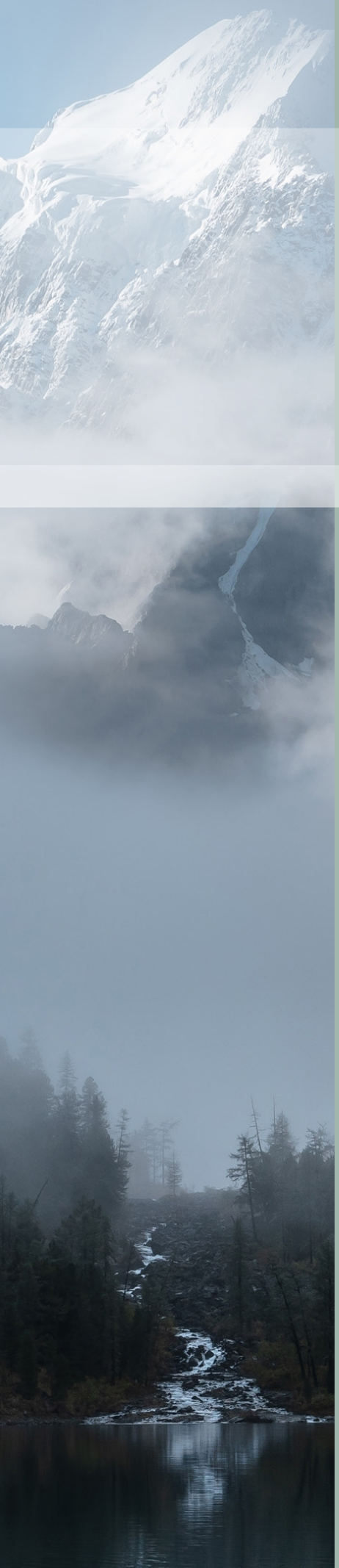
ISSN 0049-8122



World Medical Journal

Official Journal of The World Medical Association, Inc. Nr. 3, September 2023

vol. 69

Contents

WORLD MEDICAL ASSOCIATION OFFICERS, CHAIRPERSONS AND OFFICIALS

www.wma.net

OFFICIAL JOURNAL OF THE WORLD MEDICAL ASSOCIATION

Editor in Chief
Dr. Helena Chapman
Milken Institute School of Public Health, George Washington University, United States
editor-in-chief@wma.net

Assistant Editor
Mg. Health. sc. Maira Sudraba
Latvian Medical Association
lma@arstubiedriba.lv, editor-in-chief@wma.net

Journal design by
Erika Lekavica
dizains.el@gmail.com

Publisher
Latvian Medical Association
Skolas Street 3, Riga, Latvia
ISSN 0049-8122

World Medical Journal

Editorial

As our global medical community strives to uphold high-quality ethical standards for our medical and public health practice, we reflect on significant policies and guidelines that have been developed, debated, revised, and adopted across our nations. Over the past nine months, World Medical Association (WMA) leaders contributed their valuable expertise to prepare and revise key resolutions (e.g. situations of violence, discrimination), timely press releases (e.g. workplace violence, physicians' rights), and public statements (e.g. universal health coverage, pandemic preparedness) that have been widely circulated. The 15th World Conference on Bioethics, Medical Ethics, and Health Law, which will be held in Porto, Portugal, from 16-19 October 2023, will offer an additional platform to broaden these important discussions, including the International Code of Medical Ethics that was recently highlighted in the *BMJ Journal of Medical Ethics* publication by Dr. Ramin Parsa-Parsi, Dr. Raanan Gillon, and Dr. Urban Wiesing (https://pubmed.ncbi.nlm.nih.gov/37487625/).

Physical and mental health and well-being are influenced by the social determinants of health, including access and availability to health services, which complement these discussions focusing on medical ethics and environmental justice topics. Emerging risks across our global communities include, but are not limited to, the direct and indirect effects of climate change on health, harmful smoke emissions from wildfires, drought and flooding events that influence agriculture and food security, and increasing temperatures and land use changes that favour vector habitat expansion and risk of disease transmission. As a timely opportunity, One Health Day (https://onehealthday.com/) is recognized on 3 November 2023, encouraging global citizens to collectively brainstorm on novel approaches to address complex global challenges that impact human, animal, and ecosystem health.

However, the question remains: How is our global medical community preparing to meet health priorities as well as strengthen medical education and training across our countries? Albert Einstein expressed the continuous need to advance science through critical appraisal: "To raise new questions, new possibilities, to regard old problems from a new angle, requires creative imagination and marks real advance in science".

Collectively, we can identify existing knowledge and practice gaps in our clinical and surgical fields as well as encourage conversations about how we can apply innovative technology and data applications, such as artificial intelligence and machine-based learning, to accelerate drug and vaccine discovery and improve algorithms for disease early warning systems. Since our national medical associations (NMAs) represent indispensable leadership across hospital and community settings, our active participation in WMA and our specialty conference proceedings, are influential ways to advance science, leverage expertise to support national and global preparedness, and hence strengthen national and global health security.

The 74th WMA General Assembly will be held in Kigali, Rwanda, from 4-7 October 2023. The Rwanda Medical Association has shared the formal invitation in this issue, noting the "Global Health Security" theme of the scientific session. At this event, WMA members will contribute to key discussions affecting physicians, review WMA statements and resolutions, gain insight from invited speakers on global health security topics, and expand networking opportunities with other NMAs and WMA members.

In this issue, Dr. Ricardo León-Bórquez, Dr. Geneviève Moineau, Ms. Romana Kohnová, and Dr. Cheryl Stroud shared personal reflections on their leadership and training, current and upcoming priorities, and opportunities to become involved in World Federation for Medical Education and One Health Commission activities, respectively. Dr. Deborah Thomson and colleagues described the value of adding planetary health into health education. Dr. Jeff Blackmer offered insight on the ongoing discussion related to public and private funding within the Canadian health care system. Dr. Ole Johan Bakke and Dr. Axel Rød stressed the importance of the principle of the separation of powers, showcasing the case of the Turkish Medical Association. Mr. Michael Willie and Dr. Sipho Kabane expressed enthusiastically how technology (e-hailing platforms) can revolutionize medical transportation. Finally, Dr. Ni Xin highlighted scientific advancements related to paediatric surgery in China.

We acknowledge the admirable leadership contributions that WMA members provide each day in their clinical and community workplace. In this issue, 10 NMAs unveil key facts about their leadership, history, mission and objectives, national and international collaborations, current challenges, and future vision. Also, we can learn from WMA members representing nine countries who present policies and community activities that support healthy aging and the International Day of Older Persons 2023. Together, we can truly expand the current scientific knowledge base by emphasizing how critical appraisal is key to addressing emerging global health risks and hence protecting population health and well-being. We look forward to networking at the WMA General Assembly in Kigali!

Helena Chapman, MD, MPH, PhD
Editor in Chief of the World Medical Journal
editor-in-chief@wma.net

BACK TO CONTENTS

World Medical Journal

Interview with the President of the World Federation for Medical Education

Ricardo León-Bórquez

Geneviève Moineau

Romana Kohnová

What is the World Federation for Medical Education, and what are the organisational goals?

The World Federation for Medical Education (WFME) is a not-for-profit and non-governmental organisation that works to support healthcare for all through promoting high quality in medical education for the physician workforce, prospective students, and trainees. Established in 1972 by the World Medical Association (WMA) and the World Health Organisation (WHO), the mission of the WFME is to enhance the quality of medical education worldwide. To achieve this mission, the WFME collaborates with doctors, educators, and medical schools worldwide through its six member regional associations (https://wfme.org/about/partner-organisations/) for medical education, collectively forming the WFME Executive Council (https://wfme.org/about/executive-council/).

The six regional associations include:

- Association for Medical Education in the Eastern Mediterranean Region (AMEEMR) (http://www.ame-emr.org/)
- Association of Medical Schools in Africa (AMSA) (https://wfme.org/publications/amsa-brochure-2/)
- Association of Medical Schools in Europe (AMSE) (https://amse-med.eu/)
- Pan-American Federation of Associations of Medical Schools (PAFAMS) (http://www.fepafempafams.org/)
- South East Asian Regional Association for Medical Education (SEARAME) (http://seara-meded.org/)
- Western Pacific Association of Medical Education (WPAME) (http://www.wpame.org.au/)

Alongside the member regional associations, the WFME Executive Council comprises the WMA and the WHO, together with the International Federation of Medical Students' Associations (IFMSA) (https://ifmsa.org/), Junior Doctors Network (JDN) (https://www.wma.net/junior-doctors/), the ECFMG® (http://www.ecfmg.org/), a member of Intealth™, and the Association for Medical Education in Europe (AMEE) (https://amee.org/).

What are the current WFME priorities and activities for 2023-2024?

Our current priorities encompass several key areas, including promoting accreditation of basic medical education through the WFME Recognition of Accreditation Programme (https://wfme.org/accreditation/wfme-recognition-programme/), raising standards across various stages of medical education (undergraduate, postgraduate, continuing professional development) and in distributed and distance learning, and maintaining the *World Directory of Medical Schools* (http://www.wdoms.org/), a comprehensive and free searchable directory of undergraduate medical education programmes worldwide.

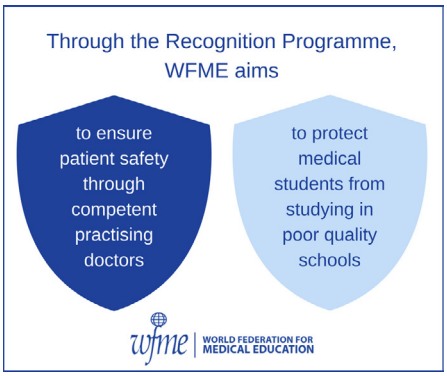
For the period spanning 2023 to 2024, the WFME has organised activities related to the following areas:

Recognition of Accreditation Programme

The Recognition of Accreditation Programme delivers an independent, transparent, and rigorous method of ensuring that accreditation of medical schools worldwide is at an internationally accepted and high standard. The WFME evaluates compliance of accrediting agencies with pre-defined criteria, where currently, 38 agencies have received recognition and 17 agencies are in process.

BACK TO CONTENTS

World Medical Journal



WFME Standards

In the WFME Standards project, the focus is directed to the recent publication of the revised *WFME Standards for Postgraduate Medical Education* (PGME) (https://wfme.org/standards/pgme/), which has been revised to be principles-based rather than prescriptive-based. This resource enables users to develop their own local practice aligned with their context and culture. As a follow-up to the recent publication, the WFME has been working on developing a webinar series dedicated to postgraduate medical education. With the aim of transitioning all WFME standards to a principles-based approach, next steps include the revision of the *WFME Standards for Continuing Professional Development.*

World Directory of Medical Schools

The WFME will continue to support this comprehensive and valuable publication by updating the content as new medical schools are established and the status of existing medical schools change. The World Directory (https://www.wdoms.org/about/), which is maintained jointly with FAIMER®, a Member of Intealth™, contains information on over 3,700 operational and historical schools. Each record highlights available school details, including year of establishment, school type, operational and status, programme details, and contact information. The strategic objective involves the integration of accreditation information.

Engagement in Medical Education Accreditation Scholarship

The WFME has taken a strategic step to expand its activities by exploring the creation of an International Research Network to support the advancement of scholarship in medical education accreditation.

How has the coronavirus disease 2019 (COVID-19) pandemic affected medical education across the world?

The onset of the COVID-19 pandemic created a clear distinction between medical students and residents. Medical students could no longer attend in-person classroom, small group teaching sessions or clinical clerkships. On the other hand, medical residents were redeployed away from their educational rotations to provide clinical services, where needed, regardless of the risks involved.

Medical schools with a robust infrastructure and financial resources rapidly moved to online education. Many regions of the world, however, required innovative academic approaches, which directly depended on available technology and connectivity. Learners at all stages were also deeply affected by the progressive burnout experienced by their clinician preceptors who no longer had the capacity to teach or supervise.

These unprecedented times led to unique levels of cooperation and collaboration, while global medical education leaders demonstrated dedicated efforts to provide the best education possible to their learners. We also realized the extent to which distance learning is possible and, in 2021, the WFME released distributed and distance learning standards (https://wfme.org/standards/ddl/).

What are the current challenges in medical education across the world, and how can these challenges be addressed?

The COVID-19 pandemic has led to a worldwide health workforce crisis, and medical education is in great demand. Medical education leaders must engage with their governments to ensure that they train physicians to meet the diverse needs of the populations they serve.

Medical school curricula must adapt to include the most pressing novel health issues for society. Currently, these

Photo 1. WFME Executive Council meeting in April 2023, Québec, Canada. Credit: WFME

BACK TO CONTENTS

World Medical Journal

Photo 2. WFME team photo in January 2023, with Romana Kohnová, Barbora Hrabalová, Ricardo León-Bórquez, Geneviève Moineau, Jana Cohlová (left to right). Credit: WFME

topics include recognizing the value of public health, training future primary healthcare providers, becoming aware of artificial intelligence and machine learning as new tools in the delivery of patient care, and understanding the impact of the climate crisis on health and healthcare providers' urgent role to address planetary health. The WFME Executive Council has agreed to be a signatory to the *Academic Health Institutions' Declaration on Planetary Health* (https://www.afmc.ca/initiatives/planetaryhealthdeclaration/), which calls on medical schools to educate their students on planetary health, conduct health research on addressing the climate crisis, and advocating for the responsible behaviours of institutions and health systems in reaching net-zero emissions.

As leaders in medical education, it is our obligation to support the well-being of our learners, educators, preceptors, and clinicians through healthy and safe learning and work environments. Despite our rapidly evolving world, the importance of the human connection between healthcare providers and their patients will never change in medicine and medical education, and that ultimately, our patients will always be our best teachers.

How can WMA members become more involved in WFME activities and help strengthen medical education across their countries?

First, WMA members can engage with medical schools in their countries and medical education associations in their region, to advocate for forward-looking curricula delivered in positive learning environments. This advocacy for excellence in medical education should include support for strong accreditation environments for medical schools and residency programs. The WFME Recognition of Accreditation Programme for basic medical education and the potential development of a postgraduate recognition programme contribute to the pursuit of excellence.

Second, the WFME and the ACGME Global Services have collaborated on the development of the Global Postgraduate Medical Education Survey (https://wfme.org/wfme-and-acgme-global-services-exploring-postgraduate-medical-education-oversight-worldwide/). WMA members can contribute their perspectives on accreditation practices in postgraduate medical education worldwide. This project aims to promote collaboration and sharing of knowledge and best practices among organisations responsible for enhancing the quality of postgraduate medical education accreditation processes in their respective jurisdictions.

Finally, the WFME is requesting that all WMA members consider being a signatory organisation on the Academic Health Institutions' Declaration on Planetary Health.

We look forward to seeing many WMA members at the WFME World Conference 2025 in Bangkok, Thailand, on 25 to 28 May 2025. At this event, your voices as medical leaders will help shape the future of medical education around the world.

Authors

Ricardo León-Bórquez, *MD*
President,
World Federation for Medical Education

Geneviève Moineau, *MD*
Vice-President,
World Federation for Medical Education

Romana Kohnová
Executive Assistant,
World Federation for Medical Education Office
admin@wfme.org

World Medical Journal

Interview with the Executive Director of the One Health Commission

Cheryl Stroud

For this interview, Dr. Cheryl Stroud, executive director of the One Health Commission (OHC) (https://www.onehealthcommission.org/), a non-profit organisation based in the United States but working globally to help the world understand our urgent need for One Health, shares her background, her leadership of the One Health Commission, perspectives on leverageing One Health expertise across global networks, and how World Medical Association (WMA) members can contribute to the One Health paradigm shift, with Dr. Helena Chapman, the WMJ Editor in Chief.

Please describe three key learning moments during your veterinary medicine and doctoral research training and your career.

Because no one profession or discipline can know everything, we must join hands across professions to share knowledge. This awareness, concept, and approach is known as One Health. I will answer this question as key learning moments on my journey to becoming a One Health advocate and practitioner.

First, after four years studying veterinary medicine to become an animal health practitioner, I took the Veterinarian's Hippocratic Oath [1]:

Being admitted to the profession of veterinary medicine, I solemnly swear to use my scientific knowledge and skills for the benefit of society through the protection of animal health and welfare, the prevention and relief of animal suffering, the conservation of animal resources, the promotion of public health, and the advancement of medical knowledge.

I will practise my profession conscientiously, with dignity, and in keeping with the principles of veterinary medical ethics.

I accept as a lifelong obligation the continual improvement of my professional knowledge and competence.

I was aware, in that moment, standing before the world in my graduation robes, of my responsibilities not only to animal health, but also human health. I was literally taking an oath to promote public health. It was years later, however, that I came to fully realise the significance of that oath and to understand its meaning today as a One Health practitioner. This moment was a first step in my One Health awakening.

Second, after working for a couple of years as a veterinary clinician, I decided to continue my education with graduate studies in endocrine physiology to gain research skills, which are very different from clinical practice skills. It was fascinating to more deeply understand how hormones – which regulate our metabolism, bone density, reproduction, and emotions – are physiologically remarkably similar across humans, non-human animals, and even plants. In fact, one day, I distinctly remember an "aha moment" while sitting in my reproductive physiology class, when I realised that there are endocrine disrupters in our shared environment that can affect both animals and humans. That was my awakening to the interconnectedness of environment and ecosystem health with health of all life forms, and my realisation of how animals, environments, and humans form a triumvirate of health: there is only One Health.

Plants are also fascinating living tissues that are affected by their environment – by the soil microbiome, by climate, and atmosphere – and can pass on any harmful exposures to creatures that feed on them. Increasing global carbon dioxide levels and depleted soils affect plant nutrient uptake, resulting in nutritional deficiencies among any creatures (animals or humans) that depend on them for nourishment [2,3]. Thus, I expanded my understanding of One Health to include plants and soil health.

Third, the emergence of the One Health movement coincided with my own mother's neuro-degenerative decline and death and offered a very personal revelation. In the late 1990s and early 2000s, a discussion emerged – first as 'One Medicine' and subsequently as 'One Health' – from ecologists and conservation medicine practitioners highlighting that many diseases are of zoonotic origin. The conversation ramped up in 2003, with the mpox outbreak in the United States, global High Pathogenic H5N1 Avian Influenza scare, and the severe acute respiratory syndrome coronavirus (SARS CoV-1) epidemic in Asia [4-6]. Then, the H1N1 Influenza A pandemic, inadvertently referred to as swine flu in 2009, the emergence of the Middle East Respiratory Syndrome

BACK TO CONTENTS

World Medical Journal

(MERS) in 2012, and other zoonotic disease events were documented, all preceding the coronavirus disease 2019 (COVID-19) pandemic [7,8].

Parallel to these events, in 1999, my mother began displaying clinical signs of dizziness and disequilibrium that progressed over a nine-year period. She was eventually diagnosed with progressive supranuclear palsy (PSP, a cousin to Parkinson's disease) and died in 2008, at the age of 76. It was devastating to watch her suffering and overall health decline. Little did I know that that personal experience would drive my own career path.

As I became more involved in the One Health conversation, I helped launch a North Carolina One Health Collaborative (NC OHC) in 2010, where I worked closely with many human and animal health colleagues. We frequently discussed vector-borne diseases (VBDs). As I learned more and reflected on my mother's clinical presentation and decline, I realised that it was very similar to degenerative neurologic syndromes observed from some long-term VBDs such as Bartonellosis and long Lyme borreliosis. My family (mother, father, brother) were very active outdoor enthusiasts, spending a lot of time game hunting (deer, wild boar, turkey) in the southern United States. It began to haunt me that my mother might have been infected with an undiagnosed VBD.

Although I will never know the exact aetiology of my mother's illness, I often ponder: What if her illness was the result of a VBD infection? What if we had had better diagnostics for Lyme disease and other VBDs? What if her doctors had known about and been able to diagnose or rule out Bartonellosis or other VBDs? If this information had been available, would it have saved my mother and others who have suffered from 'invisible', difficult to diagnose, diseases like Lyme borreliosis and Bartonellosis? The more I learned, the more committed I became to One Health discussions that would pave the way for enhanced information and knowledge sharing between animal, human, and environmental health practitioners and drive collaborative research to develop diagnostics for acute VBDs.

What were the driving factors that led to your collaborative efforts leading the One Health Commission? What challenges has your team faced in leverageing One Health expertise across global networks?

In a very real way, it was my mother's death that has driven my passion and commitment to the One Health movement. As a result of my NC OHC work, where we were increasing local awareness about One Health, I was invited to serve on the OHC Board of Directors in 2012, and later became Executive Director in late 2013. The OHC is one of many organisations actively working to help the world understand our urgent need to make One Health tenets the default way of thinking, acting, and living at all levels of academia, industry, research, government, and policy (https://tinyurl.com/OHC-WW).

As for challenges, I have always believed that you do not have to have a lot of money to accomplish great things, and the OHC has so far demonstrated that point of view. The OHC is led by volunteers working under the slogan, "Connect, Create, Educate." In other words, we work to 'connect' One Health stakeholders, to 'create' teams and networks that work together across disciplines to 'educate' about One Health and One Health issues. However, even with volunteers, enabling working group activities does require money. The greatest challenge for the organisation has been finding sustainable funding for OHC staff to support the working groups and OHC initiatives. Over the years, a number of organisations (https://tinyurl.com/OHC-Sponsors-Donors) have stepped forward to financially support the OHC and its activities and for that we are very grateful.

One Health is not a new concept. Many indigenous cultures have understood the interconnectedness of animals, humans and environment for millennia. However, as our knowledge grew, systems were developed that pushed us into educational and professional silos – such as existing systems for publishing research findings in professional association journals that only association members could access, structural barriers as government agencies work in silos, and language barriers across professions. The current conversation that we call One Health, that began re-emerging in the late 1990s, was first picked up by veterinarians in the early 2000s. other professionals perceived this early movement as just coming from veterinarians, and less relevant for those working in public health, human health or anthropology. So, challenges faced in leverageing One Health expertise include helping other professionals, beyond veterinary medicine, realise that they are critical players in implementing this One Health concept and improving global understanding of the full scope of One Health beyond zoonotic diseases. Many of today's primary challenges – climate change, antimicrobial resistance, and disaster preparedness and response – and others of equal importance – comparative medicine and translational research, human-animal bond benefits, and food safety and security – are begging to be addressed using a One Health approach.

BACK TO CONTENTS

World Medical Journal

Please describe a few significant contributions of the One Health Commission for the global community.

Over the past 10 years, we have been able to support actions that promote critical awareness, including:

- Starting and continuing to lead an annual global One Health Day since 2016 (https://tinyurl.com/OH-Day-Home)
- Leading an annual One Health Awareness Month (https://tinyurl.com/OH-OH-Awareness)
- Creating and disseminating a monthly *One Health Happenings Newsletter* (https://tinyurl.com/OHC-OH-Happening)
- Compiling and sharing a Who's Who in One Health series of maps (https://tinyurl.com/OHC-WW) to highlight individuals and organisations working in One Health and encourage networking to synergize our efforts to further One Health
- Creating more trans-professional network teams (https://www.onehealthcommission.org/en/programs/), especially for One Health Education
- Preparing the *2021 Annual Report* [9]

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

First, because no one profession can know everything, the One Health way of thinking and sharing information across disciplines can benefit all health professionals and their patients. Notably, human health practitioners are a critical and integral part of this One Health conversation, and WMA members are urgently needed to bring forward their own knowledge and skills. Without your active participation, the world will never really understand the urgency for our patients, creatures, and planet of implementing this interconnected way of thinking, or experience how it can benefit them.

Second, one of my professors in veterinary school once said, "You cannot diagnose something you cannot think of". Hence, I have expanded that idea in my own One Health thinking:

- You cannot diagnose something you cannot *think* of.
- You cannot *think* of something that you do not *know*.
- You cannot *know* about something that you have not been taught or that *never gets shared* across current professional silos.

Therefore, One Health can help us with the sharing of critical information and knowledge across professions.

Third, incorporating One Health thinking into your daily practice can benefit both you and your patients. The knowledge you gain from One Health conversations with other professionals – animal health practitioners, social scientists, economists, and environmental health specialists – can enable you and your team to offer the highest standard of care that will be life-saving and economically beneficial for patients and society. Here are some examples:

Benefits to physicians

As physicians, your increased awareness of communicable and non-communicable diseases, shared by animals and humans, and interactions with their shared environment will help you ask patients more astute, thoughtful, pointed questions when taking a patient history. For example, the following questions can be added to your patient intake forms:

- Do you live or work with animals? If yes, what types of animals and in what capacity do you live or work with them?
- Do you sleep with your pets?
- Are your pets up-to-date on their vaccinations?
- Are there any ill animals in your home or surroundings?
- How would you describe your home and community environment?
- How would you describe your work environment?
- How would you describe your leisure or play environment?
- Do you spend much time outdoors gardening, hiking or camping?

Knowing these factors about your patient will improve your ability to know *what* questions to ask and *what* tests to order for more directed and better focused discernment and confirmation of a diagnosis. In short, this information can often lead to a shorter time to diagnosis, more targeted therapy, less medical costs, and less patient suffering.

Benefits to patients

- More targeted diagnostics
- Shorter time to more accurate diagnosis
- More targeted therapy
- Less suffering

BACK TO CONTENTS

World Medical Journal

- Saving money
- Saving lives

The end result will be an overall higher standard of care and economic benefits to patients and society.

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

Contributing your expertise

- Include questions (as noted above) about animal interactions on all patient intake questionnaires.
- Be cognizant of potentially overlooked parasitic and zoonotic diseases (e.g. campylobacter, leptospirosis, larval migrans, ring worm, sarcoptes, cryptosporidia, salmonella).
- Teach colleagues, children, and patients about rabies. [Note: Species of caution will vary by global region. For example, in the Americas region, bat rabies education focuses on the avoidance of touching bats or reporting interactions with bats, whereas in other geographies, the concern remains in contact with dogs.]
- Use the human-animal bond to help patients understand that their pet's health is dependent on their own health. For example, if patients understand that cigarette smoking is bad for their cat, dog or bird, then they may be inspired to stop smoking. If your patients recognise the health concerns of obesity for themselves and their pets, including expensive medical treatment for pets' clinical management of arthritis, diabetes, and heart disease, then they may be motivated to take appropriate steps for weight loss for both themselves' and their pets [10].
- Review the evidence-based literature on zoonotic and vector-borne diseases, especially in One Health journals (https://tinyurl.com/OHC-Jour-Perio).
- Seek relationships with local veterinarians, public health workers, environmental health workers, and animal control officers.
- Attend veterinary and environmental health conferences to enhance your own scientific understanding.
- Support the call to action to prevent the next pandemic through bio-surveillance of wildlife and companion animals in urban and rural settings as well as caution for wet markets (e.g. where live species are brought together for slaughter in close spaces with people).
- Place One Health educational brochures in your waiting rooms and nursing stations, including *Bat Rabies Education, VBD brochures* (e.g. Bartonella, Borrelia, Leishmania), and *Healthy Habits for Backyard Chickens* [11].

Becoming more involved in local and national One Health initiatives

- Join the international One Health community listserv to receive global One Health news (https://tinyurl.com/OHC-Listserv).
- Start an interprofessional local One Health brown bag group or reading club that meets monthly to discuss One Health topics at the interface of your disciplines. Encourage open sharing of scientific publications from human, animal, and environmental health communities.
- Promote the One Health approach to improve connections between physicians and other health professionals. Explain how being cognizant of the interconnections of animals, environments, and humans help both physicians and patients.
- Call your lawmakers to establish a relationship and indicate that you are available to answer any questions about One Health issues that they might need to know before voting on legislation. Share your knowledge and understanding of One Health and the need for bio-surveillance of companion animals and wildlife in urban and rural areas. Highlight that there is no federal agency in charge of this bio-surveillance, and no Centres for Disease Control and Prevention (CDC) for animals.
- *Become a One Health Champion!*

In summary, remember:

- No one profession or discipline can know everything, so we need to join hands and share knowledge across disciplines.
- In our current systems, One Health collaborations will not automatically happen. We must create opportunities to form the relationships needed to learn from each other.
- *No one species, arena or sector is healthy until everyone is healthy, because everything is connected.*

References

1. American Veterinary Medical Association. Veterinarian's oath [Internet]. n.d. [cited 2023 May 23]. Available from: https://www.avma.org/resources-tools/avma-policies/veterinarians-oath

BACK TO CONTENTS

World Medical Journal

2. Dance A. A warmer planet, less nutritious plants and…fewer grasshoppers [Internet]. Knowable Magazine. 2023 [cited 2023 May 23]. Available from: https://knowablemagazine.org/article/food-environment/2023/climate-change-effect-on-plant-nutrients

3. Morgan JB, Connolly EL. Plant-soil interactions: nutrient uptake. Nature Education Knowledge. 2013;4(8):2. Available from: https://www.nature.com/scitable/knowledge/library/plant-soil-interactions-nutrient-uptake-105289112/

4. Centres for Disease Control and Prevention. Update: multistate outbreak of monkeypox --- Illinois, Indiana, Kansas, Missouri, Ohio, and Wisconsin, 2003. MMWR Morb Mortal Wkly Rep. 2003;52(27):642-6.

5. Centres for Disease Control and Prevention. Highlights in the history of avian influenza (bird flu) timeline – 2000-2009 [Internet]. 2022 [cited 2023 May 23]. Available from: https://www.cdc.gov/flu/avianflu/timeline/avian-timeline-2000s.htm

6. LeDuc JW, Barry MA. SARS, the first pandemic of the 21st century. Emerg Infect Dis. 2004;10(11):e26.

7. Centres for Disease Control and Prevention. The 2009 H1N1 pandemic: summary highlights, April 2009-April 2010 [Internet]. 2010 [cited 2023 Sep 20]. Available from: https://www.cdc.gov/h1n1flu/cdcresponse.htm

8. World Health Organisation. Middle East respiratory syndrome coronavirus (MERS-CoV) [Internet]. 2022 [cited 2023 May 23]. Available from: https://www.who.int/news-room/fact-sheets/detail/middle-east-respiratory-syndrome-coronavirus-(mers-cov)

9. One Health Commission. 2021 Annual Report [Internet]. 2021 [cited 2023 May 23]. Available from: https://tinyurl.com/OHC-AnnReport2021

10. Natterson-Horowitz B, Bowers K. Zoobiquity: what animals can teach us about health and the science of healing. New York: Knopf Publishing; 2012.

11. Varela K, Brown JA, Lipton B, et al. A review of zoonotic disease threats to pet owners: A compendium of measures to prevent zoonotic diseases associated with non-traditional pets: rodents and other small mammals, reptiles, amphibians, backyard poultry, and other selected animals. Vector Borne Zoonotic Dis. 2022;22(6):303-60.

***Cheryl Stroud**, DVM, PhD*
Executive Director,
One Health Commission
cstroud@onehealthcommission.org

World Medical Journal

WMA Members Share Reflections about International Day for Older Persons 2023

Credit: Rawpixel.com / shutterstock.com

According to the World Health Organisation, healthy ageing is described as "the process of developing and maintaining the functional ability that enables wellbeing in older age" [1]. The United Nations (UN) Department of Economic and Social Affairs reported that the estimated population of older persons (over age 65) increased from 260 million in 1980 to 761 million in 2021 [2]. As the global population is expected to reach 1.6 billion by 2050 – or 17% of the total population – global health leaders will need to discuss how this demographic transition will impact the national preparedness of health care and social systems to address the unique and diverse ageing needs of the older population, especially across low- and middle-income countries (LMICs) [2]. Although information and communications technology continues to expand social connections between families and communities, loneliness and social isolation are prevalent within society and are linked to sedentary behaviours, cognitive decline, mental health disorders, and stress responses associated with chronic diseases [1,3].

Celebrated annually on 1 October, the International Day for Older Persons aims to raise community awareness of the physiological processes related to healthy ageing and highlight the need to develop appropriate health and social protection measures for older persons [2]. The UN General Assembly recognised this annual day through *Resolution 45/106* in December 1990, which was officially adopted through *Resolution 46/91* in December 1991 [2]. The 2023 theme, "Fulfilling the Promises of the Universal Declaration of Human Rights for Older Persons: Across Generations", offers an unprecedented moment for the global community to unite in reflection and advocate for older persons' rights, protection, and safety throughout the lifespan [2]. Community leaders organise in-person and virtual events, press releases, and social media campaigns to promote a supportive environment that encourages older persons to remain actively engaged and connected with their families and communities as well as participate in exercise and physical activity (e.g. aerobic, balance, muscle strengthening). Global health leaders should examine how countries can prepare for these projected demographic trends and identify age-friendly approaches for health and social protection and rights that reduce inequalities, discrimination, and social isolation [1,3].

The Decade of Healthy Ageing (2020-2030) reinforces the need to implement evidence-based strategies to protect physical and mental health and well-being in older persons across the world [1]. This initiative focuses

BACK TO CONTENTS

World Medical Journal

on four action areas, including age-friendly environments (promoting communities that integrate older persons), combatting ageism (changing perceptions on ageing and ageism), integrated care (person-centred integrated care delivery for older persons), and long-term care (increasing access and availability to high-quality long-term care services). It expands the agenda established by the *2002 Madrid International Plan of Action of Ageing*, which incorporates ageing into policy frameworks related to economic, human, and social rights [4].

Strengthening national policies and actions that promote healthy ageing and social protections will be essential to advance progress toward the 2030 Agenda for Sustainable Development. In this article, physicians from nine countries – Algeria, Brazil, India, Kenya, Nigeria, Pakistan, Taiwan, Trinidad and Tobago, and Turkey – highlighted insightful reflections about International Day of Older Persons community activities and national policies that promote healthy ageing across their countries.

Algeria

In Algeria, a country with 42 million residents, the International Day of Older Persons holds significance in recognizing the contributions and wisdom of older persons to Algerian society and culture. In 2010, the *Law Concerning the Protection of the Elderly* was adopted to ensure that the elderly (persons over age 65) have access to in-home governmental assistance for comprehensive care, including physical and psychosocial health support services, social protection, and connections to cultural activities [5]. In 2016, Dr. Abdelmadjid Zaalani, the President of the National Council for Human Rights, shared a dual call to action to include geriatrics as a specialty and create a geriatric hospital to care for these ageing needs [6]. Also, in 2016, the Prime Minister of Algeria issued the Executive Order No. 16-294 on the *Aid Measures and Special Care of the Elderly at Home*, which established the formal guidelines for how the elderly can request in-home governmental assistance [7].

Algerian physicians and medical students lead annual efforts to raise awareness about active ageing, including chronic diseases like diabetes and hypertension. First, the International Federation of Medical Students' Associations of Algeria (IFMSA-Algeria) coordinates annual activities such as "iftar" meals during Ramadan and ensures elderly people access to proper healthcare services. Medical students from the city of Batna also educate elderly citizens about the dangers of self-medication in order to promote responsible medication use. Working with medical specialists, IFMSA-Algeria (Le Souk Batna) members conduct annual health fairs to provide valuable information about chronic diseases and offer free health consultations. They also coordinate medical caravans with a team of medical professionals to travel to remote areas and bring healthcare services directly to the citizens, including elderly population.

As physicians in Algeria and around the world, our call is to prioritise and advocate for the well-being, health, and dignity of older persons by raising awareness, promoting healthy ageing, addressing geriatric health concerns, preventing elder abuse, and supporting family caregivers. Health professionals, stakeholders, policymakers, and governmental and non-governmental organisations should collaborate to develop an effective task force that strengthens the geriatric mental health response to emerging health issues across the country and region.

Brazil

Brazil, a country of 209 million residents, has an estimated 30.1 million (14.3%) of persons over the age of 60 years, which has significantly increased from 2.6 million in 1950 [8]. With this significant demographic transition across Brazil, it is imperative to advocate for relevant public policies and healthcare services (including long-term care) to ensure the inclusion and respect of senior citizens. Local and national leaders have coordinated numerous annual events in schools and healthcare centres – like academic lectures, health fairs and seminars, and cultural activities – to spotlight elderly citizens' rights and the significance of active ageing.

One of Brazil's pivotal laws for safeguarding the elderly and nurturing health and social well-being is the *Elderly Statute*. On 1 October 2003, the *Elderly Statute*, enacted by *Law No. 10,741*, stands as a legal framework dedicated to ensuring the rights of senior citizens within the nation [9]. As it outlines an array of rights, protective measures, and mechanisms to guarantee an elevated standard of living, respect, and dignity for the elderly, it focuses on priority access to public and private services, free healthcare access, safeguards against abuse and violence, and judicial support.

In Brazil and across the globe, it is essential to recognise and proactively address the challenges confronting the elderly. As societal demographics shift, national leaders, including physicians, should advocate for elderly to have equitable access to high-quality healthcare, emotional support networks, and avenues for engaged and meaningful ageing. Challenges stemming from uneven healthcare access, social isolation, loneliness, maltreatment, and neglect necessitate

BACK TO CONTENTS

World Medical Journal

a collective approach. Through heightened awareness, knowledge dissemination, and collaborative policies, we can collectively shape a future where our elderly citizens are honoured, their contributions are acknowledged, and their well-being are safeguarded, enabling them to embrace a life marked by vitality and significance.

Colombia

According to the Colombian National Administrative Department of Statistics (Departamento Administrativo Nacional de Estadística, DANE), Colombia has 49 million residents, with an estimated 6.8 million adults (51% female, 49% male) living over the age of 65 [10]. Like other Latin American and Caribbean nations, the Government of Colombia has developed community programs and policies that promote healthy ageing, but gaps still remain in the older adult population, including 14.5% illiteracy, 27% living in poverty, and 43% living in rural areas [10]. Together with these changing demographics, physicians encounter barriers within the health system, where their large workload and limited time per patient consultation hinder their autonomy and ability to provide comprehensive and holistic evaluations for older adults [11].

Over the past two decades, national leaders have supported legislation to ensure health and social protection of elder citizens. First, the *Law 931 of 2004 (Ley 931 de 2004)* ensured social protection against age discrimination for employment opportunities, and the *Law 1251 of 2008* (*Ley 1251 de 2008*) recognised diversity throughout the lifespan and the need for continuous medical and social attention to the elderly [12,13]. Second, the *National Public Policy on Ageing and Older Age, 2022-2033 (Política Pública Nacional de Envejecimiento y Vejez, 2022-2031)*, was adopted by the Decree 681 in 2022, to ensure appropriate conditions for the healthy and dignified ageing of older adults, to increase autonomy and independence and reduce discrimination [14].

The Department for Social Prosperity of the Government of Colombia, under the leadership of President Gustavo Petro Urrego, has continued the implementation of the Colombia Elderly Programme (Colombia Mayor Program) since 2012, as a result of the *Resolution No. 2958 of 2012* and *Resolution No. 0234 of 2020* [15]. This program offers social and financial protection to older persons through an economic subsidy (social pension) for those living in extreme poverty (e.g. homelessness, no pension) [15]. Currently, the Colombian Medical Federation (Federación Médica Colombiana, FMC) has brought national leaders together to discuss health system reform, especially with adapted high-quality comprehensive programs and policies to enhance attention and empathetic care of elder citizens. Specific priorities include promoting holistic care for healthy ageing, manageing chronic diseases, and preventing complications for high quality of life. As physicians, we recognise the importance of the International Day of Older Persons, where we can collectively advocate for equitable access to medical care, encourage increased opportunities for specialised medical training in geriatrics medicine and research, and emphasise the need for physical, mental and social activities for elder citizens across our countries.

India

India, a country of 1.4 billion residents, has an estimated 104 million persons over the age of 60, which is expected to increase by 14% over the next decade [16]. The UN Department of Economic and Social Affairs estimates that, India will represent the nation with have the highest numbers of elderly persons by 2050 [17]. Notably, the elderly population living in rural areas is estimated at 8.5 million persons, when compared to those living in urban areas at 8.3 million, hence giving rise to health care needs which will require new approaches to meet their needs. This calls for financial resources to ensure provision of adequate and quality health care services for the elderly population in India.

Over the past two decades, India has taken various policies and initiatives to ensure the welfare of ageing and older persons. First, the *National Policy on Older Persons* (NPOP) was launched in 1999, to ensure that older persons are treated with respect and dignity in the society [18]. The policy also provides a framework for the welfare of older persons covering areas such as health, nutrition, housing, employment, social security, education, and access to information and services. Second, the Government of India launched the National Program for the Health Care of the Elderly (NPHCE) in 2010, to guarantee better access to quality health care services and facilities for elderly persons, including free medical consultations and treatment for elderly persons living in rural and urban areas [19]. Finally, the Government of India adopted various pension schemes, such as the National Pension System (NPS) and Pradhan Mantri Vaya Vandana Yojana (PMVVY), which provided regular income to senior citizens who have retired from active employment. These initiatives aim to ensure that elderly people in India have access to basic necessities and services that will help them lead a comfortable life throughout the lifespan.

BACK TO CONTENTS

World Medical Journal

The Government of India is also taking steps to create a conducive environment for ageing and older persons through the implementation of robust policies such as increasing healthcare infrastructure, setting up of specialised geriatric care facilities, and improving long-term care services. As physicians, we have the moral responsibility to care and protect our elder population and help them build social networks within their community. If health professionals obtain a comprehensive directory of elders who are living alone in their homes, then we can work together with social workers and community members to help maintain the elders' social networks and increase their quality of life.

Kenya

Kenya, a country in East Africa with a population of 47.56 million, approximately 2.2 million are over the age of 60 with an average life expectancy of 66.7 years, as of 2020 [20]. The Constitution of Kenya (2010) defines an older person as any Kenyan aged at least 60 years (Article 260) and recognises older persons as distinct right holders (Article 57), entitled to care and protection from the State. Family values about caring for older persons are changing in Kenya, with more households focusing on the nuclear family, leading to the abandonment of older persons. This is giving birth to destitute older persons who, if no intervention is implemented, will die of neglect, especially since most older adults in Kenya live alone in the countryside. Public homes for the poor and nursing homes offer additional housing options for improved socialisation and minimise neglected life in the village.

Kenya has not yet achieved universal health coverage and to access healthcare, citizens require insurance coverage to cover health expenses or out-of-pocket payments. The health system does not have a program for the care of the older persons, so there is no adequate health care for the older persons, who typically rely solely on their children for financial support to pay for health services. As a result, they may not seek primary care unless they have a profoundly serious health problem, such as bleeding and other manifestations of complications of chronic noncommunicable diseases such as diabetes, hypertension, and cancer.

As physicians in Kenya, the International Day of Older Persons serves as a reminder of both our social and professional responsibility to cater to the specific healthcare needs of older persons, including age-related health issues and the promotion of active ageing, through three initiatives. First, to enhance the financial security of older persons, the government-funded "Pesa ya Wazee" (Cash Transfer Program for the Older Persons) was started in 2007, providing cash transfers to poor households that have at least one member over the age of 65. In the 2020/2021 financial year, the number of households with older persons supported with cash transfers was 763,670 (91.6%) out of 833,129 older persons. They received a cash transfer as a monthly stipend (Kshs 2000, or US$15 equivalent) and coverage from the National Hospital Insurance Fund [21].

Second, the Constitution (Article 57) obligates the state to take measures to ensure older persons' participation, personal development, dignity, respect, and protection from abuse as well as provision of care and reasonable assistance to older persons [22]. Enacted in 2009, the *National Policy for Older Persons and Ageing* aims to address the unique needs and challenges faced by older persons, emphasise active ageing, social inclusion, and access to quality healthcare services, foster intergenerational understanding and support, and encourage a holistic approach to geriatric care in the country [23]. Finally, the *Kenya Healthy Ageing and Older Person's Health Strategy 2022-2026* is a comprehensive federal plan to promote active and healthy ageing throughout the life course, provide specialised healthcare services for older persons, increase public awareness about age-related health issues, and advocate for policy reforms to ensure the well-being and social inclusion of older persons. Through this strategy, Kenya seeks to create a healthcare system that is responsive to the unique challenges and opportunities presented by its ageing population, fostering a society that values and supports the older persons [24].

As physicians in Kenya, we recognise the immense value and contributions of our older population. We call upon all healthcare professionals, policymakers, and communities to join hands in ensuring a dignified and healthy life for all older persons. First, we urge policymakers to prioritise and invest in age-friendly healthcare facilities that cater to the specific needs of older persons. This includes establishing geriatric health clinics, providing specialised training for healthcare professionals, and ensuring access to affordable and comprehensive geriatric care. Second, as healthcare professionals, we should push for the integration of geriatric training into medical education. By equipping ourselves with specialised knowledge and skills, we can better address the unique healthcare needs of older patients and deliver patient-centred care. Third, we need to embrace the potential use of technology, like telemedicine and digital health solutions, to enhance

BACK TO CONTENTS

World Medical Journal

healthcare access and delivery for older persons, overcome geographical barriers, and ensure timely medical consultations. Finally, by recognizing the invaluable role of caregivers in providing support and assistance to older persons, we should advocate for caregiver training programs, respite care facilities, and financial support to alleviate the burden on caregivers.

Nigeria

Traditionally, as African cultures widely respect elder citizens, younger persons who address an older person would add a prefix to the name. For example, a prefix of Baba for men and Mama for women are added in western Nigeria, Dede for men and Dada for women are included in eastern Nigeria, and Senibo for men and Aya for women are incorporated in southern Nigeria (Ibani people of Rivers State). Since Nigerians commemorate the Nigerian Independence Day from colonial rule on 1 October, leaders enthusiastically celebrate the role of elder citizens in society through International Day of Older Persons campaigns in late September or early October.

To date, there are no formal policies or laws to protect older persons, especially regarding health insurance and social security (retirement age of 60 years, except for lecturers and judges). In 2018, the Nigerian government enacted the Nigerian National Senior Citizens Act, which established the National Senior Citizens Centre (NSCC), with its headquarters in the federal capital territory of Abuja [25]. This act incorporated five parts: 1) declaration of policy, establishment, and composition of the national senior citizens centre governing board; 2) functions of the national centre; 3) staff of the national centre; 4) financial provisions; and 5) supplemental.

Few Nigerian health professionals have received specialist training or continuing education courses in caring for senior citizens, especially with few geriatric centres in Nigeria. Examples include the Care for Elderly Person Unit (CEPU), located at the University of Port Harcourt Teaching Hospital (Port Harcourt, Nigeria), and the Chief Tony Anenih Geriatric Centre (CTAGC), located at the University College Hospital (Ibadan, Nigeria). In 2020, the Elderly Friendly Hospitals Initiative (ELDFHI) was launched at the University of Benin Teaching Hospital by the then Minister of Health, Dr. Osagie Ehanire. As forward steps, physicians should advocate for political commitment to establish geriatric training programs across all the medical specialties in Nigeria. Also, as the federal government can develop relevant policies that ensure health insurance and social security provisions for older persons, private sector establishments should pay pensions to their staff upon retirement.

Pakistan

In Pakistan, the shift from joint family to independent living for elderly people has become increasingly common in recent years. With changing societal dynamics and individual preferences, many young couples are choosing to live independently rather than in a joint family setting. Although this transition allows them to have more control over their daily lives, maintain their independence, and make decisions that align with their personal needs and preferences, the conventional care to older people suffers. Hence, it raises the importance of adequate support systems to address any challenges that may arise during this social transition.

The Constitution of Pakistan upholds the principles of equality, non-discrimination, and social justice for all citizens, which are essential for the well-being and protection of elderly individuals [26]. Article 38 (a-e) describes the need to ensure that elderly have access to healthcare, social security, and other forms of social support and protection to improve their quality of life. For example, the Constitution of Pakistan specifically states that the State shall: *a) secure the well-being of the people irrespective of sex, caste, creed and race, by raising their standard of living; b) provide for all citizens facilities for work and adequate livelihood with reasonable rest and leisure; c) provide for all persons employed in the service of Pakistan or otherwise, social security by compulsory social insurance or other means; d) provide the basic necessities of life, such as food, clothing, housing, education and medical relief, for all the citizens; and e) reduce disparity in the income and earnings of individuals* [26]. Furthermore, in 2022, Pakistan signed the *UN Madrid International Plan of Action on Ageing*, and since its ratification, the government of Pakistan had designed the significant policies regarding the protection of the senior citizens' rights.

Together, the Pakistan Medical Association and other medical organisations are collaborating to increase awareness of the complex socio-economic and cultural care to provide high quality of life and well-being for the elderly population. As a call to action, health professionals should create an inclusive environment that respects cultural backgrounds, traditions, and values, promote intergenerational activities to maintain social connectedness, provide access to recreational opportunities to increase physical activity, and foster a sense of community and belonging. By prioritising physical and mental health needs, while addressing any existing social isolation or loneliness, we can help the elderly population

BACK TO CONTENTS

World Medical Journal

maintain their dignity, autonomy, and overall happiness.

Taiwan

According to the 2018 estimates from the National Development Council, Taiwan's population over 65 years reached 3.31 million, or 14.1% of the 23 million population, officially entering the "aged society" phase [27]. Noting these demographic changes, Taiwan has taken proactive measures to address the challenges posed by an ageing society. Through a combination of well-planned healthcare systems, comprehensive long-term care services, and advancements in telemedicine, the country is working towards ensuring a high quality of life and well-being for its elderly population, while embracing technological innovations for the benefit of all its citizens.

In 1986, the Taiwan Medical Association, in collaboration with the Taiwan Ministry of Health and Welfare, implemented the *Medical Network Plan*, which emphasised hardware infrastructure and manpower planning to ensure comprehensive, continuous, and coordinated healthcare services for the older population [27]. Since 1995, the implementation of the National Health Insurance has provided fair medical treatment with a 99.8% coverage rate and has reduced financial burdens for the population. By 2020, Taiwan had set up 688 Integrated Service Centres (A-units), 6,195 Multi-Service Centres (B-units), and 3,169 Community Stations (C-units), creating a network of community-based long-term care services [28]. Ongoing efforts to further promote and expand the welfare programs will strengthen the long-term care system for older persons.

The Taiwan Medical Association, in collaboration with the Taiwan Ministry of Health and Welfare, is using a multidisciplinary team approach to design an integrated care system that combines medical and long-term care services and provides transitional care from the hospital to home-based medical services. Significant strides in the field of telemedicine have included the *Telemedicine Regulations of 2023*, revised by the Taiwan Executive Yuan, which expanded the scope and modes of remote healthcare services. This initiative, guided by the World Medical Association (WMA)'s Statement on Digital Health, has improved access to medical services for home care and patients in long-term care institutions, as well as positively influenced healthcare and individual well-being [29,30].

Trinidad and Tobago

Although ageing is inevitable, age-associated stigma should not exist in our society. Older persons represent a unique community, as some people are healthy and independent, while others may be afflicted by geriatric syndromes that negatively affect their quality of life. Physicians across Trinidad and Tobago recognise the unique dedication to the older person's plight and advocate for relevant policies and health campaigns, such as the International Day of Older Persons. For example, at the St. James Medical Complex's Geriatric Clinic, multidisciplinary teams of physicians, physiotherapists, dieticians, local institutions (e.g. Diagnostic Research Education Therapeutic Centre, DRETCHI), and national associations (e.g. Alzheimer's Association) educate patients on strategies for healthy ageing, which collectively demonstrate the most appropriate resources to be implemented.

The Trinidad and Tobago government continues to promote the global call to develop active ageing and geriatric health policies and initiatives. First, the *Homes for Older Persons Act of 2007*, which is awaiting proclamation, details requirements for licensing and other regulations to which elder homeowners should adhere [31]. Second, the Geriatric Adolescent Partnership Program, as part of the Ministry of Social Development and Family Services, offers elderly assistance with activities of daily living, transport to medical appointments, and caregiving support [32]. Third, the Trinidad and Tobago Medical Association organised the North Branch National Geriatric Meeting in June 2023, which highlighted the need for a multidisciplinary approach to high-quality elder care.

Since ethical considerations are essential to care for our elder population, as physicians, our call to action includes sensitising our colleagues on the magnitude of issues that arise in this vulnerable population [33]. These issues can range from physical or sexual abuse in homes to financial abuse in situations where there is improper or unauthorized use of older adults' money [34]. In countries where laws are absent or limited in providing health and social protections, physicians should advocate for their protection, ranging from their well-being at home to fair allocation of properties and incomes.

Turkey

In Turkey, a country with approximately 83 million people, the older population (over age 65) represented 6.7% in 2000, and increased to 9.5% in 2020 [35]. Since chronic diseases are frequent diagnoses among this population – including 90% with one, 35% with two, 23% with three, and 15% with more than four – protecting the health and well-being of the elderly is of utmost importance in Turkey [36].

BACK TO CONTENTS

World Medical Journal

According to the *First Gerontology Atlas of Turkey* (Gero-Atlas), 38% of elder citizens express loneliness, hopelessness, and complain about the future, 55% feel isolated from society, and 42% commented that they want to die [37]. To prepare for the future, attending doctors in physical therapy and rehabilitation, orthopaedics, neurology, and geriatrics have gained additional skills in the clinical and surgical management of arthrosis, osteoporosis, fractures, stroke, Parkinson's and Alzheimer's diseases, and rehabilitation.

To prioritise healthy ageing in the populace, the Ministry of Health of the Republic of Turkey launched the *National Plan of Action on Ageing of Turkey* in 2012, focusing on increasing health and well-being throughout the lifespan and providing a supportive environment with adequate facilities [38]. In 2017, the Ministry of Health established a healthy ageing research centre at the University of Health Sciences, in efforts to conduct scientific research on healthy ageing and elderly care. The *11th Development Plan (2019-2023)*, approved by the Grand National Assembly, included long-term geriatric care services (e.g. inter-institutional coordination, increased support for the health workforce at home and clinical settings), increased efficiency of geriatric health service delivery (e.g. increased geriatric health experts, ongoing research applications on dementia and gait prevention), and active social and learning environments (e.g. lifelong learning opportunities, social activities) [39]. Moving forward, a Turkey Care and Ageing Study, with oversight by the Ministry of Health, will monitor the efficiency of health services and policies to support healthy ageing.

The Turkey Medical Association continues to support national efforts to ensure health care service delivery and care for elder citizens. It supports the Turkish Geriatrics Association, which organises the annual Respect for Elders Week during the third week in March as well as endorses the *Turkish Journal of Geriatrics* (http://www.geriatri.dergisi.org/). As physicians, we can advocate for the state budget allocation to develop social support programs for the elderly, expand the coverage of geriatrics clinics, and improve treatment, rehabilitation, and home care services for elderly patients. By increasing access and availability of these services, the financial burden related to such costly medical and long-term care services will be reduced for elderly and their families. Furthermore, together with policymakers, we can serve as clinical experts on the development of relevant social policies that can be discussed and adopted, leading to improving health and social protection for elder citizens.

Conclusion

The International Day of Older Persons offers a platform for the global community to discuss the importance of healthy ageing in our society, identify existing policy and practice gaps that hinder the health and social protection of older persons, and advocate for timely initiatives that safeguard their autonomy, dignity, and independence throughout the lifespan. The Decade of Healthy Ageing (2020-2030) can help guide how our society expands the view of healthy ageing from a solitary biological process to an interplay of external factors – including the natural and built environments, social connections to family members, neighbours, and community, local and national policies and initiatives, and overarching social security and health systems – that influence health and well-being [1]. Comprehensive, person-centred care can revolutionize health care service delivery for older persons, where health professionals can work directly with patients to understand their health care needs, conduct in-depth physical and psychosocial health histories and assessments, prioritise chronic disease management, and evaluate for signs and symptoms related to social isolation, loneliness or other mental health concerns [40].

WMA members represent a global network of clinical and surgical experts, who are proficient with the complex physiological processes of ageing and the need to maintain active engagement to reduce cognitive decline and maintain high quality of life. As this collective article describes timely policies, initiatives, and community activities across nine countries, other NMAs can learn from these eloquent reports, reflect on current national policies and activities, and advocate for relevant actions to protect older persons. These collaborations showcase the political commitment across the African, Americas, Asian, East Mediterranean, European, and Western Pacific regions, as fundamental components to help prepare all nations to strengthen social security and health systems to meet the diverse needs of older persons, including the indicators of the 2030 Agenda for Sustainable Development.

References

1. World Health Organisation. World Report on Ageing and Health [Internet]. 2015 [cited 2023 Sep 10]. Available from: https://apps.who.int/iris/bitstream/handle/10665/186463/9789240694811_eng.pdf

2. United Nations. International day of older persons, 1 October [Internet]. 2023 [cited 2023 Sep 10]. Available from: https://

BACK TO CONTENTS

World Medical Journal

www.un.org/en/observances/older-persons-day

3. The Lancet. Loneliness as a health issue. Lancet. 2023;402(10396):79.

4. United Nations. Madrid International Plan of Action on Ageing [Internet]. 2002 [cited 2023 Sep 10]. Available from: https://www.un.org/esa/socdev/documents/ageing/MIPAA/political-declaration-en.pdf

5. Government of Algeria. Law concerning the Protection of the Elderly. Journal Officiel. 2010;12(21-23). Arabic. Available from: http://www.joradp.dz/FTP/jo-arabe/2010/A2010079.pdf

6. Algerie Presse Service. The invitation to establish "Geriatric Medicine" as a standalone specialty [Internet]. 2022 [cited 2023 Aug 21]. Arabic. Available from: https://www.aps.dz/ar/societe/132183-2022-09-29-16-02-41

7. Government of Algeria. Executive Order No. 16-294 of 9 November 2016 on Aid Measures and Special Care of the Elderly at Home. Journal Officiel. 2016;68. Arabic. Available from: http://www.joradp.dz/FTP/JO-ARABE/2016/A2016068.pdf

8. Travassos GF, Coelho AB, Arends-Kuenning MP. The elderly in Brazil: demographic transition, profile, and socioeconomic condition. Rev Bras Estud Popul. 2020;37:e0129.

9. Secretaria Especial dos Direitos Humanos, Government of Brazil. Estatuto do idoso: lei federal nº 10.741, de 01 de outubro de 2003. 2004 [cited 2023 Aug 20]. Available from: https://www.gov.br/mdh/pt-br/centrais-de-conteudo/pessoa-idosa/estatuto-do-idoso-2013

10. National Administrative Department of Statistics, Government of Colombia. Características generales del adulto mayor en Colombia [Internet]. 2012 [cited 2023 Jul 21]. Spanish. Available from: https://www.dane.gov.co/files/investigaciones/genero/presentacion-caracteristicas-generales-adulto-mayor-en-colombia.pdf

11. Vergara L. Cama de olvido: investigación-creación, la vejez y la salud en Colombia [Internet]. 2021 [cited 2023 Jul 21]. Spanish. Available from: https://repository.bellasartes.edu.co/handle/123456789/301

12. Government of Colombia. Ley 931 de 2004 [Internet]. 2004 [cited 2023 Jul 21]. Spanish. Available from: https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=15591

13. Government of Colombia [Internet]. Ley 1251 de 2008. 2008 [cited 2023 Jul 21]. Spanish. Available from: https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=33964

14. Ministry of Health and Social Protection, Government of Colombia. Envejecimiento y vejez [Internet]. 2023 [cited 2023 Jul 20]. Spanish. Available from: https://www.minsalud.gov.co/proteccionsocial/promocion-social/Paginas/envejecimiento-vejez.aspx

15. Ministry of Labor, Government of Colombia. Programa Colombia Mayor (Colombia Elderly Programme) (2012-) [Internet]. 2012 [cited 2023 Jul 20]. Available from: https://dds.cepal.org/bpsnc/programme?id=95

16. Government of India. Census of India, 2011: Population Projections for India and States, 2011-2036 [Internet]. 2019 [cited 2023 Aug 21]. Available from: https://nhm.gov.in/New_Updates_2018/Report_Population_Projection_2019.pdf

17. Department of Economic and Social Affairs, United Nations. World Population Ageing 2019 [Internet]. 2020 [cited 2023 Aug 21]. Available from: https://www.un.org/en/development/desa/population/publications/pdf/ageing/WorldPopulationAgeing2019-Report.pdf

18. Government of India. National Policy for Senior Citizens 2011 [Internet]. 2011 [cited 2023 Aug 21]. Available from: https://socialjustice.gov.in/writereaddata/UploadFile/dnpsc.pdf

19. Ministry of Health and Family Welfare, Government of India. National Programme for Health Care of the Elderly (NPHCE) [Internet]. 2010 [cited 2023 Aug 21]. Available from: https://main.mohfw.gov.in/major-programmes/Non-Communicable-Diseases/Non-Communicable-Diseases-1

20. Kenya National Bureau of Statistics, Government of Kenya. Kenya Population and Housing Census 2019 [Internet]. 2020 [cited 2023 Aug 20]. Available from: https://www.knbs.or.ke/2019-kenya-population-and-housing-census-reports/

21. Government of Kenya. Kenya Vision 2030: Flagship Programmes and Projects: Progress

BACK TO CONTENTS

World Medical Journal

Report (FY2020/2021) [Internet]. 2020 [cited 2023 Aug 20]. Available from: https://vision2030.go.ke/publication/kenya-vision-2030-flagship-programmes-and-projects-progress-report-fy-2020-2021/

22. Government of Kenya. Constitution of Kenya, 2010 [Internet]. 2010 [cited 2023 Aug 20]. Available from: https://kdc.go.ke/wp-content/uploads/2021/12/Constitution-of-Kenya-2010-min.pdf

23. Ministry of Gender, Children and Social Development, Government of Kenya. National Policy on Older Persons and Ageing [Internet]. 2009 [cited 2023 Aug 20]. Available from: https://repository.kippra.or.ke/bitstream/handle/123456789/1135/Sessional%20Paper%20no%202%20of%202009%20National%20policy%20on%20older%20persons%20and%20ageing.pdf

24. Ministry of Health, Government of Kenya. Kenya Healthy Ageing and Older Persons Health Strategy, 2022-2026 [Internet]. 2023 [cited 2023 Aug 20]. Available from: http://guidelines.health.go.ke/#/category/21/291/meta

25. Law Nigeria. National Senior Citizens Centre Act, 2018 [Internet]. 2018 [cited 2023 Aug 1]. Available from: https://laws.lawnigeria.com/2018/05/10/lfn-national-senior-citizens-centre-act-2018/

26. National Assembly of Pakistan. Constitution of the Islamic Republic of Pakistan [Internet]. 1973 [updated 2012; cited 2023 Aug 20]. Available from: https://na.gov.pk/uploads/documents/1333523681_951.pdf

27. National Development Council. White Paper on Ageing Society by the Executive Yuan, Ministry of Health and Welfare [Internet]. 2022 [cited 2023 Aug 10]. Taiwanese. Available from: https://www.ndc.gov.tw/Content_List.aspx?n=8414DD2B06820C07

28. Government of Taiwan. Ministry of Health and Welfare Long-term Care 2.0 Ten-Year Plan [Internet]. 2022 [cited 2023 Aug 10]. Taiwanese. Available from: https://www.mohw.gov.tw/dl-78115-5511ccc0-cae0-4d16-b729-6d0e16228fb5.html

29. Formosan Medical Association. Taiwan's Telemedicine Health Insurance Policy [Internet]. 2022 [cited 2023 Aug 10]. Taiwanese. Available from: http://www.fma.org.tw/2022spring/S5-2.html

30. World Medical Association. WMA Statement on Digital Health. 2009 [updated 2022; cited 2023 Aug 10]. Available from: https://www.wma.net/policies-post/wma-statement-on-guiding-principles-for-the-use-of-telehealth-for-the-provision-of-health-care/

31. Parliament of Trinidad and Tobago. The Homes for Older Persons Act, 2007 [Internet]. 2007 [cited 2023 Jul 23]. Available from: https://www.ttparliament.org/publication/the-homes-for-older-persons-act-2007/

32. Ministry of Social Development and Family Services, Government of Trinidad and Tobago. Geriatric Adolescent Partnership Program [Internet]. 2020 [cited 2023 Aug 10]. Available from: https://www.social.gov.tt/wp-content/uploads/2020/10/GAPP-Placement-Agency.pdf

33. Hassanali S. Stiffer laws, penalties for abuse of elderly in T&T [Internet]. 2011 [cited 2023 Jul 23]. Available from: https://www.guardian.co.tt/article-6.2.456001.fc72c12ecb

34. Centres for Disease Control and Prevention. Fast facts: Preventing elder abuse [Internet]. 2021 [cited 2023 Aug 10]. Available from: https://www.cdc.gov/violenceprevention/elderabuse/fastfact.html

35. Ministry of Family and Social Services, Republic of Turkey. Fourth cycle of the Implementation of the Madrid International Plan of Action on Ageing and its Regional Implementation Strategy (MIPAA/RIS), 2018-2022 [Internet]. 2021 [cited 2023 Aug 20]. Available from: https://unece.org/sites/default/files/2021-10/mipaa20-report-turkey.pdf

36. Bilir N. [The role of public health workers in changing health patterns: chronic diseases and ageing problems]. Toplum Hekimliği Bülteni. 2006;25(3):1-6. Turkish.

37. Kurt G, Beyaztaş FY, Erkol Z. [Problems and life satisfaction of the elderly]. Adli Tıp Dergisi. 2010;24(2):32-39. Turkish.

38. Formosa M, Gökçe Kutsal Y. Ageing in Turkey. International Journal on Ageing in Developing Countries. 2019;4(1):6-17.

39. Presidency, Republic of Turkey. Eleventh Development Plan, 2019-2023 [Internet]. 2019 [cited 2023 Aug 20]. Available from: https://www.sbb.gov.tr/wp-content/uploads/2022/07/Eleventh_Development_Plan_2019-2023.pdf

BACK TO CONTENTS

World Medical Journal

40. Hammond L, Pullen RL Jr. Manageing loneliness and chronic illness in older adults. Nursing. 2020;50(12):22-8.

Authors

Sharad Kumar Agarwal, *MBBS, MD (Forensic Medicine)*
National President, Indian Medical Association
New Delhi, India

Douaa Roufia Attabi, *MD*
Member, IFMSA-Algeria (Lesouk Batna)
General Physician, Maternal Neonatal Hospital
Biskra, Algeria

Damion Basdeo, *MBBS, Acute Medicine SCE (UK)*
President, Trinidad and Tobago Medical Association
Port of Spain, Trinidad and Tobago

Dabota Yvonne Buowari, *MBBS*
Department of Accident and Emergency, University of Port Harcourt Teaching Hospital
Port Harcourt, Nigeria

Brian Chang*, MD*
Secretary General, Taiwan Medical Association
Chiayi, Taiwan

Helena Chapman, *MD, MPH, PhD*
Milken Institute School of Public Health, George Washington University
Washington DC, United States

Shun Chin Chang, *MD*
Director, Integrated Geriatrics and Palliative Care Centre, Da-Lin Tzu Chi Hospital
Chiayi, Taiwan

Shravan Dave, *MBBS, MS (Surgery)*
Chairperson, Global Surgery Working Group, WMA Junior Doctors Network
National Co-convener, JDN of the Indian Medical Association (2019-2022)
Vadodara, Gujarat, India

Deniz Erdogdu, *MD*
Former Council Member, Turkey Medical Association
Associate Professor, University of Health Sciences Dışkapı Yıldırım Beyazıt Training and Research Hospital
Ankara, Turkiye

Isi Imasekha, *MBBS*
Chairperson, Non-communicable Diseases Subcommittee, Trinidad and Tobago Medical Association
Port of Spain, Trinidad and Tobago

Ming-Nan Lin, *MD*
Vice Superintendent, Da-Lin Tzu Chi Hospital
Chiayi, Taiwan

Wanjala Mercy, *MBCHB, MSc, MBA-Healthcare Management*
Embu Division Chair, Kenya Medical Association
National Secretary, Kenya Association of Family Physicians
Embu, Kenya

Anilkumar J. Nayak, *MBBS, MS (Ortho)*
Honorary Secretary General, Indian Medical Association
New Delhi, India

Prof. ***Muhammad Ashraf Nizami,*** *MD, PhD*
WMA Council Member
President, Pakistan Medical Association
Lahore, Pakistan

Thiago Vicente Pereira, *MD*
Member, Junior Doctor Network, Brazilian Medical Association
Fellow Cardiologist, Instituto do Coracao, University of São Paulo
São Paulo, Brazil

D. R. Rai*, MBBS*
Past Honorary Secretary General, Indian Medical Association
New Delhi, India

Carlos V. Serrano *Jr., MD*
International Relations Director, Brazilian Medical Association
Associate Professor, Faculty of Medicine, University of São Paulo
São Paulo, Brazil

Ana María Soleibe Mejía, *MD*
President, Federación Médica Colombiana
Bogotá, Colombia

World Medical Journal

Modernizing Health Education: The Need to Address Planetary Health by Taking a One Health Approach

Deborah Thomson

Noel Lee J. Miranda

Christina Pettan-Brewer

Donald A. Donahue

Elizabeth Johnson

Paul van der Merwe

Charles Muleke Inyagwa

Peter Rabinowitz

Samuel S. Myers

As fires, floods, droughts, heatwaves, and storms have illustrated more starkly than ever before, the health of all life on Earth depends on stable natural systems. Medical education, veterinary education, and their counterparts across all other health sectors, are being challenged to keep pace with a changing world where environmental health risks, emerging and re-emerging infectious diseases, and climate change are impacting patient health. In addition, awareness of the complex interplay between public health, animal health, and the state of our planet's natural life support systems is requiring educators to breakdown disciplinary silos and train competent healthcare providers who can operate within multi-, inter-, intra-, trans- and cross-disciplinary workforces.

The last decade has seen a leap in our understanding that the health and well-being of humanity and the rest of life on Earth depends fundamentally on the state and stability of our natural systems [1]. This understanding drives the need to refocus health education and is the reason why the fields of "Planetary Health" and "One Health" have evolved [2]. Today's complicated health challenges are leading "Planetary Health" and "One Health" to become more synergistic than ever before.

Definitions

Medical students and professionals may be more familiar with the current definition of "Planetary Health" as "a solutions-oriented, transdisciplinary field and social movement focused on analyzing and addressing the impacts of human disruptions to Earth's natural systems on human health and all life on Earth"[3]. Meanwhile, some medical students and professionals understand that "One Health" is

BACK TO CONTENTS

World Medical Journal

currently described as "an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals, and ecosystems. It recognizes the health of humans, domestic and wild animals, plants, and the wider environment (including ecosystems) are closely linked and interdependent" [4]. These two terms may lead to confusion because "One Health" may also be explained as a concept (strikingly similar to "Planetary Health") as well as the aforementioned approach [5]. Therefore, the authors here emphasize the aspect of "One Health" that relates to its holistic approach to managing health challenges related to people, animals, plants, and their shared environment. As such, the "One Health" *approach* relies on teamwork (including communication, collaboration, coordination, and capacity building) between people of different disciplines, backgrounds, and strengths to prevent and respond to "Planetary Health" challenges [6].

A Student-led Initiative in Planetary Health Education

The growing recognition that the Earth Crisis is driving a global health and humanitarian crisis requires an evaluation of how well our educational system is exposing health professionals to this reality and providing them with necessary skills to address the clinical and public health aspects of these crises. Recently, health professional (medicine, nursing, pharmacy, physiotherapy) students studying across 105 schools in 13 countries (Australia, Canada, India, Ireland, Germany, Greece, Japan, Malaysia, New Zealand, South Africa, Switzerland, United Kingdom, United States) evaluated institutional criteria, including the current state of "Planetary Health" curricula, the extent of interdisciplinary research portfolios, and sustainability practices on campus [7]. This initiative is commendable for several reasons: 1) it incorporates four schools of health sciences, thereby implementing a "One Health" approach, 2) it aims to objectively evaluate schools of health sciences in different countries, and 3) it establishes a global standard of "Planetary Health" education.

Expansion of the Initiative

Health professionals (regardless of the species of their patients) can no longer effectively do their jobs while the natural life support systems, upon which all life depends, are eroding under the weight of a degrading and changing environment. While health professionals recognize that our planet is rapidly changing and pose challenging environmental health risks for our patients, we currently do not have a grasp of our educational strengths and weaknesses in "Planetary Health" education across the health sectors. In order for us to better care for our patients, their families, our communities, and our planet, we must remain humble, combine our clinical expertise, and recognize gaps in the knowledge base.

After all, we can agree that our patients (human or otherwise) are highly vulnerable to environmental health risks such as climate change, natural disasters, deteriorating resources, habitat degradation, biodiversity loss, and air and water pollution. However, are all health-related sectors preparing their students and professionals with the appropriate knowledge and skill set in patient care management to apply their training on a rapidly changing and challenging planet?

Therefore, the authors wish to expand upon this promising student-led initiative and advance the global dialogue on "Planetary Health", by performing a gap analysis in "Planetary Health" education among health professional programs [8]. To conduct this analysis, multiple experts across several global associations, such as the World Association for Disaster and Emergency Medicine, the International Network of Health Workforce Education, the World Veterinary Association, the Planetary Health Alliance, and other interested global associations, will be developing a survey in multiple languages that will be disseminated to a broader audience. The aim is to reach beyond the initial four health disciplines (medicine, nursing, pharmacy, physiotherapy) and involve *both* students and professionals, in equal measure, living and working across high-, middle-, and low-income countries of the Global North and South. The inclusion of perspectives from as many countries, cultures, and backgrounds as possible will align support toward a common goal: to teach the global health workforce to efficiently protect the health of the planet and all living organisms [9]. In the upcoming months, the aforementioned team of experts will distribute survey links to leading organizations and their networks.

This gap analysis survey results will allow for real-time snapshot evaluation of the current state of "Planetary Health" education, assess how well aspiring health leaders are prepared for our challenging and quickly changing world, and empower health professionals to change the paradigm of global medical education. Through purposeful collaboration across all health professions, we can attain a more comprehensive evaluation of "Planetary Health" education around the world. Identification of these educational gaps have the potential to drive improvements in medical and other health education programs, and ultimately promote a unified approach to strengthen future efforts in support of "Planetary Health".

Call to Action

Through taking a "One Health," collaborative approach, health

BACK TO CONTENTS

World Medical Journal

practitioners and advocates can efficiently and simultaneously achieve the common goal of benefiting our patients and our planet. As a call to action, we can use our collective voices to make a difference both locally and globally by: 1) completing the aforementioned survey to illustrate the current state of "Planetary Health" education and impact future teachings, 2) actively inquiring about environmental health risks when taking patient histories in daily clinical practice, 3) sharing our "Planetary Health" knowledge with our friends and colleagues in daily conversations, 4) asking local health institutions about their current "Planetary Health"-related activities, and 5) creating or joining "Planetary Health"-focused action groups within local institutions and communities. By working together across all health sectors towards a common goal, health professionals and advocates can simultaneously improve educational efforts that protect the integrity of our planet and the health and well-being of our patients, our generation, and all future generations.

Acknowledgments: The authors wish to thank Dr. Asger Lundorff Jensen, Dr. James Ouma, and Ms. Doris Ma, members of the World Veterinary Association's One Health Education Subgroup, for their contributions to the development and review of this final draft.

References

1. Myers S, Frumkin H. Planetary Health: protecting nature to protect ourselves. Washington, DC: Island Press; 2020.

2. One Health Initiative. 'One Medicine-One Health': an historic perspective. WMJ. 2023;69(2):18-27.

3. Planetary Health Alliance. What is Planetary Health? [Internet]. 2023. [cited 2023 Sep 8]. Available from: https://www.planetaryhealthalliance.org/planetary-health

4. One Health High-Level Expert Panel (OHHLEP), Adisasmito WB, Almuhairi S, Behravesh CB, Bilivogui P, Bukachi SA, et al. One Health: a new definition for a sustainable and healthy future. PLoS Pathog. 2022;18(6):e1010537.

5. Thomson DJ. The art of science communication: sharing knowledge with students, the public, and policymakers. Arlington, Virginia: Thomson Publishing LLC; 2021.

6. Thomson DJ, Ma D, Lennard PR, Ferri M. Evaluation of a global training program in One Health communication. One Health Implement Res. 2023;3:55-68.

7. Planetary Health Report Card. The Planetary Health Report Card Initiative: an international health student community inspiring institutional change [Internet]. 2023 [cited 2023 Sep 4]. Available from: https://phreportcard.org/

8. Golden SH, Hager D, Gould LJ, Mathioudakis N, Pronovost PJ. A gap analysis needs assessment tool to drive a care delivery and research agenda for integration of care and sharing of best practices across a health system. Jt Comm J Qual Patient Saf. 2017;43(1):18-28.

9. Pettan-Brewer C, Figueroa DP, Cediel-Becerra N, Kahn LH, Martins AF, Biondo AW. Editorial: challenges and successes of One Health in the context of Planetary Health in Latin America and the Caribbean. Front Public Health. 2022;10:1081067.

BACK TO CONTENTS

World Medical Journal

Authors

Deborah Thomson, *DVM*
Chair, One Health Education Subgroup & Member, One Health Working Group, World Veterinary Association
Founder and Executive Director, One Health Lessons
Arlington, Virginia, United States
DeborahThomson@OneHealthLessons.org

Noel Lee J. Miranda, *DVM, MSc*
Member, One Health Working Group & Member, One Health Education Subgroup, World Veterinary Association
Global Health Security & One Health Advisor, Global Health Technical Assistance & Mission Support (GH-TAMS)
Manila, Philippines
nlmiranda@yahoo.com

Christina Pettan-Brewer, *DVM, MSc, One Health PhD Candidate 2024*
Member, One Health Working Group, World Veterinary Association
Associate Professor, School of Medicine, University of Washington
Seattle, Washington, United States
Belo Horizonte, Minas Gerais, Brazil
kcpb@u.washington.edu

Donald A. Donahue, *DHEd, MBA, MSJ, FACHE, FRSPH*
President, World Association for Disaster and Emergency Medicine
Assistant Professor, University of Maryland Baltimore
Baltimore, Maryland, United States
ddonahue@wadem.org

Elizabeth Johnson, *PhD*
President, International Network of Health Workforce Education
Dean, School of Medicine, European University Cyprus
Nicosia, Cyprus

Paul van der Merwe, *BVSc, BVSc(Hons), MMedVet(Fer)*
Member, One Health Working Group, World Veterinary Association
President, South African Veterinary Association
Pretoria, South Africa
wildlife.vet.serv@gmail.com

Charles Muleke Inyagwa, *Dip ANHE, BVM, MSc, PhD*
Member, Education Working Group and One Health Education Subgroup, World Veterinary Association
Member, Kenya Veterinary Association
Nairobi, Kenya
charles.muleke@egerton.ac.ke

Peter Rabinowitz, *MD, MPH*
Director, Center for One Health Research, University of Washington
Professor, Depts of Environmental/Occupational Health Sciences, Family Medicine, and Global Health, University of Washington
Seattle, Washington, United States

Samuel S. Myers, *MD, MPH*
Director, Planetary Health Alliance
Principal Research Scientist, Department of Environmental Health, Harvard TH Chan School of Public Health
Cambridge, Massachusetts, United States
smyers1256@earthlink.net

BACK TO CONTENTS

World Medical Journal

The Health Care System in Canada: The Canadian Medical Association is Hosting a Consultation Process on the Proper Mix of Public and Private Funding and Delivery

Jeff Blackmer

In 1911, a 7-year-old boy living on a farm in rural Saskatchewan badly injured his leg. His family could not afford the necessary surgery. A local doctor offered the family a deal: he would operate on the leg free of cost if his medical students could watch. Following this experience, Tommy Douglas, the young patient, became convinced that all Canadians deserved access to medically necessary care regardless of their ability to pay [1].

As a politician, in 1961, Douglas' New Democratic government passed the Saskatchewan Medical Care Insurance Act, as the first comprehensive health insurance plan in Canada. This was followed by the introduction of National Medicare in 1968. Today, Canada's program of universal medical insurance is administered through the Canada Health Act, a piece of legislation that still includes the principles for which Tommy Douglas advocated: public administration, portability accessibility, universality, and comprehensiveness [1].

According to the Canadian government [2]:

The Canada Health Act (CHA or the Act) is Canada's federal legislation for publicly funded health care insurance.

The Act sets out the primary objective of Canadian health care policy, which is "to protect, promote and restore the physical and mental well-being of residents of Canada and to facilitate reasonable access to health services without financial or other barriers."

The CHA establishes criteria and conditions related to insured health services and extended health care services that the provinces and territories must fulfill to receive the full federal cash contribution under the Canada Health Transfer (CHT).

The aim of the CHA is to ensure that all eligible residents of Canada have reasonable access to insured health services on a prepaid basis, without direct charges at the point of service for such services.

As noted above, there are five criteria for public health insurance set out in *The Canada Health Act* [3]:

1. It must be **universal**, provided to all residents of a province or territory.
2. It must be **comprehensive**, covering all medically necessary services provided by hospitals, physicians and dentists (when their services must be performed in a hospital).
3. It must be **accessible** to any resident with medical needs – unimpeded by discrimination of any kind, including the ability to pay for services.
4. It must be **portable**, ensuring care for residents who are travelling within Canada or who move from one province or territory to another.
5. It must be **publicly administered**, operated as a non-profit by a government or authority accountable to it.

It is the fifth requirement that in many ways separates Canadian health care from that provided in the rest of the world. Unlike most systems, Canada does not (officially) have a parallel private option available for patients who pay out of pocket or use private insurance. Every service deemed medically necessary is covered by the public system and (in theory) Canadians cannot pay to get faster treatment or jump the queue.

In reality, there exist pockets of private care in Canada, where people with the financial means can gain access to care more quickly. For example, in some provinces, there are private MRI clinics where people can self-pay and receive a scan within a day or two (versus several weeks or months in the public system). There are also private surgical clinics where patients can pay for faster access to procedures like cataract surgery or joint replacements.

Provinces in Canada are responsible for the delivery and funding of health care within the borders of their jurisdiction. However, the federal government provides a significant amount of public funding, called the Canada Health Transfer, to each province to assist with this. These transfers are tied to each province adhering to the requirements of the Canada Health Act. Each year, some provinces lose funding or have it clawed back because of non-adherence.

BACK TO CONTENTS

World Medical Journal

Figure 1. Summary of the Canada Health Transfer flow to provinces [2]

Although not all aspects of care are covered by Canada's public health care system, the primary focus is on hospitals, diagnostics, and physicians. If a patient needs a hip replacement, it will be done without charge in a hospital, but the outpatient physical therapy required following the surgery will be paid for by the patient (or their private insurance plan).

And while public health care must be overseen by provinces and territories, they can choose private facilities or providers to deliver care, as long as patients are not charged for services covered by the health cards in their wallets [3].

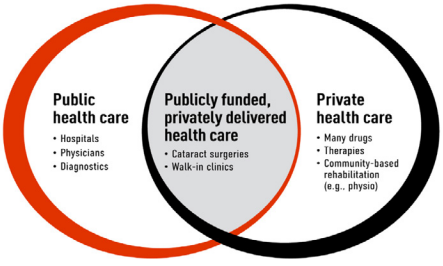


Figure 2. Summary of how care is funded and delivered in Canada [3]

The following graphic summarizes the current state of health care funding and delivery in Canada:

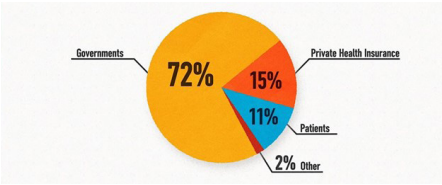


Figure 3. Summary of source of funding for health care in Canada [4]

In Canada, approximately 72% of health care is publicly paid for and delivered [4]. This is actually a smaller proportion than in many other wealthy nations, because Canada does not currently comprehensively cover services like dental care, home care, community mental health care (unless delivered by a psychiatrist) or most medications. Instead, Canadians pay for these out of pocket or through private insurance, which they purchase individually or, more commonly, receive through their employer.

Over the years, it has become an article of faith that the vast majority of Canadians see their public health care system as part of the social fabric of the country, in particular when compared to our friends and neighbours to the South in the United States. While it means higher taxes, it also means that no Canadian is likely to experience poverty or bankruptcy as the result of an illness or injury. It is often called the "third rail" of Canadian politics – no politician dares touch our publicly funded health care system lest they electrocute themselves and burst into flames.

However, the coronavirus disease 2019 (COVID-19) pandemic has exposed cracks in the system that have long existed but were all too often papered over by the selflessness and dedication of physicians and other health care providers. Wait lists have lengthened considerably, and millions of patients do not have access to a primary care provider. Governments are under tremendous pressure to take action, and in this new environment, innovative approaches to health care funding and delivery are now being discussed and considered in ways that were not possible prior to the pandemic. In many cases, this involves the private sector.

It is in this environment that the Canadian Medical Association is embarking on a series of consultations with the medical profession and members of the Canadian public. We recognize that there is no "perfect" health care system or agreed upon standard of public:private ratios of funding and delivery. We are looking at all of the various models that exist, domestically and globally, with their pros and cons, and speaking with persons who have experience in different systems to understand their perspectives.

Over the next several months, we will be completing an array of activities to engage the general public and medical community. First, we will be working with one of Canada's flagship newspapers, the *Globe and Mail,* to host a series of public town halls across the country, where Canadians will gather to discuss these issues. The initial session was held in Toronto on 8 September 2023, and was attended by hundreds of people in person and virtually. Next, we have commissioned polling of the public and the medical profession to better understand their views in a more nuanced way. We are hosting small group sessions in most provinces (and virtually) to meet with physicians and patients. Finally, we will be conducting targeted outreach to vulnerable populations living in rural and remote areas. In short, our goal is to provide an open platform for all Canadians to share their views and input.

At the end of this process, our Board

BACK TO CONTENTS

World Medical Journal

of Directors will meet to consider what we have heard and discuss the reports from the various engagement initiatives. We will review our policy and develop an advocacy strategy. We do not know where all of this will lead us – but we know that the conversation, while difficult (and at times quite emotional) is an important one, and that we are best situated to lead it. Our profession and patients need to be actively engaged in shaping the future of health care in Canada, and the Canadian Medical Association should provide them with this timely opportunity.

References

1. Canadian Medical Hall of Fame. The Honourable Thomas Douglas [Internet]. 2023 [cited 2023 Sep 13]. Available from: https://www.cdnmedhall.ca/laureates/thomasdouglas

2. Government of Canada. Canada Health Act [Internet]. 2023 [cited 2023 Sep 13]. Available from: https://www.canada.ca/en/health-canada/services/health-care-system/canada-health-care-system-medicare/canada-health-act.html

3. Canadian Medical Association. Understanding public and private health care [Internet]. 2023 [cited 2023 Sep 13]. Available from: https://www.cma.ca/our-focus/public-and-private-health-care/understanding-public-and-private-health-care

4. The Commonwealth Fund. International health care system profiles: Canada [Internet]. 2020 [cited 2023 Sep 13]. Available from: https://www.commonwealthfund.org/international-health-policy-center/countries/canada

Jeff Blackmer, *MD, MHSC, FRCPC, MBA, CCPE*
Chief Medical Officer and Executive Vice President, Global Health
Canadian Medical Association
jeff.blackmer@cma.ca

BACK TO CONTENTS

World Medical Journal

Violating the Principle of the Division of Powers Threatens our Profession

Ole Johan Bakke

Axel Rød

Adapted from an editorial published in the Journal of the Norwegian Medical Association on 20 April 2023 [1].

The Board and the Secretary General of the Turkish Medical Association (TMA) stand accused of terrorist behaviour. At the same time, the President of the TMA has been deprived of central rights while waiting for her appeals trial to be scheduled.

France, the homeland of the Enlightenment, has inspired the ideals of freedom, the colours of national flags, and principles underpinning the Constitutions of Norway and other global nations. The principle of the separation of powers, developed by the philosopher Montesquieu (1689-1755), is deeply anchored in most democracies, among them our own. He divided the power of the state into three branches: legislative, executive, and judicial.

We are currently witnessing an increase in authoritarian rule close to our borders. Some of the characteristic features of these regimes are flagrant violations of the principle of the separation of powers. One example is the increased control of courts by political leaders, turning courts into instruments for the preservation of power for incumbent regimes.

Today, our colleagues in Türkiye are victims of such misuse of the judiciary. This is not a new feature, however, for a country that inherited the Ottoman empire. The TMA, which was founded in 1954, has had 14 presidents, where 11 of these presidents have been incarcerated.

In October 2022, the TMA's president, Dr. Şebnem Korur Fincancı, spoke on the Medya Haber, a German television outlet, concerning allegations about the use of chemical weapons against Kurds in northern Iraq. She disclosed her affiliations as a professor and specialist of forensic medicine, stating that an independent review was required to fully evaluate this scenario. Knowing that Turkish authorities would react, she travelled home to Türkiye and was taken into judicial custody. Following three hearings in the Istanbul court apparatus, she was sentenced to two years, eight months, and 15 days in prison, for voicing "propaganda for a terrorist organisation" [2]. She has now been released, pending the appeals trial, which may take several years to schedule within the courts.

At the same time, the TMA Secretary General and 10 other board members stand accused of terrorist activity. All 11 individuals are elected representatives of approximately 110,000 physicians, comprising more than 80% of the country's physicians. The first two court hearings were held on 28 February and 6 April 2023. The third hearing was held on 22 June 2023, and the WMA President, Dr. Osahon Enabulele, and one author of this article attended. The hearing ended in an open-closed meeting, postponing the final decisive hearing until 10 November 2023. These continuous threats of legal action challenge TMA's autonomy and independence. Furthermore, focus on the work plan, activities, and development of the TMA has been difficult since significant energy has been spent on these judicial hearings. Political actions are dangerous because they may be added to the accusations in the ongoing trials.

Some national medical associations (NMAs) still retain many roles that the authorities have taken over in Norway, including the approval of specialists, national guidelines, and reactions towards physicians in cases of malpractice. Therefore, these NMAs are, to a greater extent than in Norway, regulated by law. Such regulations have advantages and disadvantages and require mutual respect and understanding between NMAs and the authorities. This situation works well in open and democratic countries, but with an increasing number of autocracies and political interference with the judiciary as witnessed in Türkiye, the autonomy of the medical profession and its organisations is threatened.

The autonomy of the medical profession, which is associated with its traditional status as a liberal profession, is closely linked with a set of obligations and responsibilities for professional practice. Correspondingly, the professional (individual) autonomy derives from the physician's need for clinical independence. In both instances, autonomy represents freedom to practise without interference from the

BACK TO CONTENTS

World Medical Journal

political administration or individual politicians.

In Norway, less attention appears to be paid to the autonomy of the profession, NMA, and physicians, as compared to other countries like Türkiye. For example, Norwegian physicians live and work in a country where democracy stands strong, and where trust is generally high between the general population, medical professionals, and authorities. During the coronavirus disease 2019 (COVID-19) pandemic, however, we witnessed instances where authorities in some countries had abused the populations' trust, which led to reduced adherence to protective measures to reduce disease transmission. Therefore, we can assume that there is a greater urgency to protect the autonomy of the medical profession in some countries, as opposed to others.

The Standing Committee of European Doctors (Comité Permanent des Médecins Européens, CPME) has a clearstance that when clinical decisions are undermined by administrative interference to the physician's role, a patient's right to safe medical help, and high-quality health services is threatened [3]. In 2013, the CPME and the European professional associations for dentists, engineers, veterinarians, and pharmaceuticals vocalised the need to clarify how the autonomy of a profession is in the population's interest [4].

Our support of our colleagues and our sister organisation in Türkiye stands firm. When the Turkish government threatened to dissolve the TMA in 2020, both the CPME and the World Medical Association (WMA) spoke out. We underlined the importance of independent, democratic medical associations' role in maintaining patients' rights and medical ethics. In a meeting with the TMA before the first hearing in the case against president Dr. Fincancı, the CPME reiterated the importance of the independence of medical professional associations.

As we witness a clear challenge to the principle of the separation of powers in several countries, the medical profession and its organisations remain vulnerable, because autonomy and societal roles are based on fragile mechanisms requiring a high degree of trust. Autocratic developments characterise Türkiye and Russia, as well as other countries that are members of the European Union (EU) and North Atlantic Treaty Organisation (NATO). Both nationally and at the EU level, we see examples where ethical rules are argued to become obstacles to economic growth, and questions are raised concerning the profession's self-regulation and autonomy.

As a medical profession and NMA in Norway, we must ensure that ethical rules and the prioritisation of patients, both at the individual and population levels, are respected. The current events in Türkiye represent an example of a medical profession boldly standing up to their authorities' violation of the principle of the separation of powers, general human rights, and harassment of legitimate physician leaders. This stance is taken in full knowledge of the risk of judicial reactions towards the medical association and individual physician leaders. The courage and stamina of Turkish physicians should represent a model for physicians all across the European continent.

References

1. Bakke OJ. Når brudd på maktfordelingsprinsippet truer vår profesjon | Tidsskrift for Den norske legeforening (tidsskriftet.no). Journal of the Norwegian Medical Association. 2023. Norwegian. Available from: https://tidsskriftet.no/2023/04/leder/nar-brudd-pa-maktfordeling-sprinsippet-truer-var-profesjon
2. Associated Press. Turkish medical group leader sentenced to prison after urging chemical weapons probe. National Public Radio. 2023 [cited 2023 Jun 1]. Available from: https://www.npr.org/2023/01/11/1148395326/turkish-medical-association-president-sentenced-prison-terror-propaganda
3. Standing Committee of European Doctors. CPME Resolution on Professional Autonomy and Clinical Independence of the Medical Profession in Europe [Internet]. 2009 [cited 2023 Jun 1]. Available from: https://www.cpme.eu/api/documents/adopted/2009/CPME_ADBrd_130609_003_final_EN.pdf
4. Standing Committee of European Doctors. Charter for Liberal Professions [Internet[. 2013 [cited 2023 Jun 1]. Available from: https://www.cpme.eu/api/documents/adopted/2013/CPME_ADEC_10102013_140_Final_EN_Charter_Liberal_Professions.pdf

Authors

***Ole Johan Bakke**, MD*
Specialist in public health and family medicine
Board member, Norwegian Medical Association
Vice President, Comité Permanent des Médecins Européens
Holmestrand, Norway
ole.johan.bakke@holmestrand.kommune.no

Axel Rød,
MPhil Comparative Politics
Norwegian Medical Association
Oslo, Norway
Axel.rod@legeforeningen.no

BACK TO CONTENTS

World Medical Journal

Revolutionising Medical Transportation: The Emergence of On-Demand Ambulance Services through E-hailing Platforms

Michael Willie

Sipho Kabane

E-hailing services for ambulance services, also known as on-demand ambulance services, leverage technology platforms similar to those used by ride-sharing companies like Uber or Lyft [1]. These services aim to provide quick and convenient access to medical transportation when people require urgent medical attention or need to be transferred between healthcare facilities [1,2]. Depending on the service, the ambulance may be equipped with basic or advanced life support equipment, and trained medical personnel may be on board to provide emergency medical care during transport [1-5]. The e-hailing service operates through a mobile app or web platform that allows users to request an ambulance [3,4]. Users are able to download the application, create an account, and access the service at any time.

When a user requires an ambulance, they can open the app, input their location, and request the nearest available ambulance [5]. The platform uses GPS technology to determine the user's location and identify the nearest ambulance [6]. Once the ambulance is dispatched, users can track its real-time location on the app, similar to how ride-sharing apps allow tracking of drivers en route to the pick-up location [7]. The application provides an estimated arrival time for the ambulance, so users have an idea of how long they will have to wait for assistance [3,4,8]. Users handle payments through the app, either through credit and debit cards or other digital payment methods, or in some cases, insurance companies may cover the cost [8].

The Potential Use of E-hailing in African Healthcare

Ride-hailing apps and on-demand delivery platforms like Bolt have the potential to broaden access to healthcare in Africa and transform healthcare transportation and delivery [1,9]. These services offer a more reliable, affordable, and convenient means of transport for patients, particularly those residing in rural or hard-to-reach areas where public transport is often unreliable or nonexistent [9-11]. Beyond transporting patients to healthcare facilities, e-hailing services can also play a crucial role in the delivery of medicines and other medical supplies [1]. Patients with chronic illnesses who require regular medication can benefit greatly from the convenience of having medicines delivered to their doorstep, eliminating the challenges associated with travelling to healthcare facilities [12,13]. Moreover, e-hailing services facilitate telemedicine consultations, leverageing technology to connect patients with healthcare providers remotely and bridging geographical gaps in healthcare access [1,13,14]. This becomes especially advantageous when patients and healthcare providers are located in different parts of the country or even in different countries altogether [13,14].

Several African countries face challenges regarding the provision of ambulance services, which are often characterised by unreliability or even absence, resulting in considerable delays in the delivery of emergency medical care [1, 9-12]. One potential solution to mitigate this pressing concern is the utilisation of e-hailing services, which can provide immediate access to ambulance services for individuals requiring urgent medical attention [1]. Quick response times and efficient ambulance dispatch through technology ensure that emergency medical care reaches patients promptly, potentially saving lives [13,15]. The implementation of e-hailing services in healthcare requires close collaboration between technology providers, healthcare institutions, and regulatory bodies [1,9]. Emphasising compliance with medical standards and patient safety is paramount to ensure the seamless integration of these services into the healthcare landscape [1,9,15,16]. Proper training for medical personnel and drivers involved in emergency medical services is essential to guarantee that patients receive the necessary care during transportation [16-18].

Benefits of E-hailing Services for Ambulance

E-hailing services for ambulances offer expedited access to medical transportation, presenting a faster and more efficient alternative to conventional methods [1,5,9,18].

BACK TO CONTENTS

World Medical Journal

Real-time tracking capabilities enable users to monitor the ambulance's location as it approaches, while the app facilitates seamless communication between users and the ambulance crew [5,7]. The implementation of technological advancements in ambulance dispatch can enhance the promptness of the response to critical or life-threatening situations, leading to improved patient outcomes [19]. The convenience and ease of use provided by the mobile app interface further enhance the service's appeal [19,20]. With just a few taps on their smartphones, users can quickly request an ambulance, streamlining the process and minimising delays [5]. Moreover, collecting information on response times, user feedback, and other relevant metrics, can facilitate continuous improvement and data-driven decision-making, ultimately elevating the quality of service provided [20,21].

Challenges and Considerations

Ensuring regulatory compliance and guaranteeing appropriate medical expertise are imperative for e-hailing ambulance services to uphold patient safety and maintain the highest quality of care [22]. Collaborating effectively with these systems enhances the seamless integration of e-hailing ambulance services with existing healthcare systems and emergency response networks [17,23]. A broad coverage area is essential to cater to a wide range of urban and rural users and ensure equitable access to medical transportation services [9,10,18].

Ensuring the resolution of legal and liability concerns holds paramount significance for the provision of such services [24,25]. In 2016, the government of South Africa undertook a comprehensive revision of the National Land Transport Act (NLTA) of 2009, specifically identified as Act No. 5 of that year. This revision was implemented to encompass a crucial addition – the inclusion of e-hailing services into the existing legal framework governing the realm of public transportation. Prior to this revision, the regulatory structure of the public transportation system did not formally recognise or address the operation of e-hailing services. This significant amendment signalled a progressive step toward modernization and adaptation to the evolving landscape of transportation services within the country [24,25]. In response to industry complaints and stakeholder concerns, the Competition Commission in South Africa issued a provisional report in 2020, investigating e-hailing services and metre taxis [26]. The report acknowledged the challenge of accurately quantifying the number of illegal metre taxi operators but suggests that a substantial portion of drivers may be operating outside the legal framework [25,26].

Guaranteeing consumer protection and appropriate insurance coverage and handling liability issues effectively instills confidence in both users and service providers. However, despite the potential benefits, efforts must be made to overcome barriers related to smartphone and internet penetration to ensure that low-income and rural populations have access to these e-hailing ambulance services [27,28]. Additionally, constant evaluations and improvements are necessary to guarantee that e-hailing ambulance services provide align with the highest standards of care and patient safety [22,27]. As with any emerging technology, the success of e-hailing services for ambulances depends on effective implementation, continuous improvement, and collaboration with relevant stakeholders in the healthcare sector [1,25,29].

Case studies

Uber and the American Red Cross Partnership (United States): In 2017, Uber and the American Red Cross joined forces to create the Uber Health program [30]. This initiative aimed to provide reliable transportation for patients, including non-emergency medical transportation and transportation to and from blood donation centres [18]. With the utilisation of Uber's technological advancements and a vast pool of drivers, the objective was to enhance the availability of medical facilities for patients requiring immediate attention [30]. The partnership was deemed successful in helping patients reach medical appointments and blood donation centres more conveniently [30]. The main lesson learned from this initiative was the importance of partnering with established organisations in the healthcare sector to ensure regulatory compliance and proper integration into existing medical systems [30].

Ambulnz in New York City (United States): Ambulnz, a private ambulance service, adopted a model like Uber for emergency medical transportation [31]. Using a mobile app, they enabled users to request an ambulance when needed. The app provided real-time tracking and estimated time of arrival, like how ride-sharing apps work [6]. Ambulnz aimed to optimise ambulance dispatch and reduce response times [31]. The success of this model in New York City highlighted the potential for more efficient and effective ambulance services in densely populated urban areas [31]. One important lesson learned from this case is the need for strict adherence to medical regulations and standards, as emergency medical transportation involves higher stakes compared to regular ride-sharing services [18].

BACK TO CONTENTS

World Medical Journal

Careem NOW and Safe Ambulance Service (Pakistan): In Pakistan, the ride-hailing company Careem launched the Careem NOW platform, which offered various services, including food delivery and medication delivery [32,33]. Additionally, they collaborated with the Safe Ambulance Service to provide on-demand ambulance services, and users could use the Careem NOW app to request an ambulance in case of emergencies. This partnership aimed to address the issue of delayed response times for traditional ambulance services [33].

Respo App (South Africa): In South Africa, Blessing Nzuza envisioned that e-hailing an ambulance could revolutionise life-saving efforts, accessible with a simple tap on a screen [3]. With the support of five emergency service providers, Respo aims to significantly reduce ambulance response times during critical medical situations [3]. Users can easily register on the platform, providing essential personal information like their name, contact details, and medical aid particulars, along with those of their spouse. Notably, Respo pre-loads life-threatening emergency options, such as heart attacks, severe bleeding, and accidents, sparing users the need to input this information manually [3]. When users require immediate help, they can effortlessly select the nearest emergency vehicle through the app [3].

Flare App (Kenya): Flare has ingeniously crafted a response system, encompassing a hotline, user-friendly mobile apps, and a backend platform tailored for ambulance companies – effectively creating an "Uber for ambulances" concept [4]. This innovative solution seamlessly connects subscribers with emergency services, streamlining the process of dispatching the nearest ambulance [4]. Through user-friendly mobile apps or the call centre, subscribers can record emergencies with ease. Once an emergency report is made, Flare's sophisticated system efficiently identifies the closest available ambulance and dispatches it promptly to the scene [4]. This real-time and geographically optimised approach significantly reduces response times, ensuring that critical medical attention reaches those in need swiftly and effectively. Flare's comprehensive response system has the potential to revolutionise emergency medical services, providing a seamless and rapid solution akin to the convenience of ride-hailing services like Uber [4].

Conclusion

The importance of forming partnerships with established healthcare organisations, governments, or emergency response services cannot be overstated when implementing Uber-like models in ambulance services. These partnerships are crucial for ensuring compliance, safety, and the smooth integration of on-demand ambulance services into the existing healthcare infrastructure. In order to prioritise the safety and well-being of patients, it is essential for on-demand ambulance services to strictly adhere to medical regulations and safety standards, considering the life-saving nature of their services. The utilisation of technology to optimise the dispatch of ambulances and decrease response times has the capacity to greatly improve patient outcomes, especially in densely populated regions where timely access to medical assistance is of utmost importance. Ensuring that drivers or medical personnel delivering the service possess the requisite training and expertise to proficiently manage medical emergencies is of paramount significance. The customization of on-demand ambulance services to cater to specific local needs is necessary to guarantee long-term success and effective implementation in diverse regions, taking into account the cultural, geographical, and infrastructural variations. Finally, e-hailing services for ambulance transportation may require a distinct operational framework, when compared to conventional e-hailing services. This differentiation pertains to the fee structure, as well as the potential deviation in utilisation patterns and frequency of requests. Moreover, it is worth noting that these services may encounter affordability constraints in rural areas. A potential catalyst for ensuring sustainability could be the establishment of partnerships between the government, private sector, and donors.

References

1. Ezeora V. E-hailing services and the deepening of access to quality healthcare in Africa [Internet]. 2023 [cited 2023 Aug 15]. Available from: https://www.linkedin.com/pulse/e-hailing-services-deepening-access-quality-africa-vincent-ezeora/

2. Uber. Homeward bound with Uber health and MetroAtlanta Ambulance Service. 2021 [cited 2023 Aug 15]. Available from: https://www.uber.com/blog/uber-health-metroatlanta-ambulance-services-patient-transportation/

3. Sowetan Live. Software connects users to emergency services: Inventor of life-saving app benefits from state backing [Internet]. 2021 [cited 2023 Aug 15]. Available from: https://www.sowetanlive.co.za/sebenza-live/2021-02-02-inventor-of-life-saving-app-benefits-from-state-backing/

BACK TO CONTENTS

World Medical Journal

4. Clark J. Building Kenya's 'Uber for ambulances' [Internet]. 2023 [cited 2023 Aug 15]. Available from: https://www.howwemadeitinafrica.com/building-kenyas-uber-for-ambulances/151182/

5. Mesko B. Could smartphones and ride-sharing apps solve transportation in healthcare? [Internet]. The Medical Futurist. 2021 [cited 2023 Aug 15]. Available from: https://medicalfuturist.com/ride-hailing-platforms-solve-problems-transportation-healthcare/

6. Pasha I. Ambulance management system using GIS. Linköping University. 2006 [cited 2023 Aug 15]. Available from: https://www.diva-portal.org/smash/get/diva2:22123/FULLTEXT01.pdf

7. Mallik R, Sing D, Bandyopadhyay R. GPS Tracking app for police to track ambulances carrying COVID-19 patients for ensuring safe distancing. Trans Indian Natl Acad Eng. 2020;5(2):181-5.

8. Cloete N. Uber for ambulances: app created to help stamp out slow EMS response times [Internet]. Saturday Star. 2022 [cited 2023 Aug 15]. Available from: [https://chat.openai.com/?model=text-davinci-002-render-sha]

9. Mgodeli M. The rise of ehailing in Africa: opportunities and challenges [Internet]. 2023 [cited 2023 Aug 15]. Available from: https://www.linkedin.com/pulse/rise-ehailing-africa-opportunities-challenges-mike-mgodeli/

10. Syed ST, Gerber BS, Sharp LK. Traveling towards disease: transportation barriers to health care access. J Community Health. 2013;38(5):976.

11. Oluyede L, Cochran AL, Wolfe M, Prunkl L, McDonald N. Addressing transportation barriers to health care during the COVID-19 pandemic: perspectives of care coordinators. Transp Res Part A Policy Pract. 2022;159:157-68.

12. Adams S, Mulubwa M, Bheekie A. Access to chronic medicines: patients' preferences for a last kilometre medicine delivery service in Cape Town, South Africa. BMC Fam Pract. 2021;22(1):43.

13. Haleem A, Javaid M, Singh RP, Suman R. Telemedicine for healthcare: capabilities, features, barriers, and applications. Sens Int. 2021;2:100117.

14. Kironji AG, Hodkinson P, de Ramirez SS, Anest T, Wallis L, Razzak J, et al. Identifying barriers for out of hospital emergency care in low and low-middle income countries: a systematic review. BMC Health Serv Res. 2018;18(1):291.

15. Ganesh J. E-health drivers, applications, challenges ahead and strategies: a conceptual framework. Indian J Med Inform. 2004;1:40-8.

16. Walker R, Auerbach PS, Kelley BV, Gongal R, Amsalem D, Mahadevan S. Implementing an emergency medical services system in Kathmandu, Nepal: a model for "white coat diplomacy." Wilderness Environ Med. 2014;25(3):311-8.

17. Jacobson CL, Basnet S, Bhatt A, Parajuli S, Shrestha SK. Emergency medical dispatcher training as a strategy to improve pre-hospital care in low- and middle-income countries: the case study of Nepal. Int J Emerg Med. 2021;14(1):28.

18. Meskó B. Ride-hailing platforms could solve the problems of transportation in healthcare [Internet]. The Medical Futurist. 2018 [cited 2023 Aug 15]. Available from: https://www.linkedin.com/pulse/ride-hailing-platforms-could-solve-problems-bertalan-meskó-md-phd/

19. van Buuren M, Kommer GJ, van der Mei R, Bhulai S. EMS call centre models with and without function differentiation: a comparison. Oper Res Health Care. 2017;12:16-28.

20. Li X, Zhao X, Xu W, Pu W. Measuring ease of use of mobile applications in e-commerce retailing from the perspective of consumer online shopping behaviour patterns. J Retail Consum Serv. 2020;55:102093.

21. Zhong J, Ye X, Wang K, Li D. A modeling analysis of impact from e-hailing service on non-work travel mode in Shanghai, China. Transp Res Rec. 2018;2672(47);125-34.

22. Fisher JD, Freeman K, Clarke A, Spurgeon P, Smyth M, Perkins GD, et al. Patient safety in ambulance services: a scoping review. Southampton (UK): NIHR Journals Library. 2015. Available from: https://www.ncbi.nlm.nih.gov/books/NBK294028/

23. Ministry of Health, Government of South Africa. National Health Act 61 of 2003: Emergency Medical Services Regulations,

BACK TO CONTENTS

World Medical Journal

2017 [Internet]. 2017 [cited 2023 Aug 15]. Available at: https://section27.org.za/wp-content/uploads/2018/02/EMS-Regulations-2017.pdf

24. Chen B, Li H. The determination of legal liability in the infringement of online ride-hailing service. Journal of Education, Humanities and Social Sciences. 2023;11:102-7.

25. Smith LT. Assessing the adoption and utilisation of e-hailing services: the case of Cape Town, South Africa [Internet]. Stellenbosch University. 2016 [cited 2023 Aug 15]. Available from: https://scholar.sun.ac.za/server/api/core/bitstreams/093be0ff-c19d-4b00-828b-724ede97011d/content

26. Competition Commission South Africa. Market Inquiry into the Land-Based Public Passenger Transport: Executive Summary of the Main Report. In Competition Regulation for a Growing and Inclusive Economy.2021 [cited 2023 Aug 15]. Available from: https://www.compcom.co.za/wp-content/uploads/2020/02/Executive-Summary-Final-Combined-Reports.pdf.pdf

27. Vivoda JM, Harmon AC, Babulal GM, Zikmund-Fisher BJ. E-hail (rideshare) knowledge, use, reliance, and future expectations among older adults. Transp Res Part F Traffic Psychol Behav. 2018;55:426-34.

28. Nilsen ER, Stendal K, Gullslett MK. Implementation of eHealth technology in community health care: the complexity of stakeholder involvement. BMC Health Serv Res. 2020;20:395.

29. Chowdhury B, D'Souza C, Sultana N. The use of emerging technology to improve the performance of health service delivery. TENCON 2009 - 2009 IEEE Region 10 Conference, Singapore. 2009. Available from: https://ieeexplore.ieee.org/document/5395913

30. Elin L. Uber continues to support disaster relief efforts with 2016 American Red Cross partnership [Internet]. 2016 [cited 2023 Aug 15]. Available from: https://www.uber.com/newsroom/americanredcross

31. Ambulnz by DocGo. Driving healthcare home [Internet]. n.d. [cited 2023 Aug 15]. Available from: https://www.ambulnz.com

32. Javaid A, Javed A, Kohda Y. Exploring the role of boundary spanning towards service ecosystem expansion: a case of Careem in Pakistan. Sustainability. 2019;11(15):3996.

33. Tech Desk. Careem partners with Edhi to add ambulance service [Internet]. 2018 [cited 2023 Aug 15]. Available from: https://tribune.com.pk/story/1702200/careem-partners-edhi-add-ambulance-service

Authors

Michael Mncedisi Willie,
BSc, MSc, MBA, M.Phil
Executive: Policy, Research and Monitoring
Council for Medical Schemes
Pretoria, South Africa
m.willie@medicalschemes.co.za

Sipho Kabane, *MBCHB, MBA, M. Phil (Economic Policy), PhD*
Council for Medical Schemes
Pretoria, South Africa
s.kabane@medicalschemes.co.za

BACK TO CONTENTS

World Medical Journal

Current Status and Future Role of Paediatric Surgery in China

Ni Xin

In recent years, various sub-specialties in paediatric surgery have made different degrees of progress and breakthroughs in clinical concepts, diagnostic and therapeutic techniques, and scientific research innovations. The Chinese Medical Association (CMA)'s Sub-Society of Paediatric Surgery has organised sub-specialty groups to review and summarise the important disciplinary advancements in paediatric surgery, with the hope of making China's voice heard on the international stage and contributing to the global paediatric surgical field. This article aims to provide an overview of the advancements in various fields of paediatric surgery in China, thereby highlighting the directions for future developments in paediatric surgery.

1. General Surgery

Biliary atresia, which is a severe fibrotic occlusive disease of the bile duct, commonly seen in infancy, is one of the important causes of progressive cholestatic liver disease in children that ultimately leads to liver failure. Cholangitis is one of the most common complications after Kasai surgery, with an incidence rate of 30% to 90%, which affects the prognosis, quality of life, and survival rate of children with biliary atresia [1]. One research study noted that 32% of children with biliary atresia had a high-risk nutrition evaluation, and 29% had abnormal growth and development [2]. Therefore, in clinical practice, it is crucial to pay special attention to the systematic and comprehensive evaluation of the nutritional and developmental status of children with biliary atresia. For children with high nutritional risks, parents should be provided with relevant health information to care for these special needs as well as seek early collaborations with nutritionists. Early jaundice regression after Kasai surgery and the prevention of early cholangitis are key factors in improving the prognosis of biliary atresia [3]. The Liver and Bile Duct Surgery Group of the CMA's Paediatric Surgery Branch developed the *Expert Consensus on Diagnosis and Treatment of Cholangitis after Kasai Surgery for Biliary Atresia* in 2022, to establish a clear and reliable treatment plan for diagnosing and treating cholangitis [4].

On the other hand, surgical repair of esophageal hiatus hernia in children, especially newborns, has always been a challenge for paediatric surgeons. Although laparoscopic surgery has emerged as an alternative approach to invasive surgery, significant differences and controversies remain in the specific steps of laparoscopic surgery [5]. The Minimally Invasive Surgery Group and the Thoracic Surgery Group of the CMA's Paediatric Surgery Branch developed the *Expert Consensus on Operation for Laparoscopic Repair of Esophageal Hiatus Hernia in Children* in 2021, which clarifies the surgical methods and operation steps of laparoscopic repair of esophageal hiatus hernia [6]. This resource aims to help standardise procedures, improve the success rate of the surgery, and reduce postoperative complications.

2. Urology

Genitourinary system trauma accounts for about 3% of childhood trauma [7]. Kidney injury is the most common type of urinary tract injury in children, representing about 10-20% of abdominal injuries in children [8]. In order to standardise the early diagnosis and treatment of kidney injuries in children, the Paediatric Urology Group of the CMA's Paediatric Surgery Branch developed the *Expert Consensus on Paediatric Renal Trauma* in 2022, based on a comprehensive review of the literature and national and international expert opinions [9].

Posterior urethral valves are the most common cause of congenital lower urinary tract obstruction in male children, with a poor prognosis and a mortality rate of 30-46% [10]. Although early diagnosis and treatment can improve outcomes to a certain extent, inconsistent treatment standards related to timing and surgical strategies challenge physicians [11]. The Paediatric Urology Group of the CMA's Paediatric Surgery Branch released the *Expert Consensus on the Diagnosis and Treatment of Posterior Urethral Valves in Children* in 2021, based on recent national and international clinical research progress, with the aim of standardising clinical practice and laying a foundation for further development of diagnostic and treatment guidelines in China [12].

The clinical manifestations of renal duplication anomalies are diverse, and the treatment approaches are varied and controversial, with no guidance available in China before 2021. The

BACK TO CONTENTS

World Medical Journal

Paediatric Urology Group of the CMA's Paediatric Surgery Branch, in conjunction with the Paediatric Urodynamics and Pelvic Floor Group, compiled the *Expert Consensus on the Diagnosis and Treatment of Renal Duplication Anomalies in Children* in 2021, by referring to international guidelines and incorporating the diagnostic and treatment experience of Chinese physicians [13]. The consensus states that the treatment of duplicated kidneys requires a comprehensive and systematic evaluation of the morphology and function of the urinary system before surgery, and that a personalised treatment plan should be developed based on clinical symptoms, caregivers' preferences, and physicians' technical proficiency.

The reported incidence of testicular tumours in children is low (0.5 to 2 per 100,000), accounting for 1% of solid tumours in children [14]. In recent years, there has been a gradual increase in the incidence of testicular tumours, resulting from delayed diagnosis and treatment. The Paediatric Urology Group of the CMA's Paediatric Surgery Branch reached a consensus on the diagnosis and treatment of testicular tumours in children and developed the *Expert Consensus on the Diagnosis and Treatment of Testicular Tumours in Chinese Children* in 2021, to standardise the diagnostic and treatment process in children and improve the survival rate and prognosis of affected children [15].

3. Orthopaedics

Supracondylar fractures of humerus are the most common elbow fractures in children. In particular, Gartland type III fracture of the humeral condyle often involves vascular and nerve damage, and without early treatment, it can result in lifelong disability, including risk of late cubitus varus or valgus deformity [16]. Since anatomical and biomechanical structures are variable through children's growth and development, individualised and precise minimally invasive treatments are necessary to improve clinical outcomes. One clinical study indicated that 3D printing technology can convert digital simulation results into 3D physical models for enhanced surgical tools [17].

Furthermore, the anterior cruciate ligament (ACL) injury is becoming more common in children and adolescents. Since the epiphyses of children have not yet closed, a lack of uniform standards exists for the diagnosis and treatment of ACL injury in children and adolescents. The CMA's Paediatric Orthopaedics Group, the Chinese Orthopaedic Trauma and Deformity Correction Group, and the editorial department of the *Chinese Journal of Orthopaedics*, published the *Guidelines for the Diagnosis and Treatment of ACL Injury in Chinese Children and Adolescents: Injury to the Ligament Substance* in 2022, to improve the scientific diagnosis and treatment of ACL injury in children and adolescents, and ultimately improve the quality of medical services centred on affected children [18].

4. Cardiothoracic Surgery

The primary paediatric thoracic mass lesions are abnormal tissues formed by remnants of embryonic tissues or metastatic tumours. Although the incidence of malignant thoracic solid tumours in children is low (1 per 10,000), rates have been increasing in recent years [19]. The CMA's Paediatric Surgery Branch and the China Healthcare International Exchange Promotion Association's Women and Children Healthcare Branch jointly formulated the *Expert Consensus on the Surgical Diagnosis and Treatment Process of Solid Tumours in Children's Chest* in 2022, to standardise the main treatment principles and treatment process for solid chest tumours in children [20].

At present, extracorporeal membrane oxygenation (ECMO) has become the most important mechanical aid in the treatment of Chinese children with critical heart disease. One research team provided an update on ECMO technology, noting existing problems and countermeasures, where physicians can help lead advancements in paediatric critical care medicine [21].

5. Neurosurgery

Neuroelectrophysiological monitoring represents an indispensable application in neurosurgery, with unique roles in evaluating postoperative visual function. One study suggested that intraoperative neuroelectrophysiological monitoring may reduce postoperative complications and unnecessary nerve damage for patients undergoing selective posterior root rhizotomy [22,23]. This technology is also highly regarded in the surgical treatment of paediatric brainstem gliomas, where neuroblastomas account for 8-10% of childhood malignant tumours, with a mortality rate of 15% [23]. With diverse biological behaviour and complex pathogenesis, tumor heterogeneity is evident, especially for high-risk neuroblastoma. Hence, the International Neuroblastoma Risk Group Classification can help develop an appropriate diagnosis and treatment consensus that can be widely used across health centres. The Neuroblastoma Collaboration Group of the Chinese Anti-Cancer Association's Paediatric Oncology Professional Committee revised and improved the *CCCG-NB-2021 Consensus for Diagnosis and Treatment of Childhood Neuroblastoma* in 2022, based on the international

BACK TO CONTENTS

World Medical Journal

diagnostic and therapeutic progress of the treatment pre-stageing and risk stratification of neuroblastoma [24].

In recent years, indocyanine green (ICG) fluorescence-guided technology, as an emerging intraoperative navigation tool and precision medical technology, has been widely used in identifying tumor lesions and anatomical resections, defining tumor margins, locating lung metastases, and exploring sentinel lymph nodes, due to its simple operation, safety, and real-time imageing characteristics. Since the technological applications are still being evaluated, researchers reviewed the robust applications and current progress of ICG fluorescence-guided technology in the surgical treatment of paediatric solid tumours [25]. Future standardised protocols should be developed to improve the specificity and accuracy of ICG fluorescence imageing, which has shown promising results for wider applications in the diagnosis and treatment of childhood solid tumours.

7. Organ Transplantation

With scientific and technological advancements, paediatric organ transplantation has become increasingly sophisticated and applied to various diseases (e.g. end-stage renal disease, liver failure) [26]. Kidney transplantation is recognised as the best treatment option for end-stage renal disease, as it can help compensate for any growth and development defects [27]. Also, liver transplantation with early combination therapy including plasma exchange can help reduce risk of acute antibody-mediated rejection after transplantation.

8. Applications of Artificial Intelligence in Paediatric Surgery

In recent years, artificial intelligence has become a hot topic in medical research applications, including diagnostic radiology (e.g. ultrasound) and speech recognition information [28]. It may be used in remote medical treatment for low-risk, repeatable work as well as help alleviate the health workforce shortage, improve diagnostic and treatment efficiency, and ease resource management. Many questions remain, including identifying subjective diagnostic differences between doctors and technology, and the exploring if combining such diagnostic efforts can help avoid misdiagnosis in clinical medicine.

In conclusion, the development of paediatric surgery in China faces significant challenges and a long journey ahead. The global development of paediatric surgery relies on multidisciplinary collaborations and scientific progress, which can strengthen comprehensive medical services to ensure positive paediatric health outcomes. Major achievements have been made, ranging from general surgery to organ transplantation, and Chinese paediatric surgeons are dedicated to continue advancing scientific research and clinical care in the field of paediatric surgery.

References

1. Willot S, Uhlen S, Michaud L, Briand G, Bonnevalle M, Sfeir R, et al. Effect of ursodeoxycholic acid on liver function in children after successful surgery for biliary atresia. Paediatrics. 2008;122(6): e1236-41.

2. Ning Y, Pan L, Sun J, Liang Hui Y, Wen Z. [A cross-sectional study on nutritional risk assessment and growth and development status of children with biliary atresia]. Chinese Journal of Paediatric Surgery. 2021:42(6):5. Chinese.

3. Hartley JL, Davenport M, Kelly DA. Biliary atresia. Lancet. 2009;374(9702):1704-13.

4. Hepatobiliary Surgery Group, Paediatric Surgery Branch, Chinese Medical Association. [Expert consensus on the diagnosis and treatment of cholangitis after biliary atresia Kasai, 2022 version]. Chinese Journal of Paediatric Surgery. 2022;43(9):769-74. Chinese.

5. Sfara A, Dumitrascu DL. The management of hiatal hernia: an update on diagnosis and treatment. Med Pharm Rep. 2019;92(4):321-5.

6. Minimally Invasive Surgery Group, Paediatric Surgery Branch, Chinese Medical Association; Thoracic and Cardiac Surgery Group, Paediatric Surgery Branch, Chinese Medical Association. [Expert consensus on laparoscopic esophageal hiatal hernia surgery in children]. Chinese Journal of Paediatric Surgery. 2021;42(1):1-6. Chinese.

7. Shewakramani S, Reed KC. Genitourinary trauma. Emerg Med Clin North Am. 2011, 29(3):501-18.

8. Bryk DJ, Zhao LC. Guideline of guidelines: a review of urological trauma guidelines. BJU Int. 2016;117(2):226-34.

9. Urology Group, Paediatric Surgery Branch, Chinese Medical Association. [Expert consensus on kidney trauma in children]. Chinese Journal of Paediatric Surgery. 2022;43(2):97-102. Chinese.

BACK TO CONTENTS

World Medical Journal

10. Heikkilä J, Holmberg C, Kyllönen L, Rintala R, Taskinen S. Long-term risk of end stage renal disease in patients with posterior urethral valves. J Urol. 2011;186(6):2392-6.

11. Deshpande AV. Current strategies to predict and manage sequelae of posterior urethral valves in children. Pediatr Nephrol. 2018;33(10):1651-61.

12. Urology Group, Paediatric Surgery Branch, Chinese Medical Association. [Expert consensus on the diagnosis and treatment of posterior urethral valve disease in children]. Chinese Journal of Paediatric Surgery. 2021;42(7):577-82. Chinese.

13. Urology Group, Paediatric Surgery Branch, Chinese Medical Association; Paediatric Urodynamics and Pelvic Floor Group, Paediatric Surgery Branch, Chinese Medical Association. [Expert consensus on the diagnosis and treatment of renal ureteral duplication in children]. Chinese Journal of Paediatric Surgery. 2021;42(6):485-93. Chinese.

14. Anderson KH, Romao RLP. Testicular tumours in children and adolescents: long-term endocrine and fertility issues. Transl Androl Urol. 2020;9(5):2393-9.

15. Urology Group, Paediatric Surgery Branch, Chinese Medical Association. [Expert consensus on the diagnosis and treatment of posterior urethral valve disease in children]. Chinese Journal of Paediatric Surgery. 2021;42(7):577-82. Chinese.

16. Kropelnicki A, Ali AM, Popat R, Sarraf KM. Paediatric supracondylar humerus fractures. Br J Hosp Med (Lond). 2019;80(6):312-6.

17. Zhang J, Zhang DP, Zhu JS Li Ya Y, Wang Bao L, Chen Xian J. [Preliminary application of three-dimensional printing assisted surgery planning in the treatment of Gartland Type supracondylar humeral fracture in children]. Chinese Journal of Paediatric Surgery. 2021;42(2):126-32.

18. Paediatric Orthopaedics Group, Paediatric Surgery Branch, Chinese Medical Association; Paediatric Trauma and Orthopaedics Group, Orthopaedics Branch, Chinese Medical Association. [Diagnosis and treatment guidelines for anterior cruciate ligament injury in Chinese children and adolescents: ligament parenchymal injury]. Chinese Journal of Orthopaedics. 2022;42(16):1009-27. Chinese.

19. Croteau N, Nuchtern J, LaQuaglia MP. Management of neuroblastoma in paediatric patients. Surg Oncol Clin N Am. 2021;30(2):291-304.

20. General Thoracic Surgery Group, Paediatric Surgery Branch, Chinese Medical Association; Maternal and Child Healthcare Branch, China International Exchange and Promotion Association for Healthcare. [Expert consensus on the surgical diagnosis and treatment process for solid chest tumours in children]. Journal of Clinical Paediatric Surgery. 2022;21(3):208-14. Chinese.

21. Mo XM, Zou L. [The current status and problems of ECMO applications in Chinese children with heart disease]. Chinese Journal of Paediatric Surgery. 2021;42(8):673-8. Chinese.

22. Liu Y, Liu JG, Wang JL, Wei M, Li S, Xiao B. [Application of intraoperative flash visual evoked potential monitoring in saddle tumours in children]. Journal of Clinical Paediatric Surgery. 2022;21(10):911-6. Chinese.

23. Expert Committee on Neuroelectrophysiological Monitoring, Neurosurgery Branch, Chinese Medical Doctor Association. [Chinese intraoperative electrophysiological monitoring specification in neurosurgery, 2017]. Chinese Medical Journal. 2018;98(17):1283-93. Chinese.

24. Paediatric Oncology Professional Committee, Chinese Anti-Cancer Association; Oncology Group, Paediatric Surgery Branch, Chinese Medical Association. [Expert consensus on the diagnosis and treatment of paediatric neuroblastoma, CCCG-NB-2021 protocol]. Chinese Journal of Paediatric Surgery. 2022;43(7):588-98. Chinese.

25. Yin Q. Application and limitations of indocyanine green fluorescence imageing technology in the field of paediatric surgery. Journal of Clinical Paediatric Surgery. 2021;20(10):5.

26. Vanholder R, Domínguez-Gil B, Busic M, Cortez-Pinto H, Craig JC, Jager KJ, et al. Organ donation and transplantation: a multi-stakeholder call to action. Nat Rev Nephrol. 2021;17(8):554-68.

BACK TO CONTENTS

World Medical Journal

27. Stefano R, Zaccaria R, Claudio R. Perioperative acute kidney injury: prevention, early recognition, and supportive measures. Nephron. 2018;140(2):105-10.

28. Chang AC. Artificial intelligence in paediatric cardiology and cardiac surgery: irrational hype or paradigm shift? Ann Pediatr Cardiol. 2019;12(3):191-4.

***Ni Xin**, MD*
National Centre for Children's Health, Beijing Children's Hospital affiliated to Capital Medical University
President, Chinese Society of Paediatric Surgery, Chinese Medical Association
Beijing, China
nixin@bch.com.cn

World Medical Journal

CONFEDERACIÓN MÉDICA DE LA REPÚBLICA ARGENTINA (COMRA)

Jorge Alberto Coronel

Leadership (2012-2024)
President: Dr. *Jorge Alberto Coronel*
Vice President: Dr. *Natalio Cantor*
Union Secretary: Dr. *Marcelo Mingo*
Secretary of Finance and Administration: Dr. *Jorge Alberto Iapichino*
Secretary of Press and Broadcast: Dr. *Edmundo Filippo*
Secretary of Minutes and Organization: Dr. *Rodolfo Nery*
Secretary of University and Scientific Affairs: Dr. *Daniel Martelli*
Secretary of Institutional Relations: Dr. *José Lodovico Palma*
Secretary of Federative Relations: Dr. *Jorge Raúl Quiroga Mateos*
Secretary of Health and Social Medicine: *Dr. Jorge Hernán Yedro*
Secretary of Sports and Culture: Dr. *Juan Carlos Bordes*
Secretary of Social Works and Prevention: Dr. *Domingo Ubaldo Astrada*
First Alternate Secretary: Dr. *Víctor Alberto Baldassini*
Second Alternate Secretary: Dr. *Daniel Alfredo Godoy*
Third Alternate Secretary: Dr. *Héctor Abel Sale*

Confederation Court of Honor
Leaders
Dr. *Eduardo Augusto Llahyah*
Dr. *Eduardo Rocha*
Dr. *Marta Enriqueta Rios*
Alternates
Dr. *Fernando Vazquez Vuelta*
Dr. *Rúben Villaroel*
Dr. *Horacio Carasso*

Confederation Court of Honor
Leaders
Dr. *Julio Obelar*
Dr. *Cristina Elia Rosales*
Dr. *Brígida Raquel Leguizamón*
Dr. *Adolfo Enrique Rodrigo*
Dr. *Rafael Ademar Meneses*
Alternates
Dr. *Alfredo Rodríguez*
Dr. *Roberto Scarsi*
Dr. *Hugo Omar Yatchesen*

History in brief
On 22 May 1941, the first Medical Union Congress (which later became the Medical Confederation of the Argentine Republic, COMRA) was held, with over 3,728 doctors from the Medical Federation of the Argentine Republic. They dedicated their efforts to protect physicians' right to practise the profession in decent conditions and promote equal access to health for the Argentine population.

Mission
The Medical Confederation of the Argentine Republic (COMRA) is a medical union entity with more than 80 years of experience in defending physicians' labour rights throughout the country and the exercise of the right to health of all Argentines. It brings together medical professionals from across the country and is representative in each of the Argentine provinces.

National collaborations
COMRA leaders aim to protect physicians' rights by monitoring actions of the Provincial and National Social Works, the National Institute of Social Services for Retirees and Pensioners (PAMI), and health authorities and institutions. It serves as a third-party entity for its union actions that represent medical professionals in leading organisations in each province.

With more than 80 years of leadership, COMRA has developed tools such as the National Therapeutic Formulary (Formulario Terapéutico Nacional, FTN COMRA) in 1978, where the COMRA Medicine Commission aims to increase access to essential drugs as well as enhance quality control and rational use of medications.

In 1991, the pre-paid medical unions and medical federations joined COMRA to form the Argentine Health Network (Red Argentina de Salud, RAS), due to a desire for solidarity and cooperation within the medical community.
The COMRA Code of Ethics incorporates new elements of medical practice including technological advancements and respects the deontological parameters of the medical profession.

On 22 July 2010, the Union of Confederations of Health Professionals (UCOPS) was formed, comprised of the Biochemical (CUBRA), Pharmaceutical (COFA), Dental (CORA), and Medical (COMRA) Confederations, and aimed to promote the spirit of cooperation and union ethics among health professionals and coordinate actions that defend common interests.

BACK TO CONTENTS

World Medical Journal

International collaborations
COMRA was named a member of the World Medical Association (WMA) in 1954. It has formed part of the Latin American and Caribbean Medical Confederation (Confederación Médica Latinoamericana y del Caribe, CONFEMEL) since 1997, and the Ibero-American Forum of Medical Entities (Foro Iberoamericano de Entidades Médicas, FIEM) since 2007. These networks offer a space for members to exchange information, cooperate, and seek consensus on medical ethics and professional competences among medical organisations in the region.

Current challenges
The COMRA continues working on physicians' rights as part of their professional practice in the public and private sector, striving for a dignified and ethical professional practice.

Contact information
Address: Av. Belgrano 1235,
Ciudad Autónoma de Buenos Aires, Argentina
Email: comra@confederacionmedica.com.ar
Website: http://www.comra.org.ar

BRAZILIAN MEDICAL ASSOCIATION (ASSOCIAÇÃO MÉDICA BRASILEIRA)

César Eduardo Fernandes

Leadership
President: Dr. *César Eduardo Fernandes*
Secretary General: Dr. *Antônio José Gonçalves*
Treasurer: Dr. *Akira Ishida*
Vice Presidents: Dr. *Luciana Rodrigues Silva* and Dr. *Jurandir Marcondes Ribas Filho*
Scientific Director: Dr. *José Eduardo Lutaif Dolci*
Professional Defense Director: Dr. *José Fernando Macedo*
General Delegate for WMA and International Affairs Director: Dr. *Carlos Vicente Serrano*

History in brief
- **26 January 1951**: The current Brazilian Medical Association (AMB) was created, focusing on defending ethical values and promoting physicians' professional practice and rights.
- **1953:** The first Brazilian Code of Medical Ethics was created.
- **1957:** The first Table of Fees for 2,040 procedures was released. The Commission of Medical Fees (Comissão de Honorários Médicos) started revising the Table periodically.
- **1958:** Titles of specialists were awarded by the Specialty Societies.
- **2000:** The Project Guidelines (Projeto Diretrizes) was launched to enhance the development and work of the Specialty Societies.
- **2003:** The first edition of the Brazilian Hierarchical Classification of Medical Procedures (Classificação Brasileira Hierarquizada de Procedimentos Médicos, CBHPM) was published.
- **2021:** The Extraordinary COVID-19 Monitoring Committee (CEM COVID) was established, as an initiative that would become a beacon of guidance and a milestone in Brazil's response to the COVID-19 pandemic. To strengthen medical representation within the National Congress, the AMB created the Parliamentary Action Center (NAP), based in Brazil. The Alliance for Health in Brazil (ASB) collaborated with partner entities on initiatives to advance medicine.
- **2023:** The Brazilian Medical Demography 2022 was published as the most comprehensive study conducted on the reality of physicians working across Brazil.

Mission
The commitment of the Brazilian Medical Association is "to defend the professional dignity and interests of the physician and safeguard the quality assistance to the population health".

Objectives
As a non-profit, federative and civil association, the AMB unites doctors and medical students throughout the national territory, focusing on key objectives that:
- bring together the country's physicians, medical students, and their representative entities with the aim of updating scientific, ethical, social, economic, and cultural guidelines of the country
- propose models, contribute to the development of health policies, and advocate for improved public and private medical services within the country
- educate and guide the population in seeking primary health care services
- grant the titles of specialists in accordance with the national statutes and regulations
- defend, in court or out of court, the collective interests of its members
- prepare, update, publicise, and recommend the classification of medical procedures for providing medical services in the country
- encourage continuing medical education programs across the country

BACK TO CONTENTS

World Medical Journal

- promote security and pension plans for associate members
- support the establishment of criteria for evaluation and quality control of medical schools in the country
- promote social campaigns that prevent, preserve, and restore population health

National collaborations
The AMB currently serves on the National Commission for Medical Residency (CNRM), on the Permanent Committee for the Regulation of Health Care (COSAÚDE), and has seats on the Committees of the National Commission for the Technologies Incorporation of the Brazilian Unified Health System (CONITEC). It also collaborates with the Participants of the Committee of Specialties (CME), composed by the Federal Council of Medicine (CFM), the BMA, and the National Commission for Medical Residency (CNRM) which regulates the recognition and registration of medical specialties and their respective areas of activity in the scope of the medical councils.

International collaborations
The AMB works closely with international organisations such as the World Medical Association (WMA) and the Latin-Ibero-American and Caribbean Medical Confederation (CONFEMEL).

Current challenges
- Role of social care in healthcare pathways: Social care plays a crucial role in the Brazilian healthcare system, especially in facilitating primary health care services. Special attention is given to four chronic non-communicable diseases: cancers, cardiovascular disease, respiratory disease, and diabetes. Adequate resources and a sustainable health system can help attract and retain qualified professionals in the social assistance sector.
- Health inequalities: The AMB addresses health inequalities through a multi-faceted approach, including improving access to healthcare, education, and economic opportunities to Brazilian medical doctors.
- Financial challenges in the Brazilian medical community: Like healthcare systems in many countries, the Brazilian medical community faces financial challenges. The AMB has focused their efforts to obtain capital investment for maintaining and improving healthcare services.
- Exponential growth of medical schools in Brazil: Their growth between the years 2011 and 2018 can have both positive and negative consequences. While it can help address a shortage of healthcare professionals, it must be accompanied by strict quality control measures to ensure that graduates are adequately trained. The "Mais Médicos" program, which aimed to increase the number of doctors in underserved areas, has likely contributed to this growth.
- Improving medical education: The AMB aims to support the development of a prosperous medical education with intersectoral collaboration, involving various government agencies and private partnerships.

Contact information
Address: Rua São Carlos do Pinhal, 324,
São Paulo, Brazil, 01333-903
Email: presidencia@amb.org.br
Website: https://amb.org.br

BULGARIAN MEDICAL ASSOCIATION

Ivan Madzharov

Leadership
Chairman: Dr. *Ivan Madzharov*
(2018-2021, 2021-2024)
Deputy Chairman: Dr. *Nikolay Branzalov* (2018-2021, 2021-2024) and Assoc. Prof. Dr. *Hristo Shivachev* (2021-2024)
Secretary General: Dr. *Valentin Peev* (2021-2024)

History in brief
The first association of doctors in Bulgaria was founded by Dr. Dimitar Mollov in 1901 in Sofia as the "Physico-medical Society". Its main objective was to address medical and professional issues, prevention, prophylaxis, and disease treatment. The idea of establishing a medical society in Bulgaria was proposed two years earlier by Dr. Stoyko Yurdanov, in a letter to Dr. Ivan Slavkov, who envisioned a society that would unite and enrich the medical knowledge of Bulgarian doctors.

- **1883:** The Varna Medical Society was formed.
- **1895:** The Ruse Scientific Medical Society was established and similar organisations in Plovdiv and other cities.
- **1900:** 14 organisations united to form the Union of Physicians in Bulgaria.
- **1901:** The Bulgarian Medical Association (BMA) was established as an influential force in organising medical care and advocating for doctors' rights and fees.
- **1947:** The BMA was dissolved by the communist authorities,

BACK TO CONTENTS

World Medical Journal

causing significant damage to the medical profession.
- **1990:** The BMA was restored after Bulgaria's transition to democracy. Today, the BMA represents over 32,000 medical doctors and continues to promote and protect their interests.
- **1999:** The BMA became an independent professional organisation under the Law on Professional Organizations of Medical Doctors and Dentists. The BMA and the Bulgarian Dental Association drafted Codes of Professional Ethics, imposed sanctions for misconduct, and required membership for practising doctors and dentists. The BMA's role in negotiating the National Framework Contract in Bulgaria representing the interests of medical doctors has been mandated by law since the introduction of health insurance in the country.

Mission
The BMA champions and safeguards the professional rights and interests of physicians, encompassing enhancements in working conditions, professional growth, and fair compensation. The BMA ensures the utmost standards of physician competence and qualifications, alongside with quality healthcare and patient safety. The present BMA Board embraced the goal of re-establishing physicians' prestige in society, bolstering the profession's authority, reshaping perspectives and leading by positive example, and countering global challenges of aggression against medical practitioners.

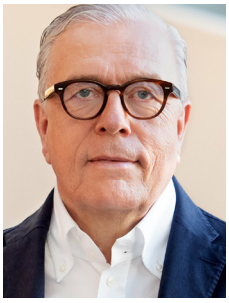
National collaborations
In 2017, the BMA and the State Prosecutor General collaborated to appoint a dedicated Prosecutor whose primary responsibility was to oversee expeditious legal proceedings against individuals involved in violence against ambulance medical teams. This joint effort aimed to enhance the protection and safety of medical professionals in the field. Building on this initiative, in 2020, a significant milestone was achieved through the signing of an Agreement between the BMA, the Prosecutor's Office, and the Ministry of Health. This Agreement solidified a collective commitment to work together in mitigating, preventing, and thoroughly investigating crimes perpetrated against medical professionals, striving to uphold justice and protect those dedicated to serving the health needs of the Bulgarian population. This partnership seeks to create a safer environment for healthcare professionals, ensuring their well-being and enabling them to provide care without fear of violence or harassment.

International collaborations
The BMA actively engages in collaborations with regional, European, and international organisations of physicians, which is driven by the belief that collective efforts can effectively address the challenges confronting the medical profession. The BMA's collaborations span a wide spectrum of issues, including medical education, post-graduate training, brain drain, quality healthcare, medical ethics, and fair compensation for services. By fostering these partnerships, the BMA seeks to find innovative solutions, draw on best practices, and collectively strengthen the medical community's capacity to meet these pressing challenges. Through its active involvement in international forums, the BMA aims to benefit from shared expertise, stay informed about global healthcare trends, and advocate for policies that promote the well-being of both medical professionals and patients. These dedicated efforts ensure that the BMA remains at the forefront of positive change and advancement within the medical field in Bulgaria and beyond.

Current challenges
- Raise awareness about the lack of political will to complete the health reform and the absence of a clear healthcare sector development strategy in Bulgaria.
- Highlight the concerning issue of "brain drain" among Bulgarian doctors who leave the country to pursue their careers elsewhere, and the need for urgent measures to retain and support the talented medical workforce within the nation.
- Advocate for immediate legislative amendments to align the medical standards with global best practices, ensuring both top-notch services and physician safeguarding.
- Support national amendments related to Continuous Medical Education (CME).

Contact information
Address: 2 Dospat str, Sofia 1606, Bulgaria
Telephone: +359 2 954 11 69
Email: blsus@blsbg.com
Website: https://blsbg.com

GERMAN MEDICAL ASSOCIATION (BUNDESÄRZTEKAMMER)



Klaus Reinhardt

Leadership
President: Dr. *Klaus Reinhardt* (2019-2027)
Vice-Presidents: Dr. *Ellen Lundershausen* (2019-2027) and Dr. *Susanne Johna* (2023-2027)

BACK TO CONTENTS

World Medical Journal

History in brief

The German Medical Association (Bundesärztekammer) is the joint association of the 17 State Chambers of Physicians (Landesärztekammer).

- **1947:** Was founded as the Working Group of West German Medical Chambers.
- **1955:** Was recognised as the German Medical Association (GMA). Following the reunification of Germany, the system of medical self-governance was extended to the former East German states, where State Chambers of Physicians were also established.

Mission

The GMA is the central organisation in the system of medical self-governance in Germany. It represents the professional policy interests of the medical profession in Germany and plays an active role in the opinion-forming processes related to health and social policies and legislative procedures. Individual physicians in Germany are GMA members via compulsory membership in their respective local State Chamber of Physicians. As corporations under public law, the State Chambers of Physicians (Landesärztekammer) are responsible for the administration of all matters related to specialty training and continuing medical education in Germany.

Objectives

- Ensuring good medical care for the population through regular exchange with the State Chambers of Physicians and coordination of their common goals and activities
- Mediating the exchange of opinions and experiences among the State Chambers of Physicians
- Fostering a feeling of unity among physicians practising in Germany
- Ensuring the most uniform possible regulation of the professional duties of physicians and the principles for practising medicine in all fields
- Safeguarding the professional interests of the medical profession in matters that extend beyond the jurisdiction of one State (Land)
- Liaising with national government authorities and individual political parties
- Communicating the position of the medical profession on health policy and medical issues
- Promoting continuing medical education and continuing professional development
- Promoting quality assurance
- Establishing relations with the medical community and medical organisations abroad
- Overseeing and updating the 1) Model Professional Code, which outlines the ethical and professional obligations of physicians; 2) Model Specialty Training Regulations, which outline the content, duration and objectives of specialty training and specialist designations; and 3) Model Regulations on Continuing Medical Education, which outline the requirements and standards of continuing medical education activities

It is ultimately the State Chambers of Physicians as corporations under public law that adopt and implement these regulations at the State level based on the GMA's model documents.

National collaborations

The GMA collaborates with the Federal Government, the Bundestag and the Bundesrat, ministries, and individual political parties in Germany on issues that impact the medical profession. The GMA also maintains ties with other medical organisations in Germany, including the Kassenärztliche Bundesvereinigung (National Association of Statutory Health Insurance Physicians); the Marburger Bund, the trade union representing the professional and political interests of medical students and physicians employed in Germany; the Hartmannbund, an organisation representing the professional, political, and social interests of physicians, dentists, and medical students; and the Virchowbund, the professional association for practise-based physicians in Germany.

International collaborations

The GMA represents the interests of the German medical profession on the international stage, by maintaining bilateral relations with medical associations abroad and through its membership in numerous international organisations. The GMA Department for International Affairs serves as a point of contact providing general information for physicians seeking advice on working abroad, as well as for physicians from abroad who wish to work in Germany. It plays a central role in representing the global interests of the German medical profession by organising and coordinating activities with an international focus. It contributes to international work on human rights impacting the medical profession, developmental analyses and trends in international healthcare systems, supporting systems of self-governance (e.g. Kosovo), and monitoring European-level issues relating to the medical profession. The GMA, which also maintains an office in Brussels, plays an active role in the World Medical Association (WMA), European Doctors (CPME), the European Forum of Medical Associations (EFMA), and the ZEVA symposium, which is a platform for exchange among representatives of medical chambers in Central and Eastern European countries.

Current challenges

- Physician shortages, particularly in rural areas of Germany: Although the number of physicians per 1,000 inhabitants in Germany is comparably high compared to other countries, the medical profession and general population in Germany is ageing. Part-time positions are becoming increasingly popular among physicians. To keep up with the increasing demand for medical care for the ageing population and balancing the number of physicians who will be retiring or reducing their

BACK TO CONTENTS

World Medical Journal

working hours, the GMA has demanded 6,000 additional medical training placements for students in basic medical training.
- Digitalisation in healthcare: The GMA is involved in regional discussions to debate the European Union (EU) Commission's proposal for the European Health Data Space. The GMA President Dr. Klaus Reinhardt emphasised the importance of safeguarding sensitive health data and respecting patient autonomy to maintain a relationship of trust between patients and physicians.
- Ethical implications of artificial intelligence (AI) for the medical profession: In October 2023, the GMA will bring together top AI experts and facilitate a discussion with the German Minister of Health on opportunities and risks of AI in medical treatment and research related to personal and trust-based relationships between patients and physicians.
- Health impacts of climate change.
- Strategies for addressing medicine shortages.

Contact information
Address: Herbert-Lewin-Platz 1, 10623 Berlin, Germany
Email: international@baek.de
Website: http://www.baek.de

ICELANDIC MEDICAL ASSOCIATION (LÆKNAFÉLAG ÍSLANDS)

LÆKNAFÉLAG ÍSLANDS STOFNAÐ 1918
Icelandic Medical Association

Steinunn Þórðardóttir

Leadership
President: Dr. *Steinunn Þórðardóttir*
CEO: Mrs. *Dögg Pálsdóttir*

History in brief
- **1918:** The Icelandic Medical Association (IcMA) was established.
- **2018:** The IcMA hosted the WMA General Assembly, as a part of its 100-year anniversary celebration.

Mission
To promote the independence of the medical profession and to advocate for the improvement of the health status of Iceland's citizens.

Objectives
The IcMA is both a trade union and a professional organisation. Almost all doctors practising in Iceland are members although the membership is voluntary. The IcMA enters into collective agreements on behalf of its members who work for the public health care system regarding employment conditions, such as salaries, working hours, sick and parental leave, and pensions.

National collaborations
The IcMA collaborates with the government and parliament as well as national, regional, and local authorities.

International collaborations
The IcMA is a founding member of the WMA and has long-standing collaborations with the medical association from other Nordic countries, the Standing Committee of European Doctors (CPME), and the European Union of Medical Specialists (UEMS).

Current challenges
The challenges facing the Icelandic health care system are:
- strain on health care due to ageing population, tourism and severe lack of general practitioners
- insufficient staffing of doctors both in urban and rural areas
- far to high utilisation of inpatient facilities
- difficulties in maintaining highly specialised services (e.g. cardiothoracic surgery), mainly due to lack of doctors
- long waiting lists (e.g. children's mental health services)
- burnout and brain drain of doctors
- unsafe legal environment when related to handling adverse incidents

Contact information
Address: Hlíðasmári 8, IS-201 Kópavogur, Iceland
Email: lis@lis.is
Website: http://www.lis.is

BACK TO CONTENTS

World Medical Journal

LIECHTENSTEIN MEDICAL ASSOCIATION (LIECHTENSTEINISCHE ÄRZTEKAMMER)

Johannes Jehle

Leadership
President: Dr. *Johannes Jehle*
Secretary General: *Stefan Rüdisser*

History in brief
- **2004:** The Liechtenstein Medical Association (LMA) was founded and succeeded the Liechtenstein Doctors' Association as the professional association for medical doctors in the country. Membership in the LMA is mandatory for all doctors practising in Liechtenstein.

Mission
As part of the mission of the LMA, it represents, promotes, and strengthens the interests of all doctors in Liechtenstein.
It also has authorities which it exercises instead of the public health administration.

Objectives
The LMA primary objectives are defending the profession against excessive state intervention, increasing the attractiveness of the location as a destination for doctors, and supporting doctors with rising bureaucratisation in the healthcare sector.

National collaborations
The LMA is connected with numerous stakeholders within the Liechtenstein healthcare sector, focusing on collaborations with associations of other healthcare professions.

International collaborations
The LMA also collaborates with the World Medical Association (WMA) and Consultative Meeting of German-Language Medical Organisations (Konsultativtagung deutschsprachiger Ärzteorganisationen).

Current challenges
- ensuring access to the entire spectrum of medical care
- continuous recruitment of new specialists in all medical fields, with challenges related to physician retirement and the shortage of doctors across the wider region
- fending off state interventions in the provision of medical care, which are generally the result of budgetary considerations within the government

Future vision
All Liechtenstein residents enjoy easily accessible and timely medical care without regard to their personal financial circumstances. The work of doctors is less bureaucratic, adequately compensated, and not undermined by politics, thus increasing the attractiveness of the location and encouraging young doctors to settle in the country and stabilise the natural workforce fluctuation.

Contact information
Address: St. Martins-Ring 1, 9492 Eschen, Liechtenstein
Email: office@aerztekammer.li
Website: http://www.aerztekammer.li

MACEDONIAN MEDICAL ASSOCIATION

Goran Dimitrov

Leadership
Term of office (April 2020-April 2024):
President: *Goran Dimitrov*, MD PhD
Deputy Presidents: *Mirjana Shosholceva*, MD PhD and *Boro Dzonov*, MD PhD
General Secretary: *Oliver Karanfilski*, MD PhD
Members:
Prof. *Slavejko Sapunov*, MD PhD
Prof. *Dragan Mijakoski*, MD PhD
Sead Zejnel, MD

BACK TO CONTENTS

World Medical Journal

Prof. *Marija Zdravevska*, MD PhD
Ljuben Ristevski, MD
Prof. *Niki Metveeva*, MD PhD
Dimitar Arnaudov, MD

History in brief

- **12 August 1945:** The Macedonian Medical Association (MMA) was established in the postwar period of the People's Republic of N. Macedonia with the mission to promote medical and related sciences, protect the interests of doctors, and contribute to the growth of the medical profession.
- **March 1947:** The MMA played a crucial role in establishing the Faculty of Medicine in Skopje, contributing to the development of medical education in Macedonia.
- **1976:** The MMA received high federal recognition, the Order of Merit for the People with SilverRays, acknowledging its significant contributions to the advancement of healthcare services and medical education.
- **2005:** On the occasion of its 60th anniversary, the MMA received the "St. Kliment Ohridski" national award, in recognition of its outstanding contributions to the healthcare sector in the Republic of N. Macedonia.

Mission

The primary mission is to improve the health status of the population and contribute to overall social development. The MMA aims to strengthen medical education programs, protect the interests of doctors, and support their continuous professional development. At times when healthcare resources were limited, the MMA played a central role in modernizing health services in Macedonia and affirming its national identity and autonomy.

Objectives

- Continuing Medical Education (CME) and Professional Advancement: The MMA places significant emphasis on CME and continuous professional development to ensure that healthcare professionals maintain their competences and skills. The association organizes scientific congresses, symposiums, and meetings, providing physicians with opportunities to enhance their knowledge and remain updated with the latest medical advancements.
- Fostering Medical Research and Scientific Advancement: The MMA actively supports and promotes scientific research in medicine. By organizing medical debates, discussions, and public lectures, the association encourages the dissemination of knowledge and the exchange of ideas among medical practitioners.
- Advocacy and Engagement in Health Policy: The MMA collaborates with the Ministry of Health, the Medical Faculty, and other state bodies to participate in the development and improvement of healthcare regulations and policies. The association actively engages in discussions and policymaking related to healthcare, working towards evidence-based and efficient healthcare practices.
- Promotion of Medical Ethics and Professionalism: The MMA places great emphasis on promoting ethics and professionalism among its members. Adherence to the Macedonian Code of Medical Deontology and the International Code of Medical Ethics is encouraged, and an the Ethical Committee upholds the highest standards of ethical conduct in medical practice.

National collaborations

The MMA works closely with the Ministry of Health, the Faculty of Medicine, and the Doctors' Chamber of Macedonia to develop and implement evidence-based health policies and initiatives. The MMA regional and specialist associations facilitate knowledge exchange, promote professional development, and bring together medical professionals with shared interests and expertise.

International collaborations

The MMA's commitment to international collaboration extends to prominent organizations such as the World Medical Association (WMA), the European Forum of Medical Associations (EFMA), the World Health Organization (WHO), the European Union of Medical Specialists, as well as the United Nations Population Fund (UNFPA), and the United Nations Children's Fund (UNICEF). These comprehensive collaborations underscore the MMA's dedication to remaining at the forefront of global medical advancements and its proactive engagement in international research initiatives. By actively participating in a multitude of professional and scientific conferences worldwide, the MMA members gain invaluable opportunities for cross-cultural learning, which in turn, contributes to the Republic of N. Macedonia's heightened integration into the global healthcare community. Through its multifaceted partnerships, the MMA ensures that its members are well-informed and plays an integral role in advancing healthcare standards on both regional and international fronts.

Current challenges

The MMA faces several significant challenges in the current healthcare landscape of Macedonia, including:

- addressing the persistent shortage of healthcare professionals
- ensuring accessible and relevant CME opportunities
- integrating technological advancements into healthcare services
- reducing health inequalities that exist among certain vulnerable populations
- advocating for evidence-based health policy reforms

Future vision

The future vision of the MMA is anchored in a commitment to excellence, advocacy, empowerment, and global collaboration. The MMA aims to further enhance medical education and research in Macedonia, foster partnerships with academic institutions,

BACK TO CONTENTS

World Medical Journal

and promote evidence-based practices. By actively engaging in policy-making and advocating for health policy reforms, the MMA seeks to strengthen the healthcare system and improve healthcare access and outcomes for all citizens. International collaborations will continue to play a pivotal role in promoting knowledge exchange, research collaboration, and professional development opportunities for its members, positioning the MMA as a dynamic and influential force in shaping the future of healthcare in the Republic of N. Macedonia.

Contact information
Address: Dame Gruev 3, Skopje 1000, N. Macedonia
Telephone: + 389 2 3162 577
Email: info@mld.mk
Website: http://www.mld.mk

NEPAL MEDICAL ASSOCIATION

Anil Bikram Karki

Leadership
President: Dr. *Anil Bikram Karki* (2023-2026)
Immediate Past President: Dr. *Lochan Karki*
General Secretary: Dr. *Sanjeeb Tiwari*
Editor-in-Chief, *Journal of the Nepal Medical Association*: Dr. *Angel Magar* (2013-present)
Chief Administrative Officer: Mr. *Milan Chandra Khanal*

History in brief
The Nepal Medical Association (NMA) is a non-profit national professional organisation of Medical and Dental Doctors of Nepal. Established with as few as 20 members, it has evolved into a large organisation with more than 13,000 members, with 16 branches across the country. The Founding President was the late Dr. Siddhi Mani A. Dixit. The NMA has been publishing the *Journal of Nepal Medical Association (JNMA)* since 1963; it is the first and oldest medical journal in Nepal.

- **4 March 1951:** Was founded.
- **1959-1961:** Request for the NMA recognition by His Majesty's Government (HMG).
- **1961-1963:** The NMA was registered with the HMG, and the constitution subcommittee was formed. The first issue of the JNMA was published.
- **1963:** The Nepal Medical Council (NMC) was established by the NMA at the First National Medical Association Conference.
- **28 February 1964:** The NMC was recognized under the Act of the NMC. Though established on due legal grounds, the NMC was still non-functioning due to the lack of Rule, Regulations/Bylaws as per the NMC Act.
- **13 September 1965:** Rule, Regulations/Bylaws was published in the *Nepal Gazette* for the first time, stating that under the power delegated by Clause1 (III) of the NMC Act, His Majesty's Government has enforced 13 different Clauses.
- **9 June 1966:** All other Clauses of the NMC Act were enforced except Clause 26, and they were enforced in Kathmandu and Biratnagar in July 1977.
- **1964-1966:** Kathmandu and Biratnagar branches were recognized. There was an appeal for diarrhoea, cholera, and dysentery prevention to the honorary minister.
- **1966-1968:** Affiliation to the WMA was requested. HMG requested to waive the customary charges on the prices of medicines, drugs, and medical equipment.
- **1 January 1968:** The NMC Rules was approved by HMG. Regular functioning of the NMC was started. The first issue of the *JNMA* was published.
- **1968-1970:** HMG requested to implement the NMC Act.
- **1970-1972:** Proposal of special leave for higher studies for doctors with two years of service. The first symposium on "Social and Medical Aspects of Family Planning in Nepal" was held at Bir Hospital. The proposal was completed to establish the Central Medical Library. The code of medical ethics and role of members of the NMC were discussed.
- **1972-1974:** Planning for training of nurses, auxiliary, and paramedical program. The NMA attended the World Council for General Practice in Australia.
- **1974-1976:** The Scientific and Public Relation subcommittees and two more branches were established.
- **1976-1978:** The provision of an allowance for private practice compensation from working in a remote place and hazardous conditions, was requested. A NMA representative was sent to represent the Ministry of Health in "Long-term Planning".
- **1978-1980:** The NMA research fund was established.
- **1980-1983:** Rural health survey was conducted; medical relief fund was established; special fellowships for Nepalese doctors for post graduate studies were established.
- **1983-1985:** Blood donation program were initiated, and free clinics were opened.
- **1985-1986:** The NMA award for sincere long services was established. Free health and eye camps and a smallpox vaccine

BACK TO CONTENTS

World Medical Journal

awareness campaign were conducted.

- **1986-1988:** Community-oriented programs for awareness of tuberculosis, leprosy, measles, and vaccines were conducted.
- **1988-1990:** The formation of training and career subcommittee for training and higher education of medical doctors; team of doctors was recruited to examine the victims of democracy movements and civil war.
- **1990-1992:** The Health Service Act was proposed alongside with the formation of Health Service Act subcommittee; village health camps were conducted.
- **1992-1994:** The establishment of the Society of Dermatologists, Venereologists and Leprologists was approved; subcommittee was formed to conduct family planning activities.
- **1994-1996:** Various campaigns including AIDS, tobacco cessation, and drug abuse campaigns were conducted. The concept of doctors' insurance was introduced.
- **1996-1998:** Advised for Continuing Medical Education in coordination with the NMC; HIV/AIDS and STD care and management programs were executed.
- **1998-2000:** The NMA established discounts on eldercare (70 years and beyond).
- **2000-2002:** The NMA endorsed the Medical Education Act and increased awareness about violence against doctors, influenza, smallpox vaccination, and tobacco cessation.
- **2002-2004:** The doctors benefit fund was established.
- **2004-2006:** The HIV/AIDS project was implemented. A protest against violence against doctors occurred.
- **2005:** Dr. Sudha Sharma became the first female NMA president, Dr. Achala Vaida was appointed as the new *JNMA* Chief Editor. Dr. Angel Magar was selected as Deputy Executive Editor.
- **2006-2008:** The idea of Legal Case-related Insurance for NMA Life Members was formulated. Medical and logistical support was provided to flood victims.
- **2007:** The "Jail without Bail" movement was initiated for violence against health professionals in Nepal.
- **2009-2010:** Dr. Kedar Narsingh KC was appointed as new President. Several protests and rallies were organised that demanded the rights of health professionals. The National Workshop on Kidney Transplantation was conducted.
- **28 June 2009:** Dr. Angel Magar conducted the national consultative meeting on undergraduate vs postgraduate seats: rationale, challenges and future perspectives in Nepal. White paper was submitted to the government to establish a single medical university and common entrance and exit exams for medical professionals. It ultimately led to the establishment of a medical education commission in Nepal.
- **2013:** Dr. Anjani Kumar Jha was appointed as new NMA President, Dr Angel Magar was appointed as the youngest Chief Editor of the *JNMA*, and the 50th Anniversary of the *JNMA* was celebrated. The *JNMA* conducted various training on research and scientific publications. The World Health Organisation's Office in Delhi digitised the old *JNMA* journals. Financial support from the Ministry was obtained for the *JNMA* printing. Amendment of the NMC Act.
- **2015:** The new NMA building was constructed.
- **2015-2017:** Amendment to the NMC Act. Psychological counselling and post-earthquake psychological support and counselling training was provided.
- **2017-2020:** Dr. Mukti Ram Shrestha became the new NMA President. A discussion on Organograms of the Health System in Nepal was initiated.
- **2020:** Dr. Lochan Karki led the NMA as the new president.
- **2021:** Under the new president's leadership. Dr. Angel Magar led the first Women in Medicine in Nepal that highlighted female doctors by the President of Nepal and also founded and organised the 1st NMA National Health Summit.
- **2022:** The 2nd Women in Medicine in Nepal and the NMA Health Summit 2022 were organised.
- **2023:** The 29th All Nepal Medical Association Conference (ANEMECON 29) was organised.

Mission

- To ensure professional rights and promote the quality of ethical practices in medical and dental professions in order to develop and improve the healthcare sector in Nepal
- To uplift and preserve professional standards, values, and freedom of NMA members
- To conduct academic activities which increase the knowledge and skills of medical doctors working in the country
- To raise public awareness of different health issues and contribute to programmes that can improve population health
- To enhance closer professional and scientific links between medical doctors and strengthen relationships between doctors and the general public

Objectives

- To safeguard the legitimate professional interest and promote the spirit of harmony and cooperation among individual members
- To encourage members to maintain the highest standard of professional conduct, prioritising the health of the patient.
- To encourage research and studies to acquire the knowledge of medical and allied sciences by all possible means (e.g. *JNMA* publications, establishment of medical libraries, holding symposia, seminars, and conferences)
- To assist in continuous professional development of doctors via various accredited national and international training and programs
- To develop high-quality educational trainings of all medical and paramedical personnel based on international standards.
- To encourage and support the endeavour to develop and extend the provisions of curative and preventive medical facilities
- To be willing to offer services and cooperation to the government in its efforts to eliminate quackery from medical

BACK TO CONTENTS

World Medical Journal

practice in Nepal
- To work to raise public awareness of the laws on healthcare, hygiene, and cleanliness
- To perform duties to improve the health of the nation
- To disseminate state-of-the-art knowledge, clinical practice, technology, and emerging concepts in medical sciences among medical and allied health professionals
- To create public awareness about various health-related issues

National collaborations
The NMA serves an important role in the development of medical science as the link between the government and medical professionals. The NMA is associated with 36 societies in Nepal, and it provides professional security by supporting its members during various manhandling and vandalism incidents that occur in the workplace. It also conducts various academic and training programs, including various national-level programs in collaboration with the World Health Organization.

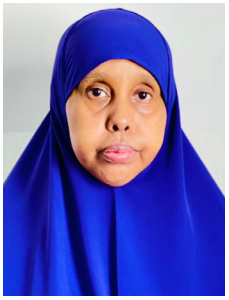
International collaborations
The NMA is a member of the World Medical Association (WMA), the Confederation of Medical Associations in Asia and Oceania (CMAAO), and a founder member of the South Asian Medical Association (SAMA). It is affiliated with the Indian Medical Association, and it has helped to establish the *Bhutanese Medical Journal*.

Current challenges
- Improving the efficiency of the hospital, motivating health professionals, and using appropriate technology
- Ineffective using of resources and budgets allocated for improving the quality of health
- Strengthening medical ethics, medical research, and scientific publications

Future vision
- To establish research and development programs across the country
- To establish the NMA as a think tank and contribute significantly to policy-making in the medical sector

Contact information
Address: NMA Building, Siddhi Sadan P.O. Box 189, Exhibition Road, Kathmandu, Nepal
Telephone: +977 1 4225860/4231825/4225300
Email: nma@nma.org.np
Website: https://www.nma.org.np/

SOMALI MEDICAL ASSOCIATION (URURKA DHAKHAATIIRTA SOMAALIYEED)



Lul Mohamud Mohamed

Leadership
President: Dr. *Lul Mohamud Mohamed*
Vice President: Dr. *Asad Hassan Sheikh Mohamed*
Secretary General: Dr. *Liban Hassan Mohamud*
Secretary for Public and International Affairs: Dr. *Kadra Dahir Abdi*
Finance Secretary: Dr. *Jamal Salad Hussein*
Secretary for Social Welfare and Emergency: Dr. *Hassan Ahmed Abshirow*
Secretary for CME and Research: Dr. *Mohamed Ibrahim Abukar*

History in brief
1999: The Somali Medical Association (SMA) was founded as an independent professional union of doctors that supports the professional and personal needs of doctors working in Somalia.

Mission
To build a sustainable professional association of medical doctors that will advance the delivery of qualitative healthcare services through continuing professional development, advocacy, research, and public education in collaboration with other stakeholders.

Vision
The SMA represents a professional body committed to promote efficient healthcare delivery, support high ethical standards, and protect the interests of its members.

Objectives
- To promote the medical and related arts and sciences and to maintain the honour and the interests of the medical profession
- To aid in advancing measures designed to improve public health and prevent disease and disability
- To assist in promoting measures designed to improve standards

BACK TO CONTENTS

World Medical Journal

of hospital and medical services
- To advise the government, other medical bodies, and the general public on matters related to health
- To promote continuing professional development through periodic publications, seminars, and scientific conferences
- To enhance the relationship with international medical associations around the world

National collaborations
The SMA collaborates with the Ministry of Health, National Institute of Health (NIH), National Health Professionals Council (NHPC), and the local organisations representing patient interests, other healthcare specialists, and relevant state institutions.

International collaborations
The SMA closely collaborates with the World Medical Association (WMA), Arab Medical Union (AMU), Kenya Medical Association (KMA), and Rwanda Medical Association (RMA).

Contact information
Address: Jawhara Apartment Block D-Room2, KM5, Hodan District Mogadishu, Somalia
Telephone: +252617677999 Mobile: +252615546032
Email: info@sma.org.so
Website: https://sma.org.so/

SPANISH MEDICAL COUNCIL (CONSEJO GENERAL DE COLEGIOS MÉDICOS DE ESPAÑA)

OMC ORGANIZACIÓN MEDICA COLEGIAL DE ESPAÑA | CONSEJO GENERAL DE COLEGIOS OFICIALES DE MÉDICOS

Tomás Cobo Castro

Leadership
President: Dr. *Tomás Cobo Castro*

History in brief
- **1893:** A large part of the medical profession felt the need to create a professional association. The General Council of Official Medical Colleges (CGCOM) was established, as a pattern for the constitution of different provincial colleges. Zaragoza and Burgos proposed to have the Central College with the headquarters in Madrid. Its mission would be solving disputes between fellow associates as well as conflicts between district and provincial Boards.
- **1899:** The school of Seville proposed to hold a national meeting of schools in Madrid with a specific program for debates. The discussion topics would be holding a congress on Medical Ethics (in 1903), mandatory membership, and aspects related to the Health Law and tenure of doctors.
- **1 February 1900:** The national meeting, which was sponsored by Julián Calleja y Sánchez as President of the College of Physicians of Madrid, was held over three days, with 46 of the 49 invited provinces in attendance. The Madrid school was designated as a representative of all national schools. During the following decades, the different scientific societies organised national assemblies in the Madrid College.
- **15 May 1917:** The Prince of Asturias School for Medical Orphans was established at El Pilar Street in Zaragoza by a royal decree, with the aim to encourage consensus between provincial schools on participation dues.
- **October 1918:** Another attempt aimed to bring the Boards of Directors of the Medical Colleges together during the National Congress of Medicine, although it was prevented due to the influenza epidemic.
- **26 January 1919:** Assembly of Boards of Directors, attended by representatives from 33 provinces, was concluded with issues related to regular doctors and pensions for families of doctors who died in the recent epidemic; an executive committee with its residence in Madrid and headed by Augusto Almarza was created; a decision was concluded to hold another assembly in the fall 1919. In this new meeting, the creation of the Federation as a harmonious organisation of all Medical Colleges was to be proposed.
- **6 November 1920:** At the request of his college, the Assembly of the Medical Colleges of Spain held in Valencia, finally established the Federation of the Medical Colleges of Spain, formed from Regional Confederations; a representative from each would form the National Directory.
- **1921:** Two Assemblies were held in June in Madrid and in Barcelona in November; discussion topics included relationships with Governing Boards and Board of Trustees of Regular Doctors, the professional practice of international doctors, and intrusion and quackery.

Mission and objectives
- The functions provided for the regulations on professional colleges correspond to those of the General Council of Official Colleges of Physicians, including:

BACK TO CONTENTS

World Medical Journal

- representing the Collegiate Medical Organization before all international medical and health organisations
- representing the Collegiate Medical Organization before the institutions of the European Union, related to issues that affect professional practice and its ethical and deontological aspects

- The following functions correspond to those of the General Council of Official Colleges of Physicians:
  - processing requests or claims of the Official Colleges of Physicians addressed to the central bodies of the General Administration of the State, provided that they do not fall under the jurisdiction of the corresponding autonomous council and so are the interests of the respective colleges, where appropriate, without prejudice to the fact that can send them directly or through the autonomous councils
  - collaborating with the Government and other authorities, at its own request or at the request of the Associations, in the improvement and perfection of the regulations on professional associations and mandatory inform of any draft provision that affects the general conditions of professional practice
  - studying the problems of the profession, adopting, within its scope of competence, the necessary general solutions and proposing, on its own or at the suggestion of the colleges, the pertinent reforms; intervening in any conflicts that affect the medical profession and its corporate organisation, exercising the rights in its representation, without prejudice to the right that corresponds to the colleges or, individually, to each doctor, or to the competence of the corresponding autonomous council
  - resolving the administrative appeals filed by the members against agreements of the Official Colleges of Physicians, in the absence of regulation in this regard by the regional regulations and provided that this is established in the particular Statutes of an Official College. Likewise, resolving the appeals for reconsideration that are filed on an optional basis against the agreements of the General Council

Contact information

Address: Plaza de las Cortes, 11 – 28014, Madrid, Spain
Email: cgcom@cgcom.es
Website: https://www.cgcom.es/

World Medical Journal

74th World Medical Association General Assembly in Rwanda

Dear Esteemed Colleagues around the World,

We are thrilled to extend a warm invitation to you for the 74th World Medical Association (WMA) General Assembly, which will be hosted in the beautiful and vibrant city of Kigali, Rwanda, from 4-7 October 2023. This event represents a global platform for medical experts to address the most pressing issues in healthcare today. It also holds immense significance as it marks the first time that Rwanda has been chosen as the host country for the WMA General Assembly.

Theme: Global Health Security

The theme for this WMA General Assembly's scientific session is "Global Health Security." We recognize that global health challenges demand global solutions, and this theme reflects our commitment to addressing critical issues that affect the health and well-being of our interconnected world. It underscores the importance of collaboration and preparedness to ensure the health and safety of all.

A Comprehensive Program

The WMA General Assembly's program is designed to encompass a wide array of activities over four days. It will include statutory meetings, a scientific session, and a plenary assembly. Our program also features specialised sessions tailored for the Junior Doctors Network, an environmental caucus, and a full-day scientific session dedicated to the selected theme for 2023. In addition, the assembly will offer ceremonial sessions, social events, and excursions to various attractions across Rwanda.

Registration Information

We encourage all members of the global medical community to register for the event by using the following link (http://cvent.me/4b4L4l).

Join Us in Rwanda

We are excited about the contributions that this WMA General Assembly can make to help advance healthcare globally. Your presence and active participation will enrich the discussions and help shape the future of medicine.

We look forward to welcoming you to Rwanda, the Land of a Thousand Hills, for the 74th WMA General Assembly. Together, let us inspire positive change and create a healthier world for all.

Please mark your calendar for 4-7 October 2023, and join us in Kigali for this historic event!

Rwanda Medical Association
Kigali, Rwanda
info@rma.rw

BACK TO CONTENTS

World Medical Journal

Obituary

Anthea Mowat

Dr. Anthea Mowat passed away peacefully at her home in Morpeth, United Kingdom, on 23 July 2023, in the loving presence of her husband Andrew and their two daughters, Siobhan and Catriona. She had been diagnosed with breast cancer in late 2022. Throughout her life, Anthea has brought a major contribution to our medical profession, with an acute sense of ethics, justice, and equal rights of all to the high-quality healthcare they need.

Anthea Mowat was born in 1958 in Newcastle, UK, where she grew up in a very supportive family. Already as a child, she became an active participant in her community, including a Girl Guide and at Dame Allan's Girls' School, and she won many academic prizes. By age 6, she wanted to become a doctor, and she never let go of her passion for our profession! She attended Aberdeen Medical School, where she became actively involved in different associations, showing her interest in supporting social causes and those in need in her community. But above all, medical school is where she met Andrew, who became her husband in 1984.

Interested in anesthesia, she completed her specialty in Inverness and Aberdeen. After having her two children, she was attentive to her work-life balance and took up a "Married Women Doctor Returner Scheme" in a hospital near her home. Later, she returned to her specialty as a senior hospital doctor, and thanks to her skill and experience, she became Associate Specialist in anesthesia and chronic pain.

When a negotiating committee to represent doctors among hospital management was selected for her institution, Anthea offered to join the committee and served for over 20 years. As she was particularly skilled in negotiating and representing her colleagues, she was elected chair of this committee and held this position for more than 10 years. Notably, she was the first Associate Specialist in the UK to hold this role, which was obviously the start of her truly remarkable career in medical politics.

On a national level, Anthea Mowat revived her local geographic British Medical Association (BMA) division to become one of the most active national divisions. As Chair of the division, she could attend the BMA Annual Representative Meeting (ARM), which is the main policy body of the BMA. Her ardor in supporting issues relevant to her colleagues back home, led to her election to the national Committee for Associate Specialists and Specialty Doctors ("SAS Grade"), where she became Conference Chair and later Deputy Committee Chair.

Clearly, the BMA had spotted her outstanding capacities. She led the ARM Agenda Committee, and then became Deputy Chair and Chair of the BMA Annual Representative Meeting. She was only the second women – and first SAS Grade Doctor – to hold this remarkable position since 1832. She used her role as BMA Chief Officer to lead for equality and inclusion, true to her ideals and vision of medicine. She campaigned against the gender pay gap and led reports highlighting homophobia, bullying, and harassment within the healthcare system.

Beyond all this, Anthea kept working as an anesthetist and was much appreciated in her hospital, reflecting that she had anesthetized about 90 people of her own staff! At the end of her term as Chair of the BMA Representative Body, Anthea Mowat was called to become Honorary Secretary of the national Medical Women's Federation.

Shortly after she retired, the coronavirus disease 2019 (COVID-19) pandemic started. She returned to work at her hospital, where she helped with bereavement counseling and support for colleagues in administrative duties.

Later, Anthea and her husband became active in their local church community, singing with St. Mary's Choir, and helping with fundraising. Their faith was important to both of them.

In December 2021, Anthea was asked by the Chair of the WMA Associate Members, the late Dr. Joe Heyman, to take over as interim Chair, due to his terminal illness. He had selected Anthea for this role, knowing that she was a respected person and passionate about the ongoing important work he had initiated. She assumed this role in her wonderful supportive and diligent manner, among other tasks completing the update of the rules of the WMA Associate Membership. At the end of her interim mandate, she became Past-Chair in the WMA Steering Committee.

A few months later, in December 2022, Anthea Mowat was unfortunately diagnosed with breast cancer; she dealt with this news and the following treatment stoically and patiently. Remarkably, she donated her hair before chemotherapy, and raised several thousands of pounds for charities and her church.

Dr. Anthea Mowat was a truly remarkable person, dedicated to her profession, and through it to her patients, and her colleagues. She exhibited qualities and skills that are rarely found in one single person. We will miss her dearly and remember her fondly.

Our heartfelt sympathy goes out to her family – to her daughters, Siobhan and Catriona, and especially to her husband Andrew, a dear Colleague and WMA Associate Member.

Jacques de Haller, *MD*
Obituary written by the Chair of the WMA Associate Members

BACK TO CONTENTS