organization (WHO), and health-related non-governmental organisations. With WMA communications support, they led a social media campaign on the Twitter social media platform, where delegates shared highlights and key messages from the COP27 with WMA members.

## Health-Related Side Events

In collaboration with the Global Climate Health Alliance, WMA members successfully organised the “Building Healthy Resilient Health Systems” panel. On this panel, Dr. Lwando Maki (South Africa) described the health impacts of climate change as witnessed by health professionals. Dr. Lekha Rathod (India/Netherlands) attended the “Hospital-based Sustainability Practices” side event, which emphasised the urgency for health care institutions to implement mitigation and adaptation plans to decarbonize and achieve carbon neutrality. Session panellists shared the Scope 1 on direct on-site emissions (e.g. green health systems, climate-sensitive patient care, climate ready public health infrastructure, community climate resilience) and Scope 2 on emissions from purchased electricity.

## Advocacy and Plenary Statements Supported by Member States

During the first week, WMA delegates met with Dr. John Balbus, an internal medicine and public health physician who serves as the Interim Director of the Office of Climate Change and Health Equity in the U.S. Department of Health and Human Services, as well as three assistants working in global affairs in the U.S. Department of State. Dr. Balbus, who works specifically on

the intersection of climate change and health, with a particular focus on health and climate equity, emphasised three specific points. First, Dr. Balbus promoted the need for national delegations, policymakers, and the COP presidency to apply the health lens on these climate discussions. He shared case studies of how climate change specifically affects human health and health-seeking behaviours, which can help government officials convince policymakers to support urgent and substantive policy changes to climate change policies in all fields (e.g. accessibility and delivery of care, transportation, food systems, forestry). Second, he requested that the medical community brainstorm on specific solutions to the climate crisis through research, pilot projects, and policy proposals and collaborate with global counterparts to share this information with policymakers. Finally, he recommended that the medical community share their voices on emerging health issues in their geographic regions and speak

with a unified voice. After all, if the climate discussions are not considered a priority, then policymakers will not prioritise these environmental health issues.

During the second week, WMA delegates followed the opening ceremony of the high-level COP27 segment, noting that only some parties focused on health issues. The delegation had engaged with several member states from all WHO regions and advocated for health. Notably, Dr. Schauer-Berg and Dr. Rocksén held a meeting with the WMA delegation from Austria – Dr. Leonore Gewessler, Minister of Climate Action, Environment, Energy, Mobility, Innovation and Technology, and Dr. Helmut Hojesky, head of the Austrian national delegation. They discussed the health impacts of climate change on patients with a special focus on the effects of heat waves, health care service delivery, and preparedness of the Austrian health care system as well as the inclusion of health in



*Photo 1. The COP27 delegation during week 1 included WMA members (Dr. Ankush Bansal, Dr. Muba Hassan, Dr. Ahmed Taba Aboushady) with Dr. John Balbus (U.S. Office of Climate Change and Health Equity) and three members of the U.S. Department of State. Credit: WMA*



the Austrian national adaptation plan. During the COP27 plenary, delegates stressed that small island states will suffer dire consequences if climate change continues its current trajectory. Member States of Tuvalu, Antigua, and Barbuda vocalised the Loss and Damage fund and the need for a forceful transition to carbon neutrality.

## COP 27 Key Outcomes

As a high-level political meeting with environment ministers, the COP included essential discussions and negotiations for global coordination to address climate change. As a result,

delegates discussed seven topics at length, including the loss and damage fund, Santiago Network, Warsaw International Mechanism (WIM), carbon markets, failure to phase out fossil fuels, involvement of youth and intergenerational equity, and a right to a clean, healthy, and sustainable environment

## Loss and Damage Fund

Although certain parties held a consistent voice for the establishment of a fund to address loss and damages, there were intense negotiations between parties from 18-20 November 2023. The outcome was

the establishment of a new fund for loss and damages, with a transitional committee that would make recommendations for adoption at the COP28.

## Santiago Network

The Santiago Network was formed at the COP25 in Madrid, with the goal of helping low-income countries to identify technical needs and connect with technical experts and providers who can address technical needs. At the COP27, there was a consensus on the institutional arrangements to operationalise the Santiago Network.

## Warsaw International Mechanism

The WIM was established in 2013, with the goal of coordinating and encouraging dialogue on loss and damage. There was no decision made on taking the WIM forward by the parties, as parties were unable to form a consensus on whether it should be under the COP or Paris Agreement governance.

## Carbon Markets

Carbon markets, which can be bought and sold between countries or entities, are defined as a system of credits based on carbon emissions that countries or entities can use to emit carbon emissions. Although the use of carbon credits was transparent, delegates changed the text to allow for confidentiality around the movement of carbon credits.

## Failure to Phase Out Fossil Fuels

Although a total of 80 countries, led by India, supported the call to phase out fossil fuels, parties failed to raise the mitigation ambitions regarding fossil fuels including coal. Although non-profit and non-governmental organisations, academic, and climate activist communities have held



Photo 2. The COP27 delegation during week 2 included WMA members, Dr. Lwando Maki, Dr. Lars Rockén, Dr. Johanna Schauer-Berg, Dr. Lehka Rathod, and Dr. Mahesh Bhatt (left to right). Credit: WMA

consistent voices to phase out fossil fuels, parties used wording such as “accelerating efforts towards the phase-down of unabated coal power and phase-out of inefficient fossil fuel subsidies”. Thus, the goal of phasing out fossil fuels was not accomplished at the COP27.

## Involvement of Youth and Intergenerational Equity

The COP27 had a youth envoy for the first time, which recognized the key role of youth representatives from country delegations and the commitment for the appointment of a youth envoy for future COPs. Members of the WMA delegation from the Junior Doctors Network (JDN) were proud to have represented young physicians from across the world at the COP27. JDN members are planning future activities that address the climate crisis.

## Right to a Clean, Healthy, and Sustainable Environment

Despite facing pushback from some parties, the “right to a clean, healthy, and sustainable environment” phrase, was included on the cover of the final document. Notably, this term was recognised by the UN General Assembly in July 2022. This phrase, together with the “right to health” phrase, are both located in the final document of the COP27 proceedings, as a fruitful outcome of the advocacy work of the health community at the COP27.

## Way Forward to the COP28

Since the COP26, the global health community, including the WMA, has successfully encouraged national delegations to incorporate health in climate negotiations during intersessional meetings. The COP27 was the first year that these discussions extended beyond linking the effects of

climate change to health as a justified priority for action, by highlighting the specific harms, causes, and potential solutions. One positive step forward at the COP27 was additional committee meetings and negotiations related to the Koronivia Joint Work on Agriculture (KJWA). The KJWA examines food systems, nutrition, security, health impacts related to loss and damage, local and indigenous communities, resilient health systems, emissions with respect to carbon markets and Article 6, and gender issues and health. Incorporating such examples as KJWA into these COP27 discussions – and future COP28 proceedings – will emphasise the urgency and importance of climate action as well as support ongoing advocacy efforts by the WMA and the wider health community.

The COP28 will be held in Dubai, United Arab Emirates (UAE) from 30 November 30 to 12 December 2023. Currently, Dr. Sultan Ahmed Al Jaber, the COP28 president-designate, and H.E. Mariam Almheiri, the UAE Minister of Climate Change and Environment, have pledged to include health as a top priority item on the COP28 agenda. To prepare for the COP28, the WMA delegation proposes the following actions:

1. To develop and plan lectures and panel discussions with collaborating organisations, which can describe the health impacts of climate change across geographic regions and what physicians are observing due to climate change (e.g. hurricanes, typhoons, excessive heat, drought, nutrient depletion from soil, vector-borne diseases)
2. To organise and plan the promotion of previous and current WMA statements and declarations on climate change to national delegations

3. To expand the WMA Environment Caucus activities and membership, which can foster new ideas, encourage collaborative projects, and leverage expertise among WMA members
4. To seek relevant delegations in order to facilitate advocacy work during the COP28.

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## WMA Members Share Reflections about Earth Day 2023



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Founded in 1970, Earth Day (<https://www.un.org/en/observances/earth-day>) is celebrated on April 22, as a reminder of the delicate balance with nature and the need to conserve our natural resources [1]. Each year, the global community organizes in-person events, press releases, and social media campaigns to raise awareness of the need to adopt environmentally sustainable practices. Over the past decade, leading health organizations and institutions have propelled climate action – incorporating the One Health concept [2] – to be placed as a forefront issue on national policy agendas. However, since the effects of climate change have unequally affected global communities, namely marginalized populations and low-income countries, it is essential to develop comprehensive interventions to ensure inclusivity, equity, and access to community health services for all global citizens [3].

The World Health Organization (WHO) has recognized climate action and the health effects of climate change and building public trust as two of the 13 urgent health needs [4]. Professional associations like the World Medical Association (WMA), the World Veterinary Association (WVA), and the American Public Health Association (APHA) have dedicated plenary sessions and scientific symposia at conferences to discuss climate mitigation and adaptation plans. The Conference of the Parties to the United Nations Framework Convention on Climate Change (COP) – with the COP27 (2022) held in Egypt and the COP28 (2023) forthcoming in the United Arab Emirates – experts have prioritized climate change as part of national and international priorities of the 2030 Agenda for Sustainable Development.

Since the 17 Sustainable Development Goals (SDGs) are directly linked to the One Health concept, incorporating information from the *New England Journal of Medicine* (e.g. Fossil-Fuel Pollution and Climate Change Series), *Lancet* (e.g. Countdown on Health and Climate Change), and the One Health High-Level Expert Panel (e.g. *One Health Joint Plan of Action*, 2022–2026) can offer a holistic framework to address emerging health threats [5–7]. National policies, guidelines, and actions will be indispensable to accelerate climate action and ensure environmentally sustainable action for a healthy planet Earth. In this article, physicians from seven countries – Argentina, Dominican Republic, Latvia, Nigeria, Spain, Trinidad, and Turkey – highlighted insightful reflections about Earth Day activities and relevant national policies that promote environmentally sustainable practices across their countries.



## Argentina

Argentina, with 44 million residents, is recognized as the second largest nation in South America and fourth largest nation in the Americas region. This country has borders with Chile (west), Bolivia and Paraguay (north), and Brazil and Uruguay (northeast). The Argentinian landscape is diverse and ideal for nature enthusiasts, with five major geographies – rainforest (northeast), plains (central), grasslands (central), plateau of Patagonia (southern), and Andes Mountains (western).

Over the past decades, Argentina authorities have reported the effects of climate change across this national landscape. As the northern territories have an estimated increase of 0.5°C since 1960, with a smaller increase in central territories, more intense rainfall and resulting flooding have occurred [8]. With the biodiversity crisis, driven by environmental degradation and habitat loss, bird and mammal species have become extinct [9]. Hence, national leaders have participated in a rewilding program, supported by the Fundación Rewilding Argentina in 1998, as well as prepared official communications to the UN Frameworks Convention on Climate Change (UNFCCC) on national mitigation and adaptation measures to climate change [8,9]. In 2021, the Law No. 27.621 entitled, the *Implementation of Integral Environmental Education in Argentina (Ley para la Implementación de la Educación Ambiental Integral en la República Argentina)* was adopted, which aims to guarantee the right to free, federal, non-partisan, and continued environmental education for all public and private academic institutions and promote environmental sustainability and conservation to combat the climate crisis [10].

As health leaders of the Medical Confederation of the Argentine Republic (Confederación Médica de la República Argentina, COMRA) (<https://comra.org.ar/>), we celebrate International Earth Day, in efforts to raise awareness about the need to protect our natural environment and biodiversity, promote the management of efficient waste management, and prioritize the rational use of disposable materials in our medical offices and health institutions. We have observed the increased morbidity and mortality rates due environmental events (e.g. heat waves, droughts, wildfires, floods), geographic spread of vector habitats that increase risk of disease spread (e.g. dengue, malaria), and longer pollen seasons. As physicians, it is our responsibility to lead local and national efforts to coordinate conferences that present up-to-date scientific evidence on the state of our national and regional environments to other health professionals. We should collaborate to develop innovative messaging on how climate change can impact health and empower our local communities and Americas region.



## Dominican Republic

Representing the eastern two-thirds of the island of Hispaniola, the Ministry of Environment and Natural Resources of the Dominican Republic (DR) has a long history of promoting key legislation and educational activities that protect natural resources and encourage the public to adopt environmentally responsible and sustainable practices. Over the past two decades, DR leaders have supported the implementation of four significant community-wide activities. First, they developed the annual Environmental Fair as an opportunity for environmental organizations and companies to share products and services related to environmental sustainability as well as for scientists to hold scientific seminars about

biodiversity, climate change, and waste management. Second, they connected with primary and secondary school students by organizing national drawing and photography competitions on environmental themes and educational campaigns about conserving energy and water resources and recycling. Third, they endorsed ecological tourism (e.g. Eagle's Bay in Pedernales) and community participation in cleaning rivers and beaches (e.g. International Coastal Cleanup). Finally, they led the development of the Environmental Training Center (Centro de Capacitación Ambiental) of the Industry Association of the DR (Asociación de Industrias de la República Dominicana, AIRD), which offered capacity training exercises for business and industry leaders to promote environmentally sustainable practices.

Furthermore, DR leaders have led the preparation and adoption of environmentally conscious and sustainable national policies in the country. First, in 2001, the *Law for Environment and Natural Resources, 64-00 (Ley General sobre Medio Ambiente y Recursos Naturales, 64-00)* established a legal and regulatory framework for long-term environmental and conservation management [11]. Specific actions focused on biodiversity conservation, protected areas and restoration of damaged ecosystems, mitigation and adaptation of the effects of climate change, environmental education awareness, emission regulations, clean and renewable technology, and sustainable agriculture and fishing. Second, in 2010, the *National Strategy for Development, 2010-2030 (Estrategía Nacional de Desarrollo, 2010-2030)* incorporated a clear vision for national directives and strategies that guide actions for long-term sustainable and socioeconomic development by 2030 [12]. After

a comprehensive analysis of strengths and limitations (including external risks), focus areas targeted the economic, education, energy, environment, and health sectors, as well as highlighted the need for active participation across the federal government, civil and private sectors, and international partnerships.

Third, in 2014, in collaboration with the UN Development Programme (UNDP), DR leaders supported the *National Report of Human Development, 2014 (Informe Nacional de Desarrollo Humano, 2014)*, which noted the importance of natural resources to protect human development for current and future generations [13]. Fourth, in 2015, they adopted the *National Strategy of Environmental Education (Estrategía Nacional de Educación Ambiental)*, which established the need for environmental education activities to promote national awareness for natural resources [14]. Fifth, in 2017, in collaboration with UNDP, the *National Plan for Climate Change Adaptation (Plan Nacional de Adaptación al Cambio Climático)* stressed timely strategies and actions to help mitigate the effects of climate change in the country [15]. Finally, they adopted the *National Strategy for Fire Management in the Dominican Republic, 2016–2025 (Estrategía Nacional de Manejo de Incendios en la República Dominicana, 2016–2025)*, which highlighted technical and scientific approaches to prevent and mitigate the impact of forest fires on ecological conservation and biodiversity [16].

The DR Ministry of Environment and Natural Resources has contributed significant leadership to develop relevant and timely national policies and activities to protect ecosystem health. They understand the urgency to establish a culture of environmental protection that promotes responsible

and sustainable practices across the country. They also recognize the need for continued review and revision of such policies and activities to support best guidelines, laws, and practices for a healthy planet Earth.



Earth Day is a symbolic day that reminds us about the importance of health for humans, animals, and the surrounding environment. We can be exposed to an array of chemical compounds in our home and work environments – antibacterial detergents, paraben-containing cosmetics, furniture varnish, and lead-based plumbing or paint – and this chronic exposure can negatively impact our physiology over time. As a global society, we must take immediate action to conserve our natural resources and preserve our environment, as shared in the common phrase, “leave no trace” [17].

The Big Clean Up Day is the largest global movement in the world, uniting 191 countries and millions of volunteers each year to make the planet Earth clean, green, and beautiful. This day has origins tracing back to three Baltic states during the 18th and 19th centuries, when neighbors helped other neighbors in completing agricultural and livestock tasks [18]. History has observed the human spirit rescuing each other, as heroes helped Heracles clean the stables of Augeus in Greek mythology. For Latvians, the word “help” means more than coming to the neighbor’s rescue, but rather “helping” our planet Earth. The Big Clean Up Day, which has been widely celebrated across Latvia since 2006 – and supported by Liela Talka as the largest volunteer movement in Latvia [19] – resembles the dedicated efforts of Latvians to protect the planet Earth. Although the Big Clean Up Day does regularly occur on a specific date – sometimes

coinciding with Earth Day – it is still clear that the common theme of understanding the delicate balance of our planet Earth and the need for environmentally sustainable actions is incorporated into our minds and actions.

During the WMA Council Meeting held in April 2017, the Latvian Medical Association proposed a resolution to limit the use of plastic bags to support environmental conservation. After WMA discussion, the WMA Statement on Environmental Degradation and Sound Management of Chemicals was adopted in October 2018 [20]. This historic statement offered great support for the Latvian Medical Association for future legislation in Latvia. For example, plastic bags (except very light plastic bags) are no longer freely distributed at stores, and customers must pay a few cents for a plastic bag or opt for a paper bag (as of 1 January 2019), and a national plan to add 10 cents to the purchase of plastic bottles and a deposit system for these plastic bottles including the 10-cent refund (as of 1 February 2022) [21,22].

As the Latvian Medical Association, we encourage all NMAs to take significant strides to preserve our natural ecosystems. As legislation alone is not enough to widely promote sustainable practices, we must strive to increase national and international awareness about the importance of adopting eco-friendly behaviors. If we seek optimal health and well-being for all global citizens, we must start by taking responsibility for our daily activities, protecting our natural landscapes (e.g. forests, coral reefs, soil, oceans), understanding the physiological processes of the human body, and adopting nature-based solutions that honor our planet Earth.





## Nigeria

Across Nigeria, several Earth Day campaigns have followed the “Invest in our Planet” theme and have used media sources (e.g. television, radio, newspapers, and social media) and public fairs (e.g. open markets and motor parks) to educate the populace on the importance of biodiversity preservation. Jingles are shared on television and radio programs to promote wildlife and land preservation, while some organizations coordinate tree planting exercises at local primary and secondary schools. These national actions follow a key policy change in 2020, when the Nigeria Federal Ministry of Environment incorporated the Finima Nature Park (River State, Nigeria) as a wetland of global importance for biodiversity [23]. This park represents a protected area for endemic, rare, and endangered plant and animal species.

For Earth Day 2022, Nigeria leaders collaborated with other African leaders from 14 other countries [24]. They encouraged African citizens to take accountability, recognize the call to action to change the climate of the business, political and environmental sectors, and act boldly to protect Africa. As they noted that biodiversity conservation requires collective action among the federal government, private sector organizations, and citizens, they have supported policies to prevent animal species extinction, as elephants and hippopotami have migrated due to industrial activities. Furthermore, Nigerian leaders have duly recognized some Nigerian cities for their ecological contributions to protecting biodiversity. One example is Port Harcourt, the capital of Rivers State, which is recognized as the “Garden City” because of its green vegetation and cleanliness.



## Spain

At the UN Climate Change Conference in Glasgow (COP26), the government of Spain, together with 44 other countries, voiced their commitment to modify their health systems as low-carbon and sustainable for energy utilization [25]. These global conference and events, like the COP26, have helped doctors become more aware of the effects of climate change on human health and the urgent need for climate action. However, they recognize that they have received limited clinical and public health training on these environmental health topics.

To address this training gap, the Spanish General Medical Council (Consejo General de Colegios Oficiales de Médicos, CGCOM) has supported two main activities. First, the CGCOM’s Foundation for Training (Fundación para la Formación) team has developed courses and seminars to train health professionals on the health effects of the changing ecosystems and their collective duty to preserve the environment and combat climate change, as stated in the renewed Code of Medical Ethics [26]. Second, they form part of the One Health Platform’s Executive Committee, which offers a platform for scientific dialogue and debate, supports the development of relevant policies and statements, promotes collaborations, and encourages community health education activities.

An ambitious step forward has been the creation of the Medical Alliance against Climate Change in 2022, which resulted from a collaboration between the Scientific Medical Societies (Sociedades Científicas Médicas, SCM), the WHO, the Government of Spain, and the

European Union. This structure, recognized as pioneer efforts in Europe, aims to raise awareness among Spanish doctors to take a proactive stance on the decarbonisation of the health sector, in compliance with the 2030 Agenda for Sustainable Development. Therefore, this alliance includes recommendations for the reduction of greenhouse gas emissions in health care (including pharmaceuticals and anesthesia), transportation, and waste management. It is urgent that the wider medical community collaborate on robust initiatives to combat climate change and restore the ecological balance of our planet.



## Trinidad and Tobago

In Trinidad and Tobago, Earth Day is a reminder of the critical role that environmental sustainability plays in promoting human health, especially a country that is home to a diverse landscape of forests, wetlands, and coral reefs. These ecosystems support the country’s economy, service delivery, and cultural heritage. As physicians, we recognize that the health of the environment and the population are inextricably linked, and we have a responsibility to promote sustainable development and protect the environment for the benefit of current and future generations. Notably, the Trinidad and Tobago Medical Association continues to lead Earth Day celebrations, including establishing a subcommittee for climate change as well as sponsoring beach clean-ups and plastic recycling bins at various community locations.

Over the past decade, national organizations across Trinidad and Tobago have organized robust initiatives to celebrate Earth Day and raise awareness of environmental sustainability. First, the Environmental Management Authority (EMA) has implemented



several policies and programs that aim to reduce air pollution, manage waste, and protect biodiversity [27]. Second, the Green Fund, established in 2018, has provided project findings for renewable energy, sustainable agriculture, and waste management. Third, the Renewable Energy and Energy Efficiency Technical Assistance (REETA) project, funded by the European Union from 2012-2016, seeks to increase the use of renewable energy and reduce reliance on fossil fuels in the country. It provides technical assistance, training, and capacity building to government officials and other stakeholders in the energy sector. Specifically, the REETA project aims to support federal efforts to achieve the goal of generating 10% of its electricity from renewable sources by 2021, and ultimately diversify the economy and reduce the carbon footprint. Finally, the government has launched widespread social media campaigns that increase awareness of tangible actions to reduce their carbon footprint and adopt eco-friendly behaviors to care for the planet.

The WHO has recognized climate change as one of the greatest threats to global health and has called on health professionals to take action to mitigate its impact. These actions include promoting sustainable development, advocating for policies that reduce greenhouse gas emissions, and supporting efforts to adapt to the impacts of climate change [28]. At regional and global levels, physicians can contribute their expertise to public health messaging that educates patients, community members, and colleagues about direct links between environmental and human health. They can also participate in research to better understand the health impacts of environmental degradation and climate change and help develop prompt strategies to mitigate these impacts.



## Turkey

Two major 7.5 magnitude earthquakes affected southern Turkey on 6 February 2023, with numerous aftershocks, resulting in over 46,000 deaths, as of 18 February 2023. Although this significant natural event could not have been prevented, out-of-date neoliberal urbanization policies and construction practices caused weak physical infrastructure and increased risk of Turkish citizens. More than 6,000 buildings were destroyed, leaving tens of thousands of citizens homeless. Public health infrastructure has collapsed, and millions of citizens are without clean drinking water and solid waste management systems. Notably, 10 urban communities have been exposed to hazardous waste and carcinogenic substances (like asbestos) as well as air pollutants (like particulate matter). If such debris cannot be properly managed, widespread soil and water pollution will impact the surrounding ecosystem.

Currently, the Turkish Medical Association (Türk Tabipleri Birliği, TTB) strives to contribute to recovery efforts related to the direct and indirect health consequences of the earthquake. The Turkish Medical Association and the Right to Clean Air Platform have developed fact sheets and press releases to increase public awareness of health hazards related to environmental pollution and other risks [29-31]. Following the acute post-recovery period, medical professionals and the civil society will be mobilized to help construct ecological cities that are resistant to the effects of climate crisis and natural disasters (like earthquakes). Hence, our Turkish Medical Association recognizes Earth Day as an important day to advocate for the construction of healthy and ecological cities, fundamental human rights to

safe housing, clean water and air, and proper infrastructural services, as well as access to health services.

## Conclusion

As we reflect upon the significance of Earth Day for the WMA and our National Medical Associations (NMAs), we learn about the exciting national policies and community initiatives that have been successfully adopted and implemented across seven countries. These collaborations showcase strong leadership and sustainable political commitment within the African, Americas, and European regions, which have helped increase public awareness of the delicate ecosystem balance and the observable effects of climate change. Hence, these countries are leading global efforts to encourage collective action and adopt environmentally sustainable approaches to safeguard our planet Earth.

This global call to action emphasizes the urgency for the global workforce to collaborate across disciplines and sectors and partner with local and national stakeholders to implement robust scientific initiatives. As WMA members, our clinical and public health expertise offers a unique viewpoint that can help build trust and rapport during our direct interactions with patients and community members [4]. By using evidence-based guidelines and statements by leading health organizations – including the WMA – we can streamline our efforts to influence climate action and appropriate public health messaging across our countries. In short, our collective actions can accelerate progress to achieve the 2030 Agenda for Sustainable Development, mitigate risks linked to climate change, and safeguard population health.

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# World Medical Journal



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## Africa Setting the Stage in Pandemic Prevention, Preparedness, Response, and Recovery through the New Public Health Order



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The New Public Health Order for Africa was released by the Africa Centres for Disease Control and Prevention (CDC) in September 2022. The Order, whose design started in the first year of the pandemic, is a framework that represents a roadmap and has five pillars that promotes sustainable health outcomes and health security, namely: [1,2]

1. Strong African Public Health Institutions that represent African priorities in global health governance and drive progress on key health indicators
2. Expanded Manufacturing of Vaccines, Diagnostics, and Therapeutics to democratise access to life-saving medicines and equipment
3. Investment in Public Health Workforce and Leadership Programs to ensure Africa has an appropriate workforce to address health threats
4. Increased Domestic Investment in Health, including the domestic mobilisation of financial resources, human capital, technical resources, and networks

5. Respectful, Action-Oriented Partnerships to advance vaccine manufacturing, health workforce development, and strong public health institutions

These five pillars were further reinforced at the 2nd International Conference on Public Health in Africa (CPHIA 2022) (<https://cphia2022.com/>), which was held in a hybrid format from 13-15 December 2022. Using the theme, “Preparedness for Future Pandemics and Post-Pandemic Recovery: Africa at a Crossroads”, African researchers, policymakers, and stakeholders came together and shared perspectives and research findings in public health related to pandemic preparedness and recovery. This event also encouraged a new era of strengthened scientific collaboration and innovation across the continent.

### Importance of the New Public Health Order

Since 1 January 2023, the African region has reported more than 12.2 million coronavirus disease 2019 (COVID-19) cases. In addition, only 125 million tests had been delivered during that time. These testing statistics potentially led to underreported COVID-19 cases, as the region only reported 256,000 deaths since the start of the pandemic [3].

Furthermore, the World Health Organization set a target of 40% of the population receiving the first dose of the COVID-19 vaccine by the end of 2021. To date, only 3% of African countries (15 out of 48 countries) have attained this goal, and only four countries attained the 70% target set for mid-2022 [4]. Despite these low vaccination rates, partnerships like the

COVID-19 Vaccines Global Access (COVAX) helped facilitated current vaccine coverage levels alongside other health system strengthening efforts that were enforced during the pandemic. Notably, as of 2018, only two countries have met the Abuja declaration target of public financing of 15%, amplifying the pillar on increased domestic investment in health [5]. Furthermore, a mRNA vaccine technology hub was established in South Africa, with plans underway to establish hubs in Egypt, Senegal, Kenya, Tunisia, and Nigeria. These actions aim to amplify regional efforts of expanded manufacturing of vaccines, diagnostics, and therapeutics as well as clarification of how technology transfer will happen [6].

As a continent of 1.2 billion people, the shortage of health personnel is further compounded by the region experiencing a high annual incidence of public health emergencies, compared to other regions of the world. This dual challenge can lead to increased cases of burnout and moral injury as well as increased migration of African-trained health personnel to countries with improved remuneration and working conditions. Hence, health systems should invest in leadership programs that will empower the public health workforce to handle emerging health issues across the continent. In addition, there is a need for regional public health institutions that are not only operational nationally, but also have a governance structure in place to ensure their long-term sustainability.

### Conclusion

The effects of the COVID-19 pandemic have affected health systems globally. The African region, however, has remained playing catch up, due

the deceleration in economic growth from 4.1% in 2021 to 3.3% in 2022, whilst other advanced economies have gradually reverted to the pre-pandemic growth trend [5]. Notably, the New Public Health Order for Africa has been complimented by the Africa CDC's recently approved autonomy [7]. This has commenced a new frontier in tackling future health emergencies in a region that has faced the most health emergencies from not only COVID-19 but also from Ebola, drought, food insecurity, and various humanitarian crises.

With the implementation of the New Public Health Order for Africa, we hope that other continents and regions will merge efforts in their pandemic prevention, preparedness, response, and recovery activities. Recently, World Medical Association (WMA) members contributed to the discussion and adoption of three key WMA resolutions – the WMA Resolution regarding the Medical Profession and COVID-19 in October 2020, the WMA Statement in Support of Ensuring the Availability, the Quality and the Safety of Medicines Worldwide in October 2021, and the WMA Resolution for Providing COVID-19 Vaccines for All (October 2022) [8-10]. As next steps, the WMA can continue to expand their current engagements and establish new collaborations with other organisations to tackle emerging health challenges of the 2030 Agenda for Sustainable Development.

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## Report on a Webinar on Research Collaborations in Nigeria



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Most critical scientific questions or innovative technologies can often be solved through collaborations among research teams with diverse backgrounds and disciplines [1]. In academia, collaborations occur when more than one researcher with common interests form a research partnership and aim to produce new scientific knowledge. Collaborative research offers an open exchange of ideas, exposure to new skills, access to

funding, higher quality results, and personal satisfaction. Efficient communication and ethical conduct within collaborations ensure that moral principles including confidentiality are maintained.

Collaborative research leverages valuable scientific expertise and laboratory techniques, expands networking opportunities, and promotes the visibility of research

outcomes, including scientific papers and patent rights [2]. It can encourage mentorship between students and faculty or early-career and senior-level researchers as well as foster academic debate and discussion with a potential to increase verbal communication skills [3,4]. Most importantly, studies have shown that research collaborations can enrich personal and professional lives through contributions to



their institutions, professions, and communities [5].

## Demerits of Research Collaboration

Challenges exist and may persist throughout the lifespan of a research collaboration. First, team members may not be committed to their tasks, which may result in friction and negatively impact group dynamics. Second, power dynamics may be observed which may make early-career professionals and international collaborators, including students, become less vocal or confident, when interacting with more senior-level researchers [6]. Furthermore, issues surrounding authorship roles among team members may be assumed, rather than openly discussed, leading to negative feelings among team members. Third, larger teams may be heterogeneous with different motivations, which can create communication challenges, especially when developing a consensus. Finally, language barriers may pose a challenge to international collaborations.

## The Research Collaboration Webinar

In October 2022, the Association of Resident Doctors (ARD)'s Research and Statistics Committee of the University of Port Harcourt Teaching Hospital (UPTH) and the African Science Frontiers Initiative organised a two-hour Research Collaboration webinar. The Nigerian Association of Resident Doctors (NARD) is an association of all doctors and dentists in residency training and all medical and dental officers (below the rank of principal medical and dental officers) employed in public tertiary hospitals. The objective of this webinar was to stimulate interest in research among early-career researchers as well as foster new research collaborations. Over 180 participants attended this event, representing Egypt, Germany,

Ghana, India, Italy, Nepal, Nigeria, Pakistan, Switzerland, Tanzania, Trinidad and Tobago, and the United States.

Two keynote lectures stressed the importance of research training and collaborations for physicians. A poll was administered between lectures, and of the 53 participants who responded, 22 (41%) had never published an article, 15 (28%) reported being involved in a form of national research collaborations, 11 (21%) had been involved in international research collaborations, and 16 (30%) had never been involved in a research collaboration. Of the latter group, 15 (94%) wished that they had been involved in collaborative research.

During the webinar, short speeches were given by distinguished physicians who encouraged the audience to become actively involved in research collaborations. These invited presenters included Dr. Chinenye Precious Anuonyeh (President, ARD UPTH from 2021-2022), Prof. Lucky Onotai (Chairman Medical Advisory Committee, UPTH), Dr. Uchekukwu Arum (Chair, World Medical Association's Junior Doctors Network), and Dr. Olusegun Israel Olaopa (Past President of the Nigerian Association of Resident Doctors 2018-2019 and Initiator of Research Collaboration Network). The speeches highlighted their personal experiences in research collaborations, where they encouraged members to initiate and foster collaborative research.

## Lecture 1. Research Principles Made Easy

Dr. Omosivie Maduka, a Nigerian-based public health physician, shared insights on research methods and its underpinning theories in her lecture entitled, "Research Principles Made

Easy". The lecture commenced with the definition, aims, and purpose of research collaborations. The speaker commented on the need for scientific inquiry to identify research gaps and explore associations between research variables. Then, she described the research process, starting with the conceptualization and articulation of the research idea through a comprehensive literature review. Next, she mentioned that the study can be by selecting a robust design and framework to prepare for the data collection period. Then, as data are collected and analysed, she said that researchers can prepare the scientific publication on study findings. As technical writing is learned with practice, attendees were warned against plagiarism and predatory journals.

## Lecture 2. Physician-Scientist Collaboration, Making It Work for Everyone's Benefit

The second lecture was given by Dr. Bright Nwaru, a Swedish-based researcher. He emphasised on the merits of collaborating with other health professionals for impactful health research in his lecture titled, "Physician-Scientist Collaboration: Making It Work for Everyone's Benefit". The speaker noted the role of physician-scientist collaborations in scientific advancement and shared best practices for forming collaborations. He commented that the social media sites (e.g. Facebook, LinkedIn), clinical workplaces, and conference venues can offer networking opportunities to identify synergies in scientific interests. The speaker shared the following eight fundamental techniques as being necessary for effective research collaborations:

- Collaborations should take into account the individual's and groups' mutual expectations.

- Roles and responsibilities should be clearly defined and assigned to team members.
- A strategy for preserving the group's integrity is to discuss and decide on shared responsibilities.
- Before work, authorship should be decided, taking into account each collaborator's amount of responsibility.
- Frequent communication may help in clarifying tasks, ideas, focus, and timelines.
- There should be an in-depth discussion of the expectations for the research data.
- Meeting minutes should be recorded to aid members in remembering crucial topics covered and serve as an important record of the group's development.
- The group should also decide who has access to the research data.

## **Recommendations**

Early-career researchers should seek opportunities for collaborative research where they can exchange scientific knowledge and develop technical writing skills. Given the increased social connectedness and globalisation of our world, and webinars that encourage the importance of research collaboration should be organised. Hospital administrations should foster international research collaborations to strengthen research capability, attract external funding, and reposition training institutions as centres for cutting-edge research. Finally, where collaborations exist, efforts should be made to promote unity and sustainability.

## **Conclusion**

Research collaborations allow us to appreciate the idiomatic expressions that “two heads are better than one” and “the more the merrier.” As ARD members who represent an array of clinical and surgical specialties, this is our call to action to actively contribute and lead research collaborations that examine national and international health risks to population health and well-being. The ARD UPTH research collaboration webinar was a wakeup call to early-career health care researchers in Nigeria and other African countries, highlighting the benefits and challenges of research collaborations for their career development. We hope that this webinar has empowered audience members to form productive collaborations in their clinical workplace.

## **Acknowledgements**

The authors appreciate the authorities of the University of Port Harcourt Teaching Hospital, Nigeria, as well as the speakers, attendees, and executives of the Association of Resident Doctors of the University of Port Harcourt Teaching Hospital, in Rivers State, Nigeria.

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## Media Training to Shape Kenyan Junior Doctors as Health Advocates and Policy Reformers



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According to the World Health Organization (WHO), there are an estimated 1.57 medical doctors per 10,000 population, which does not align with the minimum recommendation of 21.7 doctors per 100,000 population [1,2]. This struggling statistic, further compounded by the current economic state with inflation and rising costs of

living, results in a volatile job market and national health system challenges. Currently, there are close to 4,000 unemployed doctors in Kenya, mainly junior doctors, as reported by the Kenya Medical Practitioners Pharmacists Dentists Union (KMPDU) (Figure 1). This has led to many of these junior doctors actively using social media platforms to share their frustrations through Twitter Storms (e.g., #SomebodyTellHealthCS in November 2022, #EmployDoctorsNow in February 2023).



Figure 1. Sunday Nation's national daily headline from 5 February 2023. Credit: Sunday Nation

This unemployment challenge is driven by the lack of a centralised system for managing human resources for health. As a result, there are fewer general practitioners hired after their mandatory licensure (internship) year. To address this issue, there are continued efforts by the KMPDU and the Kenya Medical Association (KMA) (<http://kma.co.ke/>) on communicating potential solutions through mainstream media such as radio and television interviews. The KMA, which houses the Young Doctors Network

(YDN) (<http://kma.co.ke/contact-us/committees-and-divisions/kma-ydn>), has an overarching mission of "Championing for the welfare of Doctors and Quality Healthcare in Kenya." Two of the YDN's goals are to "provide a forum for junior doctors to share experiences, challenges and solutions in the medical profession" and "provide an avenue for junior doctors to collaborate with other-like minded individuals." This article aims to describe KMA YDN's efforts in media and training and lessons learnt since their mandate started in August 2022.

### KMA YDN's Role in Bridging the Unemployment Gap

On 11 November 2022, the KMA YDN organised the inaugural KMA YDN Pre-Internship Conference in Nairobi, Kenya. Using the theme, "Positioning the Intern for Impact and Opportunities in Healthcare," the event intended to prepare new medical school graduates for their upcoming mandatory licensure internship. Over 240 in-person and 160 virtual delegates attended the conference proceedings.

### 2022 Pre-Internship Conference

This one-day orientation conference aimed to empower medical doctors who had recently taken the Hippocratic oath and were yet to commence their one-year mandatory licensure internship (pre-interns) under the Kenya Ministry of Health (Figure 2) [3]. The event tackled an array of topics and gave attendees the opportunity to network with their seniors in the medical field ranging from the KMA and KMPDU National Leadership, the Medical Council, and other physicians working in public and private sectors. In addition, the inaugural

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KMA YDN Newsletter's YDN Zine ([https://issuu.com/kmaydnzine/docs/october\\_2022\\_issue\\_1\\_kma\\_ydn\\_newsletter](https://issuu.com/kmaydnzine/docs/october_2022_issue_1_kma_ydn_newsletter)), which highlighted participants' insights, was launched at the event.



Figure 2. Promotional flyers for the 2022 KMA YDN Pre-Internship Conference. Credit: YDN

## Discussions on the Future of Healthcare Practice for Junior Kenyan Health Professionals

Leading up to the Pre-Internship Conference, KMA YDN organised a



Figure 3. Promotional flyer for the Tweet Chat, held before the 2022 KMA-YDN Pre-Internship Conference. Credit: YDN

Twitter Space, in collaboration with allied professionals from pharmacy, dental surgery, and nursing students (Figure 3). This platform highlighted the current developments in the employment of junior healthcare professionals, shared challenges per cadre, and presented possible solutions to these challenges. This later sparked subsequent discussions on the “Future of Medicine” at one of the leading television station’s breakfast shows, NTV AM Live. The “Realizing Universal Health Coverage” show was broadcasted in December 2022 (<https://youtu.be/A6OnkYQ0Qjg>) to commemorate Universal Health Coverage Day, and the “What Ails Healthcare Workers” show aired in January 2023 (<https://youtu.be/H8YDH5DRCIY>) (Figure 4).

## Conclusion

The partial actualization of the WHO Global Strategy of Human Resources for Health; Workforce 2030 recommendation – “countries investing in education and training, recruitment, deployment and retention of health workers to meet national and subnational needs through domestically trained health workers” – has led to the increase in healthcare training institutions and



Figure 4. Publicity posters for the Future of Medicine Morning Segments. Credit: NTV AM Live

subsequently healthcare professionals trained for the job market, with the country currently producing close to 800 junior physicians from 11 medical schools [4]. Despite the positive strides in physician training, the lack of a well-structured recruitment, deployment, and retention framework, has led to the junior physicians facing increased moral injury due to the volatile job market, as they manage numerous hiring entities resulting from the devolved healthcare system.



For this reason, the use of mainstream and social media increased public awareness on this looming issue, especially when Kenya was establishing new federal leadership. By promoting the use of technology, Kenyan health leaders can shape conversations within the health space and create opportunities to empower junior physicians to be future health advocates and policy reformers. Our hope is that these conversations surrounding the employment of health professionals and other health-related discussions spearheaded by junior health professionals will not only continue but also align with leading guidelines such as the World Medical Association (WMA)'s International Code of Medical Ethics [5].

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## Free Continuing Medical Education on Environmentally Sustainable Practices



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This month, the World Medical Association (WMA)'s My Green Doctor program is the focus of a free 40-minute online Continuing Medical Education (CME) program offered by the American Medical Association to any physician, not just AMA members. Watch the webinar yourself at any time, and ask your office manager to watch and learn how easy it is to save money with environmentally sustainable practice management at the following link ([https://event.on24.com/wcc/r/4062883/B0A8A10449AF6354586D-](https://event.on24.com/wcc/r/4062883/B0A8A10449AF6354586D-76FEE9D19978)

[76FEE9D19978](https://event.on24.com/wcc/r/4062883/B0A8A10449AF6354586D-76FEE9D19978)). CME credits can be requested at the following link (<https://edhub.ama-assn.org/steps-forward/module/2800484>).



My Green Doctor is a free money-saving membership and climate-saving benefit from the WMA. Medical offices use My Green Doctor's "Meeting-by-Meeting Guide" to learn how to adopt environmental sustainability, save resources, and help create healthier communities. The program adds just five minutes to each regular office staff meeting or weekly office "huddle", showing that making small changes at each meeting can add up

over time.

Your team can register as Partner Society members by visiting the webpages in English ([www.MyGreenDoctor.org](http://www.MyGreenDoctor.org)) or Spanish ([www.MyGreenDoctor.es](http://www.MyGreenDoctor.es)) webpages. By using the discount code MGDWMA, your team will save US \$60 and receive full lifetime access to My Green Doctor. Ask your clinic or practice manager to register today and add My Green Doctor to your next agenda. My Green Doctor helps your practice to save money and create healthier communities!

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