

# World Medical Journal

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## Editorial

Reflecting on the past year, our global medical community has continued to articulate health priorities and needs to policy stakeholders, lead clinical care and community health activities, and support the delivery of resources to conflict-affected areas. Physicians have disseminated robust research findings and have presented such findings at conferences and workshops, which dually advance the scientific knowledge base and encourage the next generation of health professionals. These selfless acts define our indispensable role in health service delivery during endemic, epidemic, and conflict periods – and our contributions are needed now more than ever.

The World Health Organization has recently reported the urgency to address 13 global challenges, of which pandemic preparedness and the climate crisis are described at length. However, four other challenges – delivering health in conflict and crisis, investing in people who defend our health, harnessing new technologies, and earning public trust – resonate within our community. To address these challenges, our WMA members have supported our colleagues working in conflict and crisis settings (like the Ukraine Medical Help Fund) and advised on ways to strengthen medical education and training across countries (like our home institutions and the Junior Doctors Network). Albeit limited economic resources, global health workforce shortages, and workplace burnout, we can continue to leverage our expertise across our specialties, examine how technology (including telemedicine and digital applications) can help enhance clinical diagnostics and management, and streamline our public health messaging to improve health literacy and build community trust.

As key global meetings have focused on the climate crisis and sustainable actions to mitigate the negative effects of climate change on human health, the focus on the One Health concept is paramount. Notably, the Joint Plan of Action (2022-2026), supported by the Quadripartite (World Health Organization, (WHO); Food and Agriculture Organization, FAO; United Nations Environment Programme, UNEP; World Organisation for Animal Health, OIE), aims to expand activities and technical capacity across six areas: 1) One Health capacities for health systems; 2) emerging and re-emerging zoonotic epidemics; 3) endemic zoonotic; 4) neglected tropical and vector-borne diseases; 5) food safety risks; and 6) antimicrobial resistance and the environment. As this framework can help guide global physicians in clinical care, community health, education and advocacy, laboratory diagnostics, policy, and research activities, we collaborate on advancing such measures to safeguard global health security and health system preparedness.

The 222nd World Medical Association (WMA) General Assembly will be held in Nairobi, Kenya, from 20-22 April 2023. At this event, WMA members will discuss policy statements, comment on relevant revisions to WMA resolutions, and network with global colleagues. This meeting will increase awareness on key global issues and offer a platform for WMA discussion and debate.

In this issue, Dr. Klaus Reinhardt, Heidi Stensmyren, and Osahon Enabulele provided welcome remarks, the valedictory speech, and the inaugural presidential address, respectively, at the WMA General Assembly. Mr. Nigel Duncan prepared a comprehensive summary of the WMA statements and resolutions that were presented at the 221st WMA Council Session. Dr. Heidi Stensmyren and Osahon Enabulele expressed their perspectives as the outgoing and incoming WMA presidents, respectively, regarding upcoming WMA activities. Dr. Sonu Gaiind, Trudo Lemmens, Ramona Coelho, and John Maher reviewed the Canadian experiences and specific challenges related to the expansion of the Medically Administered Death (MAD) for mental illness. Ms. Priscilla Cruz and Dr. Caline Mattar described the current state of the 2022 monkeypox outbreak. Dr. Fang Xudong highlighted the value of nautical medicine and research of the marine ecosystem. Dr. María Caraballo-Lorenzo, Bienvenido Veras-Estévez, and Helena Chapman promoted World Diabetes Day 2022 as a global call to action to improve diabetes care.

We are pleased to share this fourth issue of the *World Medical Journal*, which showcases the WMA declarations, statements, and resolutions – on topics ranging from medical ethics to occupational and environmental health and safety – that have resulted from hundreds of hours of committee discussions, debate, and revisions. Notably, WMA members representing 12 countries presented inspirational and timely national initiatives on One Health Day 2022 and empowered calls to action on environmental protection. We encourage WMA members to review this fourth collaborative article and learn more about these exciting National Medical Association (NMA) activities.

As we approach the end of the year, we hope that you can take a moment to reflect on your invaluable contributions to the WMA and the global community. We wish you and your families a healthy, safe, and reflective holiday season, and we look forward to connecting in-person in Nairobi.

**Helena Chapman, MD, MPH, PhD**  
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## Welcome Remarks, WMA General Assembly Berlin, Germany, 7 October 2022



*Klaus Reinhardt*

Physician, researcher, and politician Rudolf Virchow once said, “Physicians are the natural attorneys of the poor, and social problems fall to a large extent within their jurisdiction.” He conducted his research here in Berlin and was one of the first to be firmly convinced of the impact that a person’s living conditions can have on health. He also stated that “Education, prosperity, and freedom are the only guarantors of the long-term health of a population.”

He demonstrated the interdependence of medicine and politics and encouraged physicians to also focus on social issues. According to Virchow, serving the poor leads to improved health in society.

It is this fundamental belief that unites all of the National Medical Associations who gather at this meeting. It is one of the foundations of the work of the World Medical Association, the WMA.

As the medical profession, we have the responsibility to address health care issues and raise our collective voices in support of our patients and society. In the WMA General Assembly, the global medical profession asserts its positions and provides guidance to physicians all over the world.

With all this in mind, it is my great honour to welcome you – on behalf of the German Medical Association, the GMA – to Berlin for the World Medical Association’s 73rd General Assembly.

This year’s meeting coincides with the 75th anniversary of the establishment of both the WMA and the GMA. Thank you to all who attended our celebration yesterday.

The WMA has always been an important point of reference for the GMA. Founded in the same year in the aftermath of the Second World War, they both have their roots in the lessons learned from the crimes of the National Socialist regime in Germany. It was the crimes and misconduct of German physicians, above all, that made it clear that a global medical organization was needed – one that would define medical ethics more precisely.

At the same time, 75 years ago, the State Chambers of Physicians in the newly founded federal states of West Germany, decided to establish the GMA as a working group of the West German chambers. The initial purpose of this organisation was to coordinate and advocate for their work at the federal level. You learned more about these activities yesterday.

The GMA was accepted into the WMA in 1951, after it had formally distanced itself from its predecessor organisation and the crimes of German physicians as noted, for example, in the “Doctors of Infamy: The Story of the Nazi Medical Crimes” publication. To this day, addressing the past is an important part of the GMA. We are convinced to this day that confronting the past is a process that can never be fully

completed. Only by remembering and analysing the past, can we learn the right lessons from it.

The GMA is committed to the values of the WMA. It has always felt a responsibility to contribute to the medical ethics framework of the global medical profession, which it has done by chairing the workgroups tasked with the revision of the Declaration of Helsinki in 2012, the Declaration of Geneva in 2017, and currently the International Code of Medical Ethics. We are very grateful to the international physician community for entrusting us with this great privilege. For this reason, we also proposed the theme “Medical Ethics in a Globalized World” for yesterday’s successful Scientific Session.

This is the first time that the General Assembly has been held in Berlin. The fractures of German and European history have made Germany and Europe what they are today. These fractures are still visible in Berlin in its buildings and monuments. I hope that you will have the opportunity to get to know the city which has many different centres and is marked by its history. Berlin is also a place to discover many different ways of life – and ways of living together.

Notably, it is also the first time we have been able to gather in person for the General Assembly since October 2019, and we are so pleased that you are all here. At the same time, we are poignantly aware of the hardships and losses that many have experienced and continue to experience due to the pandemic and other ongoing global crises. Physicians are currently facing unique challenges. You have arrived here from all over the world, and some have conflicts and war right at your doorstep. War has broken



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out in Europe again, and physicians have an important role to play in caring for and helping the wounded. Many European countries, especially Moldova, Slovakia, and Poland, have played an especially important role in helping the Ukrainian people.

The WMA has also turned its attention to Ukraine and has accomplished a great deal. We are pleased that the Ukrainian Medical Association is represented here. A warm welcome to Prof. Andryi Bazilevich and Prof. Iryna Mazur who have made the journey to Berlin.

The WMA reaches out to all colleagues who share the common values of the medical profession.

With all the global conflicts and challenges impacting the medical profession, I hope we will find a way forward through respectful dialogue here in Berlin.

There are many important issues on this week's agenda. Racism in medicine is one that is particularly close to our hearts at this General Assembly, as it has received little attention so far, but has such a devastating impact on the health system, patients, and doctors. I am looking forward to seeing the conclusions of this week's deliberations.

Berlin should inspire you. It is a place that is considered a little bit different, a little more unusual, and a little more

innovative than other cities.

I would like to close with a final quote from Rudolf Virchow as a sentiment that should unite us all: "Only those who regard healing as the ultimate goal of their efforts can, therefore, be designated as physicians."

In closing, I would like to welcome you to Berlin and wish you a successful event!

**Klaus Reinhardt, MD**  
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## Valedictory Speech by the WMA President, Dr. Heidi Stensmyren *Berlin, October 7, 2022*



*Heidi Stensmyren*

Thank you, Chair Dr. Montgomery, Secretary General Dr. Kloiber, officers, Council and Assembly members, Junior Doctors, and Associate members.

Dear colleagues, dear guests, and observers, and friends,

Thank you for gathering, being part of, and contributing to the medical community. We are thankful that we can finally meet in person for the World Medical Association (WMA)'s General Assembly. The value of meeting in person cannot be measured; as Warren Buffet says, "You will never see eye-to-eye if you never meet face-to-face."

My presidential year has had many obstacles to meeting in person. Many of you are dear friends, and I have seen the joy on your faces when greeting each other after so long apart. It warms my heart.

Our work is highly dependent on actually getting together to trade ideas and exchange views. Solutions to complex problems occur by working as a team, slowly taking one step after another – together. Our work is challenging and thought-provoking, as the Chinese curse states, "[we live in] interesting

times". Difficulties remain due to echoes of the pandemic, diseases, and humanitarian catastrophes. The WMA has a duty to work together, stand for humanity, and advocate for the highest ethical standards.

During my year as president, we have advocated for equitable distribution of the coronavirus disease 2019 (COVID-19) vaccines and pushed for sufficient capacity in other vaccine programs. Still, the world has not caught up. Coupled with the influence of anti-vaccination campaigns, pandemic issues have led to a measles outbreak in Zimbabwe, leaving more than 700 children dead.

Supply chain issues and conflict have made caring for the global population an incredibly complex proposition. War crimes that seemingly occur daily, are cruel and unacceptable. We have numerous reports of systematic violence against women and children. The WMA condemns the ongoing attacks on the Ukrainian people, health care professionals, and facilities. The WHO tracks confrontations and counts some

800 attacks on health care globally this year. This is unacceptable, and as president of the WMA, in my Valedictory speech, I urge you that WMA is needed now more than ever.

Refugees pour across borders, and humans flee for their lives, creating incredible health care challenges. I had hoped to spend time building more robust, global governing institutions during my presidency. The world needs more collaboration, and the WMA has a critical role in this process. Sadly, we have had to focus on war, threats of nuclear weapons, and attacks on health professionals and facilities. Health care is a vital part of society, and health professionals should be considered "neutral" in any conflict; instead, we have become targets. The attacks on health facilities have reached never-before-seen levels. The crimes against civilians and those who care for others are horrible; it is a global disgrace.

We are forced to focus on a world threatened by nuclear weapons



*Photo 1. Dr. Heidi Stensmyren, WMA Past President. Credit: World Medical Association*

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and a despot with an appetite for neighboring countries. Russia continues to place the planet in peril - through either arrogance or ignorance - by failing to safeguard Ukraine's nuclear power plants ....not to mention the thinly-veiled threat of unleashing nuclear weapons. The Russian-controlled nuclear plant in Zaporizhzhia, Ukraine, was disconnected from the power grid for the first time in its history. Many of you vividly recall Chernobyl. In the blink of an eye, this regional crisis could become a global health disaster. Every physician should take notice and condemn this irresponsible, reckless behavior.

Immense human suffering continues, and the WMA opposes flagrant violations of fundamental human rights. We demand allegations of war crimes be investigated and those responsible brought to justice.

As physicians, working integrated in society, meeting people in all stages and situations, we have deep insights in these humanitarian struggles. Violence and injustice is not isolated to war. Violence and injustice are not isolated to war. Most violence against women is within the family, often perpetrated by a partner. I am proud to stand for those without a voice and foster equity and equality in the name of the WMA.

Like you, I have been living in a 'virtual' world. Despite this challenge, you have graciously invited me to meet. To all I have met this year, thank you for sharing your knowledge and wisdom. I have been constantly impressed by your persistence and sustained enthusiasm. Thank you for funding the Ukrainian effort to provide critical medical equipment.

Pandemic echoes rumble through society, and in particular, the medical community. With more than 600

million cases and over 6.5 million deaths worldwide, the WHO estimates that between 80,000 – 180,000 health professionals have succumbed to COVID-19. Every death is tragic, but the downstream effect of lives lost from the health community is compounded. Adding to these losses are thousands of health professionals leaving their ranks early. Many, if not most, have left due to fear, burnout, and the (often overlooked) feeling of helplessness, worried that they can no longer make a difference. We must continue to invest in vaccines as well as other measures to aid our colleagues. This pandemic will not be our last, and those who do not learn from the past are condemned to repeat it. The WMA demands that governments and other stakeholders recognize the personal risk that health professionals incur and make every effort to protect them.

Our mental health professionals tell me that the pandemic directly correlates to the mental health epidemic. While crisis levels of patients seek aid, few find help. Our psychiatric colleagues have been devastated by many leaving the profession or cutting back. Those who remain are overwhelmed by the unbelievable need. Our colleagues say, as incredible as the current mental health numbers are, there is woeful underreporting.

This does not begin to address the issues within our profession. One recent survey, which was administered to 1,119 health professionals in the United States, indicated reports of stress (93%), anxiety (86%), frustration (77%), exhaustion and burnout (76%), and feeling overwhelmed (75%).

I have fostered engagement in 'One Health' - a concept that promotes the link between human health,

animal health, and a sustainable environment. None of these exists independent of the others, and an integrated and unified balance is needed. The COVID-19 pandemic is not over; it will not be the last pandemic, and it is far from the last challenge that we will face. Signs are everywhere that we are at a critical capacity to provide health care for our entire civilization. Sometimes, a crisis is the crucible needed to make substantial change. Let us lead this change!

While I am very proud of our work modernizing the International Code of Medical Ethics, I am deeply concerned about the growing violence against physicians this year. A recent study shows that violence against physicians often involves patients or relatives. Unfortunately, for our Indian colleagues, this is nothing new; their ongoing study reveals that more than 75% of Indian doctors have experienced workplace violence. The Indian parliament passed historic legislation to protect health professionals and institutions. Thank you to the Indian Medical Association for leading the way.

I wish to thank Sunny Park, Clarisse Delorme, Magda Mihaila, Nigel Duncan, and the other WMA staff for their support despite the effort required, secondary to the pandemic and geopolitical conflicts. I also would like to thank my fellow executive committee members for our close collaboration in these challenging times – Drs. Montgomery, Kloiber, Barbe, Enabulele, Matsubara, Wankhedkar, Hermansen, Park, and Rault. I would like to give special recognition to Thomas Hedmark, a remarkably efficient and professional colleague, and a reliable co-worker. I also thank the Swedish Medical Association and our strong and talented president, Dr. Sofia Rydgren Stahle. I also thank Dr.

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Torsten Mossberg, chair of the ethics committee – you have been an invaluable colleague with your humbleness and sharp mind – not to mention your ability to sing!

Most importantly, I thank my family, especially my beautiful girls, Nora and Fröja, who cannot be here today because of school. They have been patient and waited during long meetings and longer working hours. They have a whole gallery of pictures of me working at my computer every holiday and weekend for many years. They need me to come home now.

Finally, you have my humble

gratitude for entrusting me with this office. It is a challenging and unique position, and every day, I have strived to surpass expectations of those who have given me this opportunity of a lifetime. My presidency was deeply affected by the pandemic and the war, but we adapted.

We in leadership are volunteers and temporary volunteers at that. It is vital to an organization's future to recognize this and realize that for the organization to grow and improve, the old must give way to the new. We need to constantly invigorate the WMA in order to make it relevant to every member, every day. I am

fortunate to be succeeded by Dr. Osahon Enabulele – a colleague who I value highly. I am confident that he will honor the office, and I wish him great success.

It has been a fantastic journey. Now that my role as president comes to an end, I want to thank you for being my colleagues and friends – and that will never end.

**Heidi Stensmyren, MD, MBA**  
*Past President (2021-2022)*

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## Inaugural Address by the WMA President, Dr. Osahon Enabulele *Berlin, 7 October 2022*



*Osahon Enabulele*

Distinguished guests, our highly respected leaders and members of the World Medical Association (WMA), President Muhammadu Buhari GCFR, President of the Federal Republic of Nigeria, The Governor of Edo State, Mr. Godwin Obaseki, our revered Oba of Benin, His Royal Majesty, Omo N'Oba N'Edo Uku Akpolokpolo, Oba Ewuare II OGIDIGAN CFR, my mum, Evangelist Rachael Ayi Enabulele, my beloved wife, Associate Professor Joan Enabulele, and my children (Master Efosa Enabulele, Omorovbiye Victoria Enabulele, and Osarumwense Benedict Enabulele), my brothers and sisters, esteemed friends from within and outside Nigeria, and other participants here present, I welcome you all, with profound joy and humility, to my inauguration as the 73rd President of the World Medical Association, having been democratically elected in October 2021.

I congratulate the German Medical Association (GMA) on their 75th year Anniversary and for successfully hosting this 73rd General Assembly. I wish them many more attainments and glories in the years ahead.

As I assume office today as President of the World Medical Association, it is with gratitude and a deep sense of

responsibility, that I wish to present my inaugural presidential address.

I wish to express profound gratitude to our Immediate-Past President, Dr. Heidi Stensmyren, and all my predecessors in office for their tremendous efforts to promote and develop the WMA to its present status. I shall make great efforts to consolidate upon their work, even as we seek to pilot the WMA to a higher pedestal.

This occasion is very humbling for me and my family; it is one that evinces lots of emotions, considering the total uniqueness of the events, lasting experiences, and the long tortuous journey that characterized my over 15 years of engagement within the WMA, that culminated in today's historic reality.

It evokes a great sense of pride for me and my country, Nigeria, being the first time, since the formation of WMA in 1947 (75 years ago), that a physician from the West African region of the African continent of 54 countries; a physician from Nigeria (the most populous country in the African continent with a population of over 200 million people), and indeed, a physician from Edo State of Nigeria, in particular, has been elected to lead the WMA.

On behalf of the Nigerian Medical Association, my country (Nigeria), the African continent, and particularly my wife and family, I wish to express profound gratitude to all National Medical Associations in all regions of the WMA, and individual physicians across the globe, for electing me to serve as President of WMA for the 2022-2023 Executive Year.

Coming from an under-represented

and poorly understood African continent that is largely deprived of quality health care, I consider my election to the office of President of WMA as a propitious opportunity and a call to make positive impact through leading initiatives that shall enhance the fortunes of the WMA as a whole, the well-being, rights and professional autonomy of physicians across the globe, and strengthen health care systems of countries, to help them achieve Universal Health Coverage (UHC) and the Sustainable Development Goals (SDG 2030), through actions on the socio-economic, commercial and environmental determinants of health, and the mitigation of the effects of climate change.

As the World transits to a coronavirus disease 2019 (COVID-19) pandemic era, I would like to draw our attention to a few critical areas, particularly following lessons learnt during the COVID-19 pandemic era; viz: building resilient health systems; human resources for health; safety of physicians and other health care providers; public communication and engagement of physicians.

In building resilient health systems, the WMA will have to continue to champion the need for global solidarity in health, equitable access to vaccines and drug treatments, including their research and development, appropriate investments in the well-being, and protection of physicians and other health professionals.

The WMA will have to continue to promote physician-led multi-disciplinary primary health care, ethical and person-centered care based on best evidence, and appropriate communication with patients, families and the public (in a way that secures

their trust at all times).

During my tenure, our leadership will uphold the vision and mission of the WMA and implement the WMA strategic plan, with full responsibility as contained in Article 2 of the WMA constitution.

The WMA mission states that 'the WMA is to serve humanity by endeavoring to achieve the highest international standards in medical education, medical science, medical art and medical ethics, and health care for all people in the world.'

This will be our starting point; we can only move higher. In line with the WMA strategic plan, the WMA would be an untiring advocate of Global Public Health interventions to reduce or eliminate the staggering health inequities and inequalities, across the globe.

According to World Health Organization estimates, by the year 2030, the world will need about 18-20 million more health professionals, to attain UHC. Therefore, to achieve UHC and SDG, the critical issue of Human Resource for Health which afflicts every country, even though worse in lower, over-, low-, and middle-income countries (LLMICs), needs to be addressed robustly.

The WMA shall advocate that countries take urgent steps to invest more in the well-being, working and living conditions of physicians and other health professionals. This is to help reduce or eliminate physical and mental burn-out of physicians, and the brain drain of physicians and other health professionals (especially from already underserved countries).

To motivate physicians and other health professionals, the WMA shall seek to establish a WMA Global

Healthcare Excellence Award Scheme to reward excellence, and the sense of duty, diligence and uncommon commitment.

The WMA shall strongly promote and advocate a template on physicians' rights, to go along with physician responsibilities, as a counter measure to the increasing risk and cases of violence against physicians and other health professionals. We shall also promote the practical implementation of the WMA safe health care initiative.

The WMA is a rich repository of policy documents on various health issues, and continues to do important work in the area of medical ethics.

While we shall promote ongoing efforts to revise the Declaration of Helsinki, we shall also seek to promote the practical application of the Declaration of Geneva and the revised International Code of Medical Ethics, in the work we do as physicians.

Undoubtedly, the WMA has been doing great work since its establishment in 1947, in line with its objectives. But it is worrisome that many members in its regions still have little or no knowledge and appreciation of the work the WMA does.

To address this situation, the WMA shall encourage its constituent member NMAs, to engage their members more on the important work of the WMA, while as WMA President, we shall endeavour to take the WMA to individual physicians through the organization of a quarterly Regional Roundtable to be called "Meet the WMA President."

This Roundtable shall hopefully, create greater awareness about the WMA, deepen membership integration and inclusiveness, and drive greater participation of physicians and our

constituent members in the affairs of the WMA.

Furthermore, the "Meet the WMA President" Roundtable shall serve as a platform to receive and share the ideas and experiences of individual physicians and members of the WMA, no matter their location, and resolve wrong perceptions about the WMA.

Sustained efforts shall also be made to strengthen and promote the work of the Junior Doctors Network and the Associate Members of the WMA.

As the largest physician organization in the world, we shall continue to strengthen our partnership and collaboration with governments and bodies such as the World Health Organization, the Medical Women International Association, the International Committee of the Red Cross, the World Organization of Family Doctors, the Commonwealth Medical Association, the World Veterinary Association, the International Committee of Military Medicine, the International Federation of Pharmaceutical Physicians, and many other organizations with whom we collaborate.

## Conclusion

It is commonly said that at times, history and fate meet at a single place to shape a turning point. Surely, after 75 years, we are now at such a point in the life of our association, where if we must achieve our individual and collective dreams, we must be prepared to continuously organize for positive action.

As we journey through the next one year and seek to advance the fortunes of the WMA, our noble Medical Profession, and health systems around the world, let us realize that our

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individual and collective actions will surely shape the course, character, and destiny of the WMA.

Therefore, I urge all physicians and members of WMA to commit putting the WMA first, and make the needed efforts to pilot it and health systems in the world, to more progressive levels.

I call on governmental and non-governmental bodies to join hands with the WMA in our collective quest to address the various challenges confronting the health and well-being of citizens, physicians, and other health professionals.

## Appreciation

I thank our Almighty and Omnipresent creator for His grace, guidance, protection, favour, and blessings over the years.

I am grateful to all individuals and groups present at this occasion, and those at home in Nigeria and elsewhere, who, at various times, played supportive roles in my journey towards the presidency of the WMA.

I thank specially, the Nigerian Medical Association, and all physicians in Nigeria and Africa, and indeed all physicians across the globe, for their varied support.

I thank the Federal Government of Nigeria, Edo State Government, our revered Oba of Benin, His Royal Majesty, Omo N'Oba N'Edo Uku Akpolokpolo, Oba Ewuare II OGIDIGAN CFR, His Eminence, Alhaji Muhammad Sa'ad Abubakar III, CFR, mni, The Sultan of Sokoto, the Chief Medical Director (Prof. Darlington Obaseki) and Management Board of the University of Benin Teaching Hospital (where I practice), and the Chief Medical Director (Prof. Christopher Bode) and Management Board of Lagos University Teaching Hospital (where

I serve as a Management Board Member) for their strong expression of support for my presidency.

I must specially acknowledge the encouragement and support of my special guests, colleagues, friends, brothers, sisters, and in-laws from Nigeria, United Kingdom, United States, Finland, and elsewhere, who made it to this event, as well as the officers, officials, and staff of both the WMA and the German Medical Association (GMA), who helped to facilitate the processing of visas.

I dedicate this day to:

(i) my parents; my mother, Evangelist Rachael Ayi Enabulele, and my father, Elder Jonathan Enabulele JP, both of whom imbibed in me and my other siblings, cardinal and theological virtues, and inculcated in us a culture of discipline, selflessness, and a life of values. Sadly, my father, Elder Jonathan Igbineweka Enabulele JP, who had truly looked forward to a day like this, never had the opportunity to witness this moment, as he passed on in the year 2013, while I was away serving as President of Nigerian Medical Association. Daddy, may your great soul continue to Rest in Perfect Peace.

ii) my wife, Associate Professor (Dr.) Joan Enabulele, and my children (Efosa Benedict Enabulele, Victoria Omorovbiye Enabulele, and Osarumwense Michael Enabulele). I thank them for their ceaseless prayers, unimaginable sacrifices, patience, tolerance, understanding, continuous support, encouragement, love, and care, in all my years of struggle, even in the face of difficulties and frustrating challenges. Thank you for always enduring my long absence from home in the course of my leadership endeavours.

I thank my parents-in-law, my dear cousin (Engr. Ferguson Enabulele), my other siblings and in-laws (home

and abroad) for their sustained prayers and support. I particularly thank my elder brother (Mr. Ernest Oghogho Enabulele), my elder sister (Mrs. Akugbe Dorothy Ehigiator), and my little dear sister (Mrs. Efe Tracy Idahosa), and their spouses for attending my inauguration and for their strong support over the years.

I am exceedingly grateful to the Dr. Benson Okwara-led Lionkiller's Inauguration Team for their contributions towards the success of my inauguration.

As we look forward to very exciting times ahead, I promise to work very hard to vindicate the initiatives that led to the birth of WMA by its founders.

I promise to advance the principle of collectivism by working with other leaders and members of the WMA to provide an emotionally intelligent leadership, with the transformation of the WMA into a beautiful symphony of comradeship, that enables the efficient and effective implementation of the WMA strategic plans.

I cannot end this address without paying special tribute to our colleagues who lost their lives as a result of the COVID-19 pandemic. May their great souls continue to rest in perfect peace.

My heart goes out to our colleagues in Ukraine and other troubled parts of the world who are battling to deliver care in the worst of human conditions due to wars, conflicts, disasters, sectarian crises, and oppressive regimes.

I pray God to grant you all journey mercies back to your respective homes. I thank you for your kind attention.

**Osahon Enabulele, M.B.B.S., MHPM, FWACP, FNMA**  
President, World Medical Association  
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## WMA General Assembly Report Berlin, Germany, 5–8 October 2022



*Nigel Duncan*

For the first time since 2019, the WMA was able to meet in-person for its annual General Assembly. The venue of Berlin allowed both the World Medical Association (WMA) and the German Medical Association to celebrate their 75th anniversaries. Delegates from 57 National Medical Association (NMA) constituent members gathered at the Ritz-Carlton Hotel in the heart of the city (Photo 1).

### Wednesday, 5 October

#### **Council**

The 221st Council session was called to order by the Chair of Council, Dr. Frank Ulrich Montgomery (German Medical Association), who welcomed delegates to Berlin.

#### Elections and Appointment

Dr. Tohru Kakuta (Japan Medical Association) was elected unopposed as Vice-Chair of Council.

The new legal advisor, Mrs. Mervi Kattelus (Finnish Medical Association), was introduced to the meeting and her appointment was confirmed.

#### President's Report

Dr. Heidi Stensmyren (Swedish Medical Association), the outgoing President, in her written report, said her presidential year had taken place under the influence of the coronavirus disease 2019 (COVID-19) pandemic and the impact of global challenges such as climate change and conflicts. She referred to the thousands of their professional brethren who had left the profession early, most through fear, burnout, labour, and other economic pressures on their practice. Economies around the world continued to recover from direct spending on COVID-19, and many countries found it necessary to cut spending on health care, including investment in vaccines, as well as preparedness for future health crises. This pandemic would not be the last, and those who did not learn from the past were condemned to repeat it.

She also wrote about the devastating effect that the pandemic has had on mental health, with many psychiatric colleagues leaving the profession or cutting back. Those who remained were simply overwhelmed by the unbelievable need in the general population. She said that the only fruitful way to tackle global challenges was through collaboration between governmental institutions, as well as non-governmental organizations.

She went on to say that the WMA condemned the continuing attacks on Ukraine and in particular Ukrainian health care facilities. These overt assaults were becoming all too common in conflicts globally. She referred to the aid given to the Ukraine Medical Help Fund, founded by the Committee of European Doctors (CPME), the European Forum of Medical Associations (EFMA), and

the WMA, as another example of fruitful collaboration. She specifically thanked those NMAs who has contributed to these efforts.

She concluded by saying that she was deeply concerned about the violence against physicians around the globe and she particularly thanked the Indian Medical Association for leading the way on this issue.

#### Secretary General's Report

Dr. Otmar Kloiber, the Secretary General, referred the meeting to the lengthy written report that had been tabled about the activities of the Secretariat. He also reported on the help for Ukraine and the substantial assistance provided by the Japan Medical Association. He particularly thanked Dr. Leonid Eidelman (WMA Past President) for his work in delivering the help.

#### Chair of Council's Report

In his written report, Dr. Frank Ulrich Montgomery warned that the COVID-19 pandemic was not over. He was convinced that they still had to remain cautious and attentive of immunescapes, waning immune responses and new variants of concern. He said that they must continue their prevention and vaccination efforts. Demanding access to vaccines for everyone, overcoming fake news, and organizing vaccination campaigns remained a challenge to be met. Visiting several NMA general assemblies had shown him once again how similar their problems were. From human rights and ethical issues over violence against health care professionals and questions of a universal health coverage to organizing medical care for underserved communities – they



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were all in the same boat. It was the independence of the medical decision for their patients that was at the heart of their engagement.

## Complaints Procedures

Dr. Frank Ulrich Montgomery reported on two different sets of complaints that had been made to the Secretariat, where the first involved the Chinese Medical Association and the British Medical Association on the issue of the Uyghur people, and the second related the Polish Medical Association and the Physician Chamber of Russia and the physician organisation of Belarus on the issue of Ukraine.

On behalf of the Executive Committee, he reported that there had been many discussions and video calls with the various parties. He stressed that the WMA was a discussion platform, where they could discuss issues and exchange opinions, even if they were of a totally different opinion or condemned the actions of a particular NMA. This was similar to the Red Cross, the World Health Organization (WHO), and the United Nations (UN). He said it was important to discuss the issues first, followed by the complaints. On the issue of Ukraine, he said that due to the war, there were visa restrictions in the European Union and so the Russian delegation could not be present. Therefore, his advice to the Council was to postpone discussion until the WMA Council in Kenya next year.

A discussion then took place on the issue relating to the treatment of the Uyghur people in China. The British Medical Association reminded the meeting that the purpose of the WMA was to serve humanity by endeavouring to achieve the highest international standards in medical education, medical science, medical

art, and medical ethics. They knew that the Chinese Medical Association's conduct in relation to the Uyghur people was detrimental to the honour and interests of the medical profession and the WMA, which brought their entire profession into disrepute. A report from the UN had found serious human rights violations, discrimination against the Uyghur people, arbitrary detention, and allegations of torture and forced medical treatment that might constitute international crimes against humanity. It was highlighted that the WMA, by not calling these events out, was now indirectly complicit in this behaviour.

The Chinese Medical Association had repeatedly denied knowledge of any such events and had effectively called the UN report a lie. They responded that the allegations were completely contrary to the articles of the WMA, which stated that there should be no political interference in countries' affairs. They said that the UN report did not conform to the facts, and that the British Medical Association was fabricating evidence. They commented that it was a shameful act of bullying against medical professionals, and that the allegations were fabricated, which violated the spirit of international conventions and had caused serious damage to the WMA. After a brief discussion, the Council decided to postpone the complaints procedure to the next WMA Council meeting in Kenya in April.

## Support for Medical Personnel in Ukraine

The Council then considered a minor revision to its WMA Resolution in Support of Medical Personnel and Citizens of Ukraine in the face of the Russian invasion, which was passed at the WMA Council Meeting in Paris in April 2022. The Resolution was

still valid and applicable, but needed to be revised to delete the reference about the number of people displaced by the conflict. This would keep the policy up-to-date in the intermediate and long-term.

The Council meeting was adjourned.

## **Medical Ethics Committee**

The chair, Dr. Marit Hermansen (Norwegian Medical Association) called the committee to order.

## International Code of Medical Ethics

The committee considered the proposed revision of the WMA International Code of Medical Ethics. Dr. Ramin Parsa-Parsi (German Medical Association), chair of the workgroup, said that the revision had started four years ago and was one of the most work-intensive tests that the WMA had ever taken. He reported on the regional meetings that had been held and noted the extremely comprehensive, inclusive, and fruitful process of discussions that had taken place. Not all the comments received could be considered, but he assured the meeting that the workgroup had taken every single proposal seriously. He said that the compromised wording he was submitting to the committee reflected a truly universal document that would resonate globally. He asked the committee to approve the revised Code for forwarding to the Council and the General Assembly for adoption.

Without further debate, the committee agreed unanimously to this request.

## Assisted Reproductive Technologies

The South African Medical Association presented a major revision to the WMA Statement on Assisted Reproductive Technologies, drawn up

in coordination with the Workgroup on Genetics and Medicine. The document, covering issues relating to gamete donation and commercial surrogacy, had been circulated for comment. The committee was told that revision had been a long process, and that it had not been easy to establish global consensus. However, the recommendation was that it now be sent to the General Assembly for adoption. A brief discussion took place, and an amendment was agreed.

The committee agreed that the Statement be approved by Council with the recommendation that it be forwarded to the General Assembly for adoption.

## Organ Procurement from Executed Prisoners

As part of the 10-year revision process of WMA policies, the Chinese Medical Association had asked to rescind the WMA Resolution on Organ Donation in China. This had led to a workgroup being set up to review the existing documents related to the fight against coerced organ procurement, including the use of organs of prisoners sentenced to the death penalty. The Spanish Medical Association, which chaired the workgroup, submitted a proposed Declaration on Organ Donation for Transplantation from Executed Prisoners to the committee and explained that if adopted, this policy should replace the existing Council Resolution on Organ Donation in China.

This led to a lengthy debate about whether the terms of reference of the workgroup had been fulfilled, what the reasoning for an additional document was and if this new policy should lead to rescinding the existing WMA Resolution on Organ Donation in China. The Chinese Medical Association explained that it

had requested rescinding the existing Resolution on the grounds that one country should not be singled out for condemnation. They emphasised their determination to combat this practice and to respect ethical principles. Speakers differed as to whether the practice of organ procurement from executed prisoners was still occurring.

As a result, there was opposition to rescinding the original Resolution, and the committee decided to recommend that the proposed Declaration be circulated for comment.

## Declarations of Venice and on End-of-Life Medical Care

Under the 10-year revision process, a proposed major revision of the WMA Declaration of Venice was submitted by the American Medical Association. The Council had agreed to merge the Declaration of Venice with the WMA Declaration on End-of-Life Medical Care, and the proposed compromise version had been circulated for comment. The American Medical Association suggested rephrasing one sentence to read: 'The WMA remains firmly opposed to euthanasia and physician-assisted suicide, as set forth in the WMA Declaration on Euthanasia and Physician-Assisted Suicide.' They proposed that the document, as amended, be approved by the committee and forwarded to the council for adoption by the Assembly.

The committee agreed to recommend this course of action to the Council.

## Medical Ethics in the Event of Disasters

The committee heard an oral report from the Taiwan Medical Association, led by the chair of the workgroup on Medical Ethics during Public Health Emergencies. The workgroup had reviewed related existing policies and had decided to address ethics

during public health emergencies in a separate policy. It now requested that the proposed WMA Statement on Medical Ethics in the Event of Disasters be circulated to constituent members for comment for comment.

The committee decided to recommend this course of action to Council.

## Medical Technology

A proposed revision of the WMA Declaration on Medical Ethics and Advanced Medical Technology was submitted for consideration. The committee was reminded that a workgroup had been set up to review current policy on medical technology, and that the decision was to update the statement to modern practice and research. The workgroup wanted to keep the statement general and was now suggesting that the document be circulated for comment by member associations.

The committee agreed to recommend this course of action to the Council.

## Biological Weapons

The Swedish Medical Association presented a major revision of the WMA Declaration of Washington on Biological Weapons, reaffirming the WMA Statement on Weapons of Warfare and their Relation to Life and Health and condemning the use of any form of weapons against human beings. The workgroup suggested that the document now be circulated to NMAs for comment.

The committee agreed to recommend this course of action to the Council.

## Armed Conflict and Other Situations of Violence

A major revision of the WMA Regulations in Times of Armed

Conflict and Other Situations of Violence was submitted by the Associate Members. It was suggested that the title be changed from Regulations to 'Statement'. The document stated that in situations of armed conflict and other situations of violence, governments, belligerent armed forces, and others in positions of power must comply with the various relevant international agreements, and it set out various principles for physicians in such situations. The document added that physicians must not be prosecuted for complying with these ethical rules.

The committee recommended that the document be circulated for comment.

### Statement on Safe Injections in Health Care

The committee considered a proposed minor revision to the WMA Statement on Safe Injections in Health Care, which made the point that unsafe injections were a waste of precious health care resources and could be easily prevented.

The committee recommended that the revised Statement be sent to the Council for approval and to the General Assembly for information.

### Prohibition of Forced Anal Examinations

A minor revision was considered to the WMA Resolution on Prohibition of Forced Anal Examinations to Substantiate Same-Sex Sexual Activity. This document stated that physicians should never engage in acts of torture or other forms of cruel, inhumane or degrading treatment.

The committee recommended that it be sent to council and assembly for information.

## **Socio-Medical Affairs Committee**

The committee was called to order by the chair of the committee, Dr. Jean-François Rault (French Medical Association, CNOM).

### Medical Technology

The Chair of the workgroup on Medical Technology (Israel Medical Association) reported on the activities of the group since the last Council meeting. They submitted a proposed revision of the WMA Declaration on Advanced Medical Technologies, and said they would continue to work on the revision based on the comments from WMA members. The committee was told that the workgroup was discussing the opportunity to develop a new proposed policy on the misuse of emerging medical technologies and human rights violations. They were also looking into the possibility of developing a platform to enable and facilitate physicians' involvement in medical innovation. A proposal should be submitted at the next Council meeting in Kenya in April 2023.

The committee forwarded this report to the Council.

### Declaration of Edinburgh on Prison Conditions and the Spread of Tuberculosis and Communicable Diseases

A proposed revision of the WMA Declaration of Edinburgh on Prison Conditions and the Spread of Tuberculosis and Other Communicable Diseases was presented by the Uruguayan Medical Association, with the suggestion that the document be approved by the Council and forwarded to the General Assembly for adoption. The committee was told that the revised document referred to the treatment, diagnosis, and management of

communicable diseases in prison environments, which must not be used to violate the rights of prisoners in terms of obtaining treatment for their disease. The document also highlighted that they should not be forced to accept the risk of communicable diseases in prison environments. An amendment was proposed to delete the word 'tuberculosis' from the title of the document.

The committee recommended that the revised Declaration, as amended, be sent to the Council for adoption by the General Assembly.

### Global Burden of Chronic Disease

The committee considered a proposed revision of the WMA Statement on the Global Burden of Chronic Disease. This document stated that the world should pay more attention to chronic non-communicable diseases, which were the leading causes of mortality and disability in both the developed and developing world.

The committee recommended that the Statement, as amended, be approved by the Council and forwarded to the General Assembly for adoption.

### Patient Safety and Professional Regulation

The British Medical Association introduced a proposed revision of the WMA Declaration on Patient Safety. It explained to the committee that this was a new comprehensive statement on systems regulation. They all knew that significant numbers of medical errors occurred within the context of wider systemic factors and failings, especially where doctors were working within pressured environments, which led to the inappropriate and unfair targeting of individuals. There was a toxic culture of fear and blame in the

health service, resulting in doctors being less likely to be open about errors and safety concerns and more likely to practice defensive medicine. What they needed was a supportive health care culture. The Declaration had been merged with a proposed Statement on improving patient safety through whole system cultural change and redefining the role of professional regulation in order to have one single consolidation document.

The committee recommended that the revised document, as amended, be sent for approval by the Council and adoption by the General Assembly.

### Acknowledgement and Condemnation of the Genocide against the Uyghurs and other Minorities in China

The committee then considered the proposed WMA Resolution on Acknowledgement and Condemnation of the Genocide against the Uyghurs and other Minorities in China, along with other relevant documents and correspondence. The British Medical Association opened the debate by asking whether the WMA had a role in this issue. They said that the actions described in the UN report about forced sterilization and medical treatment without consent must involve doctors, so these actions clearly fell within the remit of the WMA. This was a moral and ethical issue and was clearly within the responsibility of the WMA. They commented that two questions needed to be considered – was genocide being committed, and who should be held accountable? Under the 1948 Convention on the Prevention and Punishment of the Crime of Genocide, it was clear that the activities fell within the definition of genocide. So the question was whether the Chinese Medical Association was able to acknowledge what was happening. The British Medical Association

wanted the proposed Resolution to be circulated for comment.

However, this was opposed by the Chinese Medical Association, who argued that there was no genocide behaviour or any involvement of medical professionals. So why should they be required to admit to behaviours that had never taken place. The Chinese Medical Association said the WMA was welcome to visit China to see for themselves. The committee was told to stop reading fabricated media reports and the political motives behind these reports.

The Chinese Medical Association's proposal to reject circulating the document was defeated. Further debate took place, with the Chinese Medical Association arguing that it could not represent the Chinese Government.

On a further vote, the committee agreed to recommend to Council that the WMA Resolution on Acknowledgement and Condemnation of the Genocide against the Uyghurs and other Minorities in China be circulated for comment.

### Electronic Cigarettes

The American Medical Association introduced a proposed major revision of the WMA Statement on Electronic Cigarettes and Other Electronic Nicotine Delivery Systems. This document recommended that e-cigarettes and other electronic nicotine delivery systems be subject to the WHO Framework Convention on Tobacco Control, and to local smoke-free laws and regulations.

The committee recommended to Council that the document be circulated to the members for comments.

### Violence in the Health Sector

A proposed revision of the WMA Statement on Violence in the Health Sector by Patients and Those Close to Them was submitted by the Indian Medical Association. This document states that governments should act to prevent and eliminate all workplace violence in the health sector. During the debate that followed, it was argued that this issue of violence should be given a higher priority by the WMA.

It was proposed that the following paragraph be inserted: 'Cyber and social media harassment particularly includes online threats and intimidation towards physicians who take part in a public debate in order to give adequate information and fight disinformation. These physicians are increasingly confronted with, amongst others, malicious messages on social media, death threats and intimidating home visits.'

This amendment as well as several other revisions were agreed upon, and the committee recommended that the document, as amended, be recirculated to members for comment.

### Support of the Medical Associations in Latin America and the Caribbean

The Brazilian Medical Association proposed a major revision to the WMA Resolution in Support of the Medical Associations in Latin America and the Caribbean. One important update was in relation to Cuba's practice of exporting medical personnel. The proposed Resolution listed the adverse effects of this practice, including the widespread allocation of doctors to non-priority areas and local substitution effects, and the fact that the Cuban government kept three-quarters of health personnel's salaries. In addition, the revised Resolution calls for adequate and sustainable



investment in national health care systems as a matter of priority, to provide the highest standard of care to the entire population in a country.

The committee recommended that the document be circulated within the membership for comment.

## Forced Sterilisation

A proposed minor revision to the WMA Statement on Forced and Coerced Sterilisation was submitted to the committee. Several amendments were suggested. One amendment proposed that the practice of coerced sterilisation should be specifically mentioned and condemned in the document, while a second amendment proposed that the Statement should declare forced or coerced sterilisation as a violation of fundamental human rights. It was argued that because of these substantive changes, the document should be recirculated to members for comment.

This course of action was agreed upon by the committee.

## Self-Medication

The committee considered a proposed minor revision to the WMA Statement on Self-Medication. During a brief debate, the committee added the sentence 'Health professionals should seek to identify potentially relevant self-medication during medical consultations, drug dispensing at the pharmacy and during home-based nursing interventions.' The committee also agreed to modify another sentence to read 'Pharmacovigilance for self-medication should be organized and reinforced by both governments and the industry to control the risks associated with self-medication.'

The committee then recommended that the document, as amended, be

sent to the Council for forwarding to the General Assembly for information.

## Tuberculosis

A minor revision of the WMA Resolution on Tuberculosis was considered. The committee agreed to add a new paragraph stating 'To address the burden of MDR and XDR TB in prison populations by ensuring drug susceptibility tests on isolates from patients with active TB are performed as soon as possible, and when patient compliance is a problem, implementing programs of directly observed therapy.'

Further amendments were agreed, and the committee recommended that, as amended, the document should be sent to the Council and then the Assembly for information.

## Ethical Implications of Collective Action by Physicians

The committee considered a proposed minor revision to the WMA Statement on the Ethical Implications of Collective Action by Physicians. A brief debate followed about adding the words 'including collective resignations' to the sentence 'Physicians may carry out protests and sanctions in order to improve direct and indirect working conditions that also may affect patient care.'

The committee agreed to this and recommended that the document, as amended, be forwarded to the Council and then sent to the General Assembly for information.

## Medical Assistance in Air Travel

A proposed WMA Resolution on Medical Assistance in Air Travel was considered with a minor revision. The American Medical Association put forward a number of amendments,

which were approved. The first added the sentence 'Air travel can significantly affect people who suffer from mental health challenges and resources for in-flight mental health emergencies are often lacking.'

Another amendment called for the International Civil Aviation Organization to develop standards relating to 'Medical, inclusive of mental health emergency procedures and training programs for medical personnel.' The final addition called on the ICAO to 'Define global guidelines guaranteeing physicians immunity from legal action when providing appropriate emergency assistance during in-flight medical incidents and ensure its implementation by its Member States.' There was also a debate about which language should be used on emergency materials. It was eventually agreed that planes should be equipped 'with a sufficient and standardised set of medical emergency materials and drugs that are easily identifiable packaging with instruction in English as well as consideration of other languages.'

The committee recommended that the Resolution, as amended, be forwarded to the General Assembly for information.

## Medical Workforce

A major revision to the WMA Resolution on Medical Workforce was considered with a proposal that that a workgroup be formed.

This course of action was agreed upon by the committee.

## Human Health as a Primary Policy Focus

The British Medical Association put forward for consideration a proposed WMA Statement on Human Health as a Primary Policy

Focus for Governments Worldwide. Its purpose was to move away from using Gross Domestic Product as the main measure of a nation's progress, with economic growth taking priority over human health. If they could not shift the focus to include health as a measure of the progress of nations, then they would never get health onto the agenda. This Statement was calling for a health for all policies approach that emphasized the mutual benefits from health and other policy sectors working together.

The committee recommended that the document be circulated to members for comments.

## Humanitarian and Medical Aid to Ukraine

A proposed WMA Resolution on Humanitarian and Medical Aid to Ukraine was submitted for consideration by the American Medical Association. The committee was told this was an urgent matter with medical help badly needed for those displaced in areas which had been occupied by Russia.

The committee recommended to the Council that the Resolution be approved and forwarded to the General Assembly for adoption.

## Primary Health Care

The Brazilian Medical Association, together with the Junior Doctors Network, put forward a proposed WMA Statement on Primary Health Care. The Statement emphasized the fact that primary health care represented the first contact of the patients in the health care system and as such could address most population health needs through comprehensive and integrated services. Therefore, primary health care should be integrated to the core of every health system. The committee's attention was

drawn to one of the recommendations in the document encouraging efforts to align the representation of primary health care physicians with specialized and hospital-based physicians in political decision-making as well as the need to reduce salary imbalances of physicians with a comparable training between levels of care.

The committee recommended to the Council that the proposed Statement be circulated for comments.

## **Finance and Planning Committee**

The Chair, Dr. Jung Yul Park (Korean Medical Association), called the committee to order.

## Financial Statement

The committee considered the Audited Financial Statement for 2021. The Treasurer, Dr. Ravindra Sitaram Wankhedkar (Indian Medical Association), and the Financial Advisor, Mr. Adolf Hällmayr, reported that the WMA's finances in 2021 were very solid again. The committee was given further detailed information relating to net income, expenses, equity, and membership dues.

The committee agreed that the Audited Financial Statement for 2021 be approved by the Council and forwarded to the General Assembly for adoption.

## Budget and Membership Dues Payments

The Committee considered the Proposed Budget for 2023 vs. Actual 2021 Expenditures and recommended that it be approved by the Council and forwarded to the General Assembly for adoption. It also received an oral report from Mr. Adolf Hällmayr on membership.

The Committee received the Dues Categories 2023 and recommended that the document be forwarded to the General Assembly for information.

## Strategic Plan

An oral report on the Strategic Plan was given by Dr. Otmar Kloiber, Secretary General. He reported that the current activities were in line with the Strategic Plan for 2020-2025 in four areas:

- Ethics, Advocacy & Representation, by proceeding with the revision of the WMA International Code of Medical Ethics and setting up a workgroup on the WMA Declaration of Helsinki
- Partnerships & Collaborations, by focusing on actions on universal health coverage as well as human rights and health issues with other partner organisations, and engaging in environmental and health issues in connection with the Conference of the Parties (COP) process. Dr. Kloiber stressed that a stronger focus on pandemic preparedness would be needed
- Communications & Outreach, by organizing international and regional meetings and expert hearings
- Operational Excellence, by renewing of the Associate Members' rules

## Statutory Meetings

The committee considered plans for future meetings. Dr. Simon Kigundu (Kenya Medical Association) extended an invitation to all members to the Council Session in April 2023 in Nairobi. Dr. David Nirushwa (Rwanda Medical Association)

extended an invitation to all members to the General Assembly in Kigali in October 2023. He said the theme of the Scientific Session would be Global Health Security, and the sub-sessions would be:

- Leaving no one behind: Together to fulfil the Global Health Security Mandate
- Walking towards a sustainable Global Networking Era in fighting emerging pandemics
- Sustainable Global Health Security: The Role of Multinational and Biotechnology Firms

The committee received these reports.

## Special Meetings

Dr. Otmar Kloiber said a major revision process of the WMA Declaration of Helsinki had started under the leadership of the American Medical Association as workgroup chair, and the first expert meeting would be held in Tel Aviv, Israel, with the support of the Israeli Medical Association. A series of regional meetings would be needed for the revision process and more commitment and support from NMAs would be appreciated. He added that in 2023 the WMA Secretariat was hoping to organize a leadership course in Africa to reach out to the African members.

## Membership

An application for constituent membership was received from the Saint Lucia Medical and Dental Association.

The committee recommended that the Council approve the application for adoption by the General Assembly.

## Associate Membership

An oral report was received from the Associate Members. The interim chair, Dr. Anthea Mowat, expressed her honour to carry Dr. Joe Heyman's legacy forward. She hoped that the revision of the Associate Members' rules could be adopted. The written report from the Associate Members for the period up to 31 December 2021 stated that the total number of Associate Members who were in good standing was 1,682. The regional breakdown was Japan with 604 members in good standing and all other countries with 1,078 members, comprising 366 paid members plus 30 life members, 430 junior doctors, and 252 medical student members with free membership.

## Junior Doctors Network

In its written report, the Junior Doctors Network reported that it had made many important strides with the deployment of numerous fully hybrid activities, the revitalization of activities which had been put on pause during the first two years of the COVID-19 pandemic, and the expansion of work into new areas. Membership had risen to more than 500 from almost 100 countries. The Junior Doctors Network had participated in many of the WMA's policy workgroups and had once more adopted a joint Management Team Strategy and listed priorities for the term. It had eight active working groups reporting to the Junior Doctors Network bi-annually, and their reports could be found in the regular editions of the JDN Newsletter.

The Chair, Dr. Yassen Tcholakov, gave his last oral report before stepping down as chair. He stressed that the Junior Doctors Network could increase engagement on policies in various areas. The committee chair congratulated the newly elected

Chair, Dr. Uchechukwu Arum, on his election and thanked Dr. Tcholakov for his contribution during his term.

## Past Presidents and Chairs of Council Network

The Committee received a report of the Past Presidents and Chairs of Council Network presented by the Past Presidents and Chairs of Council Network's Secretary, Dr. Jón Snædal (Icelandic Medical Association). He said this group would have a meeting during the week and planned to elect new leadership.

## Review Committee

A report was received from the chair of the Review Committee, Ms. Elizabeth LaRocca, who thanked the past chair, Ms. Mervi Kattelus, who had been appointed as the new Legal Advisor.

## Legal Seat of the WMA

Dr. Otmar Kloiber, Secretary General, reported on the issue of the WMA dissolving its legal seat in the United States while retaining its existence as an association in France. He said that this discussion required a Special General Assembly.

The committee agreed to recommend this to the Council.

## Green Guidelines for WMA Meetings

The Committee considered revisions to the Green Guidelines for WMA Meetings to create more sustainable events. This was proposed by the Secretariat following a cost analysis. The proposals related to venues, transport, food, and beverages at meetings, and event materials and merchandise.

The committee agreed that the proposed guidelines, as amended,

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be approved by the Council and forwarded to the General Assembly for adoption.

## World Medical Journal

The new Editor in Chief of the Journal, Dr. Helena Chapman, gave an oral report about the content of recent editions and her plans to engage with each NMA. The committee chair welcomed Dr. Chapman and thanked the previous editor, Dr. Peteris Apinis, and Prof. Elmar Doppelfeld for their long-term contributions.

## Public Relations

The committee received a written report on public relations, listing the press releases that had been issued during the year, and heard an oral report on further activities. Press releases would be issued on the policies adopted at the General Assembly and Council members were asked to proactively promote them within their own NMAs.

## Public Relations Strategy

A further report on public relations strategy was given by Dr. Ravindra Sitaram Wankhedkar (Indian Medical Association), who urged members to engage in the public relations activities, including social media.

## Thursday, 6 October

### **Associate Members Meeting**

The meeting was called to order by the interim chair of the Associate Members, Dr. Anthea Mowat (British Medical Association).

### Election of Chair

In an election for Chair of the Associate Members for the period from 2022 to 2025, Dr. Jacques de

Haller (Swiss Medical Association), a family doctor from Geneva, Switzerland, was elected. Dr. de Haller is a former President of the Swiss Medical Association and a former President of the Standing Committee of European Doctors. He told the meeting that as chair he would continue his interest in diversity and ethics. He was keen on having the Associate Members bringing their specific vision into the WMA deliberations – a vision of individuals doctors from throughout the world.

## Declaration of Helsinki

Dr. Mowat reported on her membership of the workgroup set up to revise the WMA Declaration of Helsinki. This was expected to be a two-year project, and the Associate Members had set up an informal subgroup to receive comments on the revision.

Oral reports were received from the Junior Doctors Network and the Past Presidents and Chairs of Council Network.

## Resolution on international medical meetings in countries persecuting physicians against medical ethics and human rights standards

Dr. Mowat reported that the original proposal from the Austrian Medical Association included examples from named countries. The revised Resolution was a generic proposal calling on the medical community worldwide to refrain from holding international medical events in countries where physicians were persecuted, especially in detention centres.

During a debate, the question was asked about who was to decide whether physicians were persecuted or not?

Dr. Kloiber, Secretary General, speaking as an associate member, supported the motion, but had serious concerns. In Turkey, physicians were being persecuted, but the WMA traveled to the country in order to be seen, be present, and demonstrate their support for these physicians. As long as they could go, they should go, he argued. They should try to help these doctors and be influential in the country. He did not think that the proposal was either practical or beneficial for doctors in these countries. An amendment was proposed to add the words 'scientific meetings' to the Resolution.

The committee recommended that the Resolution, as amended, be forwarded to the General Assembly.

The meeting was brought to a close.

### **Celebration of the 75th Anniversary of the German Medical Association**

On the Thursday morning, with the WMA meetings adjourned, a celebration took place for the 75th anniversary of the German Medical Association. With music provided by Berlin's Finest Jazzband, an audience of German Medical Association's officials, members, and staff listened to a number of speeches celebrating the event. Dr. Klaus Reinhardt, President of the German Medical Association, spoke about 'Professional Independence as an Ethical Duty in Medicine', while Professor Alena Buyx, Chair of the German Ethics Council, spoke on 'The future of medicine – The changing role of the physician'.

In her closing remarks, Dr. Heidi Stensmyren, WMA President, spoke about the importance of physicians contributing their knowledge and experiences to strategic discussions. She said it was their professional task to share their knowledge.



## Scientific Session

The title of the Scientific Session was 'Medical Ethics in a Globalized World'.

Dr. Klaus Reinhardt, President of the German Medical Association, welcomed WMA delegates to Berlin. He said that the principles of medical ethics formed the foundation of organized medicine in Germany, and the German medical profession had a tremendous responsibility to confront the horrific ethical failures of its past and to prevent them from ever happening again. He said that during these challenging times, it was even more crucial to reaffirm the fundamental and universal principles of medical ethics worldwide.

The first speaker, Prof. Tom L. Beauchamp, Professor Emeritus of Philosophy at Georgetown University, spoke about the principles of global medical ethics, giving an overview of basic universally valid principles. He discussed the WMA Declaration of Helsinki and addressed issues such as respect for autonomy, common morality, non-maleficence, beneficence, and justice.

Prof. Ames Dhai, Chair of the UNESCO International Bioethics Committee, from South Africa, spoke about the fair and just allocation of resources in public health emergencies. She referred to the major infectious disease outbreaks over the past two decades, and the world's unpreparedness for the latest pandemic. She commented that no country had adequate public health structure, noting that even those with the best systems were unprepared. The political response was poor, with inconsistent decision-making. They had seen corruption, with world leaders not taking into consideration the poor on the ground. The corruption had been a major

challenge. It had been an immoral and unethical phenomenon, where people in public offices used their power for personal gain. With reference to Africa in particular, she asked, 'What has happened to our moral compass?'

She said it was important now to be proactive, learn the lessons, and observe the lack of resources in the areas of prevention, containment, health services, equity, and global innovation. She concluded that solidarity, co-operation, shared responsibilities, and integrity were all necessary when it came to a fair and just allocation of resources.

Prof. Raanan Gillon, Emeritus Professor of Medical Ethics, at the Imperial College in London, spoke about the 'four principles approach' to medical ethics. He focused on the international and intercultural advantages for the medical and other health care professions of adopting it – as so many doctors around the world already had. A major advantage was that the four principles approach provided a set of widely acceptable moral commitments to which the vast majority of the world's doctors could commit. Another advantage was that it could provide a moral and intellectual underpinning for the vast range of substantive and more specific moral norms and commitments accepted by doctors in their practice. He looked at how the principles could morally underpin some of the numerous obligations they had as doctors and the issues of beneficence and non-maleficence. He talked about two more recently adopted principles – respect for autonomy and justice – as well as the issue of justice in health care ethics.

During a session with the theme 'Medical Ethics and Professionalism', Prof. James Childress, Professor Emeritus of Ethics and Religious Studies, from the University of

Virginia in the United States, talked about respecting conscience while protecting patients. He said that physicians were expected to practice with conscience and integrity. In some cases, they believed that they could not do so and at the same time provide a legal and morally acceptable service. Examples included abortion, physician assisted suicide, and active euthanasia. He discussed the reasons for limiting conscientious objection as well as the challenges of balancing clinicians' conscience and the protection of patients' interests. He spoke about the revision of the WMA International Code of Medical Ethics and the compromised wording on conscientious objection. He concluded his speech by saying that conscientious objection was justifiable within limits, but not conscientious obstruction. Moral imagination was needed to ensure the protection of patients' interests while also protecting physicians' conscientious objection to provide a particular service.

Prof. Urban Wiesing, Director of the Institute of Ethics and History of Medicine, at the University of Tübingen in Germany, and ethics advisor on the WMA International Code of Medical Ethics revision workgroup, spoke about globalisation in medicine, where the world in medicine was becoming culturally more diverse. He argued that the moral answer of the profession to this globalisation was a global ethos. He asked what should belong to a global ethos, such as the central obligation to patients and their families. There were uncontroversial and well-known core principles such as avoiding harm, promoting health and well-being, and confidentiality. Also uncontroversial were dignity, autonomy, no discrimination, mutual respect, good medical practice, and professionalism. He said that the more concrete the moral norm was,

the less chance there was for a global consensus.

Prof. Wiesing looked at cultural differences, where the question arose about whether physicians were allowed to advertise, and what duty physicians have to help in emergencies. These were complex questions, and the only answer was political compromise. As for the responsible party, the answer was the profession itself, and the WMA was the only justifiable organisation to make these decisions.

The final speaker, Dr. Helen Oviasogie Eboime, Director Medical Services, at the Edo State Ministry of Health in Nigeria, spoke about the importance of upholding ethical principles in teams while maintaining interprofessional respect. She looked at the barriers of upholding these ethical principles, and her conclusion was that ethical principles with appropriate knowledge and skills formed the bedrock of good medical practice, quality patient care, and improved health outcomes. Practitioners must strive to imbibe the core values of professionalism, foster commitment and team spirit, and display a good customer service attitude in order to ensure a positive societal image and branding of the self and the institution. Finally, government funding, improved working conditions, mandatory in-service training and retraining, appropriate and prompt remuneration, good conflict management system, staff motivation, and proper regulation of public and private practices were key to upholding ethical principles in teams and maintaining interprofessional respect.

## Friday, 7 October

### Reconvened Council Session

#### Medical Ethics Committee Report

##### Organ Procurement from Executed Prisoners

The committee's decision that the proposed WMA Declaration on Organ Procurement from Executed Prisoners be circulated for comment was raised by the Chinese Medical Association. They said that during the previous debate in committee, the American Medical Association claimed that China continued to use prisoners' organs without providing any evidence. If there was any evidence, the Chinese Medical Association hoped the American Medical Association would share this information, as it was a serious criminal activity, according to Chinese law. This practice was ended in 2015, but there were people profiting from capitalising on claims that the practice was still going on.

The Council agreed that the proposed Declaration should be circulated for comment. The Council agreed that the following documents be forwarded to the General Assembly for adoption:

- Assisted Reproductive Technologies
- Declarations of Venice and End-of-Life Medical Care

#### Finance and Planning Committee Report

##### Green Guidelines for WMA Meetings

Following an intervention by the Secretary General about the cost implications of these Guidelines, it was decided to defer further consideration until the next General

Assembly.

The Council agreed that the following document be forwarded to the General Assembly for adoption:

- Application for constituent membership from the Saint Lucia Medical and Dental Association

#### Socio-Medical Affairs Committee Report

##### Health and the Environment

The Council received an oral report on the previous day's meeting of the environment caucus, where reports had been given about the forthcoming Climate Change Conference (COP27) in Egypt, the new fossil fuel non-proliferation treaty and the international chemicals management meeting. A report had also been given about Denmark's new climate change policy.

##### Acknowledgement and Condemnation of the Genocide against the Uyghurs and other Minorities in China

The Chinese Medical Association reopened the debate on the committee's recommendation that the Resolution be circulated for comment. The Chinese Medical Association said there was no genocide behaviour in China and the Association firmly opposed the proposed Resolution. It proposed a motion to that effect, but in the absence of a seconder, the motion fell.

The Council agreed to recommend to the General Assembly that the Resolution be circulated for comment.

##### Violence in the Health Sector

The Council considered the committee's recommendation that the proposed revision of the WMA Statement on Violence in the Health

Sector by Patients and Those Close to Them be recirculated to members for comment. The Indian Medical Association argued that this was one of the most pressing issues facing the medical profession, and it proposed a motion that the Resolution should be forwarded to the General Assembly for adoption. This was strongly supported by several speakers. The point was made that this was an issue facing every physician in the world, and they were looking to the WMA for solutions. Governments needed to put more money into providing safe working areas. They was also pointed out that social media harassment was unrelenting.

The Council decided to forward the Resolution to the General Assembly for adoption.

## Tuberculosis

The Council reconsidered the revised WMA Resolution on Tuberculosis, which the committee recommended sending to the Assembly for information. The American Medical Association proposed re-inserting into the Resolution a reference to Directly Observed Treatment.

The Council agreed to send the Resolution, as amended, to the General Assembly.

In summary, the committee agreed that the following documents be forwarded to the General Assembly for adoption:

- Revision of the WMA Declaration of Edinburgh on Prison Conditions and the Spread of Communicable Diseases
- WMA Statement on the Global Burden of Chronic Disease
- Revision of the WMA Declaration on Patient Safety

- WMA Resolution on Humanitarian and Medical Aid to Ukraine

## Advocacy and Communication Workgroup

An oral report was given to the Council about the workgroup's activities. The group had been dormant due to a change in leadership, but would resume its duties after this General Assembly and would report to the Council meeting in Kenya in April 2023.

## **General Assembly Ceremonial Session**

The Ceremonial Session was called to order by the WMA President, Dr. Heidi Stensmyren (Swedish Medical Association).

Dr. Otmar Kloiber, WMA Secretary General, carried out a Roll Call of NMAs and welcomed honoured guests from Nigeria. Delegates from the Ukrainian Medical Association were given a standing ovation.

Germany's Federal President, Dr. Frank-Walter Steinmeier, then addressed the Assembly by video. He said that abominable crimes committed in many wars had shown that the medical profession needed an international and intercultural set of values which laid down respect for human life as an unalterable tenet. In the 75 years of its existence, the WMA had embraced the civilisational progress of the medical profession and had drawn up guidelines which had been largely incorporated as international standards into the codes of professional conduct for physicians in individual countries. He said that during the Assembly, delegates intended to adopt a Declaration against racism in medicine.

"Your aim is to ensure that even greater emphasis is placed on equality,

both that of patients and of doctors. If your conference succeeds in adopting this declaration, it would mark an important step on the road towards a global understanding of the fundamental values of peaceful co-existence among nations. I encourage you to take it."

Mr. Steinmeier referred to Russia's war of aggression against Ukraine and doctors risking their lives in the war zones to help the injured. He spoke about the COVID-19 pandemic, when many physicians were pushed beyond their limits to save lives. He said the COVAX initiative remained relevant considering the uneven distribution of vaccines. He commented that "I therefore urge the international community to provide substantial help in the form of vaccine supplies and health information, especially to nations with weaker economies. Only if we overcome the pandemic in a spirit of cooperation, we will be able to maintain trust, the most valuable resource in the co-existence among states."

Dr. Klaus Reinhardt, President of the German Medical Association, then addressed the Assembly and began with a quote from physician, researcher, and politician Rudolf Virchow, who once said "Physicians are the natural attorneys of the poor, and social problems fall to a large extent within their jurisdiction." He demonstrated the interdependence of medicine and politics and encouraged physicians to focus on social issues. This was one of the foundations of WMA initiatives.

The WMA had always been an important point of reference for the German Medical Association. Founded in the same year in the aftermath of the Second World War, they both had their roots in the lessons learned from the crimes of the National Socialist regime in Germany.

It was the crimes and misconduct of German physicians, above all, that made it clear that a global medical organization was needed – one that would define medical ethics more precisely.

Dr. Reinhardt said that physicians were currently facing unique challenges. War had broken out in Europe again, and physicians had an important role to play in caring for and helping the wounded. The WMA has also turned its attention to Ukraine and had accomplished a great deal.

He closed with a final quote from Rudolf Virchow, “Only those who regard healing as the ultimate goal of their efforts can, therefore, be designated as physicians.”

The Assembly then stood to recite the Physicians Pledge.

Dr. Frank Ulrich Montgomery paid tribute to Dr. Stensmyren, the retiring WMA President. She had taken over in 2021, at the height of the COVID-19 pandemic, and had been tireless, hardworking, and diligent for all WMA initiatives. She had helped the WMA to conquer the infodemic and had been a great role model for women in medicine.

Dr. Heidi Stensmyren then delivered her Valedictory Address.

Dr. Osahon Enabuleli then took the oath of office as President of the WMA for 2022/23. He was officially installed as President and presented with the Presidential Medal. Dr. Enabuleli gave his Inaugural Address.

The Assembly then adjourned.

## **Saturday, 8 October**

### **General Assembly Plenary Session**

The morning's events began with a keynote speech from Dr. Chikwe Ihekweazu, Director of the WHO Hub for Pandemic and Epidemic Intelligence, in Berlin. He spoke about the hub's work in detecting diseases, and said that an estimated 15 million deaths were associated with COVID-19 between January 2020 and December 2021. They were continually facing an increasing risk of disease emergence and spread, but their response efforts were improving. Since data sharing was one of the challenges they faced, he said they were getting the new hub up and running and were building a very exciting group.

### **Plenary Session**

The plenary session opened with delegates standing in silence to remember the deaths of Dr. Jim Appleyard, former WMA President, and Dr. Joe Heyman, former Chair of the Associate Members, as well as all those physicians who had died during the COVID-19 pandemic.

### **Election**

Dr. Lujain Al-Qodmani (Kuwait Medical Association) was elected unopposed as President-elect of the WMA. She is the first Arab to be elected President and will take up her post at the WMA General Assembly in Kigali, Rwanda in October 2023.

Dr. Al-Qodmani said she was honoured to accept the Presidency. She said the world had entered a difficult era with rising conflict, worsening climate change, economic turmoil, and a prolonged pandemic. As a result, their mandate as physicians and medical leaders was now more crucial than ever to protect the health

and well-being of all people with no discrimination, to secure a safe and resilient environment for the practice and delivery of medical care, and to continue to champion the highest ethical standards and professionalism in their most noble of professions.

She went on to say, “When the world was locked down, health care professionals rose up. We rose up to work longer. We rose up to treat and cure those affected even in the face of danger to our own lives. We rose up to whatever challenges were thrown our way. Many of our colleagues lost their lives, many who worked side-by-side with us. We remember, and honour their memory.”

She said the WMA had always been, and would continue to be, a leading global organization in serving humanity through its work in medical ethics, medical education, and public health advocacy because that was their purpose – “to serve and to show compassion” – as said by the Nobel prize-winning Dr Albert Schweitzer.

### **Treasurer's Report**

The Treasurer, Dr. Ravindra Sitaram Wankhedkar (Indian Medical Association), presented his report, covering a review of 2021 and 2022 as well as the 2023 budget. He said that the finances were very solid, with no financial losses to report, and very controlled financial management. The chief messages were that there was a net income of €434,000 in 2021, equity at the end of 2021 totalled €3,275,000, and membership dues were €2,336,000, which is 12 percent higher than the previous year.

The Financial Statement for the year ending 2021 and the Budget for 2023 were approved.



## Meetings

The Assembly was informed that the General Assembly in 2026 would be held from 23-25 April 2026, and that an invitation had been received from the Korean Medical Association to host the Council session in 2024.

The meeting approved the theme of 'Global Health Security' for the Scientific Session at the General Assembly in Kigali, Rwanda.

## Associate Members

The revision of Associate Members Rules was adopted.

## Membership

The application for constituent membership from the Saint Lucia Medical and Dental Association was approved.

## Legal Seat of the WMA

Dr. Otmar Kloiber, Secretary General, explained to the Assembly the plan to dissolve the WMA's legal entity in the United States, and the requirement for a Special General Assembly to approve this. He said registration in the United States was leading to legal and financial complications, and the solution was to keep the registration in France as a French association, as the WMA had been for several decades. The WMA had left the United States in 1974, and all its business had been conducted in France.

The Assembly approved the proposal to hold an immediate Special Assembly.

## Green Guidelines

The Assembly considered the proposed Green Guidelines for WMA Meetings to create more sustainable events which have been approved by

the Council. A motion was received that the Treasurer and the Secretariat should further examine the potential cost implications of the Guidelines and report back in one year.

The motion was supported.

The Assembly then adjourned and was called to order as a Special General Assembly.

## Special General Assembly

The Special Assembly meeting was asked whether it wanted to accept the dissolution of the WMA's legal entity in the United States. Delegates voted unanimously in favour of the proposal.

The General Assembly then resumed and considered recommendations from the Council meeting in Paris.

## Support for Medical Personnel in Ukraine

The Assembly considered a minor revision to the WMA Resolution in Support of Medical Personnel and Citizens of Ukraine in the face of the Russian invasion, that was passed at the Council meeting in Paris earlier this year.

It was decided that the Resolution should be translated into Russian and Ukrainian.

## Violence in the Health Sector by Patients and Those Close to Them

The proposed revision of the WMA Statement on Violence in the Health Sector by Patients and Those Close to Them was presented to the Assembly and unanimously adopted.

## Physicians Treating Relatives

The Assembly agreed to adopt the proposed revision of the WMA

Statement on Physicians Treating Relatives.

## Social Media

The proposed revision of the WMA Statement on the Professional and Ethical Use of Social Media was presented, and the Assembly agreed to its adoption.

## International Code of Medical Ethics

The proposed revision to the WMA International Code of Medical Ethics was submitted to the Assembly. Prof. Pablo Requena (Vatican Medical Association) publicly thanked everybody who had put in such an effort on revising the Code, adding that "We all are aware there are a number of issues that we would have liked to see a different drafting, more consistent with our ideas. We know everybody had shown interest in having a common text and I thank the group."

Dr. Ramin Parsa-Parsi (German Medical Association) also thanked the workgroup which he chaired. They had restructured the Code to introduce new modern and gender inclusive language, and they had invested a great effort to see that it could be applicable to different cultures and political systems. It had also been expanded to incorporate the concept of patient autonomy, physician wellbeing, equity, and justice in health care and to elaborate further on the principles of patient confidentiality and informed consent. It now included modern issues such as remote treatment, environmental sustainability, and social media. He described it as a universal document that would resonate globally.

In a vote, the revised Code was unanimously adopted by the Assembly.

## Assisted Reproductive Technologies

The Assembly considered the revised WMA Statement on Assisted Reproductive Technologies. Prof. Requena said the Vatican Medical Association could not support this Statement because it still contained a number of points on the moral status of the embryo, the right of every person to know who their biological parents were, and issues and concerns connected with the surrogate motherhood. They all knew that in most cases surrogate mothers were used around the world or money, which was damaging for the body of women. It might help in a small number of cases, but they had not been able to put effective ethical limits to the use of this practice. This was a moral principle, based on the respect for incipient human life.

With one vote against, the document was adopted by the Assembly.

## Declaration of Venice

The proposed WMA Declaration of Venice came before the Assembly. Dr. José Ramón (Spanish Medical Association) proposed that the title of the Declaration be changed to the Declaration of Venice on End-of-Life Medical Care.

The amendment was agreed and the Assembly voted to adopt the Declaration and rescind the Declaration on End-of-Life Medical Care. The Assembly adopted the following documents:

- Revised Statement on Guiding Principles for the Use of Telehealth for the Provision of Health Care
- Revised Statement on Health Hazards of Tobacco Products and Tobacco-Derived Products

- Revised Statement on the Protection and Integrity of Medical Personnel in Armed Conflicts and Other Situations of Violence
- Revised Resolution on Occupational and Environmental Health and Safety

## Declaration on Racism

The Assembly considered the WMA Declaration on Racism. The American Medical Association moved that the document be renamed the Declaration of Berlin on Racism in Medicine.

The action to rename the Declaration was approved.

Dr. Ashok Philip (Malaysian Medical Association) proposed that the first sentence of the document which reads, "Racism is rooted in a false ideology that human beings can be grouped into a hierarchy of racial categories primarily based on inherited physical traits" should be amended because, he argued, to call racism an ideology was to dignify it too much. He proposed a new sentence to read, "Racism is rooted in the false idea that human beings can be ranked as superior or inferior based on inherited physical traits."

The amendment was approved and the Assembly agreed that the document, as amended, should be adopted.

The following documents were adopted

- Declaration on Discrimination against Elderly Individuals within Health care Settings
- Resolution for Providing COVID-19 Vaccines for All

The following documents were sent to the Assembly for information:

- Statement on Self-Medication
- Resolution on Economic Embargoes and Health
- Statement on the Ethical Implications of Collective Action by Physicians
- Resolution on Medical Assistance in Air Travel
- Resolution on Tuberculosis

The following documents were adopted:

- Declaration of Edinburgh on Prison Conditions and Other Communicable Diseases
- Statement on the Global Burden of Chronic Disease
- Declaration on Patient Safety
- Resolution on Humanitarian and Medical Aid to Ukraine

## Complaints Procedure

The Assembly agreed to postpone discussion about the two complaints – involving Poland, Russia, and Belarus, and the British and the Chinese Medical Associations – until the next meeting in Kenya.

## Associates Members

Dr. Jacques de Haller, newly elected chair of the Associate Members, submitted a proposed Resolution on international medical meetings in countries persecuting physicians against medical ethics and human rights standards. The Resolution read, "The WMA calls on the medical community worldwide to refrain from holding international medical

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events in countries where physicians are persecuted, especially in detention centres.”

Dr. de Haller said, “There are many countries in the world where torture takes place. However, in some countries, the medical society is unable to speak out against human rights violations, even if they witness them, due to the severe repression in the country. It is our responsibility to help our colleagues, to show that the situation is recognized and that fundamental changes are urgently needed to guarantee to physicians safe and sustainable working conditions, allowing them to practice their profession in line with medical ethics standards. One way of showing this recognition is to refrain from holding international events in such countries.”

The Assembly agreed to send the Resolution to Council for consideration.

## Open Session

### Indonesia

Dr. Khumaidi Adib (Indonesian Medical Association) said that the Indonesian Government was proposing new health laws that could potentially have an impact on the welfare of doctors, and yet the Indonesian Medical Association had not been involved.

### Ukraine

Dr. Iryna Mazur (Ukrainian Medical Association) gave a graphic and moving report to the Assembly about the war and humanitarian catastrophe in Ukraine. The Russians had come to her country and killed civilians, children, women, the elderly, and physicians. After seven months of war, more than 200 medical institutions had been destroyed as

well as destroyed villages, weakened infrastructure, and hospitals. City doctors had been killed and about 200 wounded. Ukrainian physicians had seen the results of the terrorist activities of the Russian military. Physicians were working at the limit of their capabilities, and she said that the voice of the WMA and each NMA would help to stop the Russian aggression.

Dr. Mazur expressed the gratitude of Ukrainian physicians for the help given by the WMA and its moral support. She thanked the WMA for its Ukraine Medical Help Fund, and she ended her speech by presenting WMA and German leaders with gifts in appreciation.

### Pakistan

Dr. Muhammad Ashraf Nizami (Pakistan Medical Association) spoke about the unprecedented floods in Pakistan, which have costed the country up to US \$30-50 billion. He said that his country was going through the worst climate catastrophe, which has affected 33 million people. This country is a victim of the growing climate crisis and needed help to manage the disaster. More than a million houses had been destroyed, and hundreds of schools destroyed or damaged. Millions of people needed food tents and medicines, and most flood victims were poor peasants and small farmers. Time was running out to save victims from starvation and disease. Dr. Nizami concluded by saying that Pakistan needed climate justice.

### Argentina

The Assembly heard a report about the situation in Argentina, where thousands of physicians had died as a result of COVID-19. It was said that the pandemic is not over, especially for affected families left without any

social security support or protection. Countries were encouraged to establish a pension or a benefit for the rest of their lives for families of physicians who had died.

### Bolivia

Dr. Luis Garcia (Bolivian Medical Association) gave a report about the situation in Bolivia, where many physicians had been locked up for trying to defend the cause of physicians and asking for better medical infrastructure and better access to medicines. Unfortunately, the Bolivian Government was not listening to doctors, and doctors were being persecuted in Bolivia without justice. The Assembly was urged to adopt a statement to call for an end to this persecution of doctors in Bolivia. Dr. Kloiber responded that the WMA would do what it could to help the Bolivian physicians.

The Assembly ended with a round of thanks from Dr. Kloiber to all those who had made the meeting so successful.

## Council

Dr. Frank Ulrich Montgomery then called a brief meeting of the Council, with only two items on the agenda.

### International Medical Meetings

The Council agreed to circulate to constituent members the proposed WMA Resolution on international medical meetings in countries persecuting physicians against medical ethics and human rights standards.

### Iran

A proposed WMA Resolution on Human Rights Demonstrations in Iran was tabled. The Resolution read: “The WMA is deeply concerned by



the recent reports of violence against protesters in Iran. Many people are reported to have died in the ongoing protests against the Iranian regime and many more are said to have been detained. In addition, reports indicate that medical vehicles are being abused by Iranian authorities to bring protesters to detention.

The WMA calls on the Iranian authorities to fully adhere to its human rights obligations, including

the right to peaceful demonstration, respect the autonomy of physicians and in particular their ethical duty to provide care to anyone on the basis of medical need alone and ensure that health care equipment and facilities are used for health care purposes only.”

Dr. Montgomery moved that this should be treated as an emergency Resolution. The Council agreed with this course of action.

The meeting was adjourned.

**Nigel Duncan**

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Photo 1. Group photo of the General Assembly in Berlin. Credit: World Medical Association



## WMA INTERNATIONAL CODE OF MEDICAL ETHICS

**Adopted by the 3rd General Assembly of the World Medical Association, London, England, October 1949**

**Revised by the 22nd World Medical Assembly, Sydney, Australia, August 1968, the 35th World Medical Assembly, Venice, Italy, October 1983, the 57th WMA General Assembly, Pilanesberg, South Africa, October 2006 and by the 73rd WMA General Assembly, Berlin, Germany, October 2022**

### PREAMBLE

The World Medical Association (WMA) has developed the International Code of Medical Ethics as a canon of ethical principles for the members of the medical profession worldwide. In concordance with the WMA Declaration of Geneva: The Physician's Pledge and the WMA's entire body of policies, it defines and elucidates the professional duties of physicians towards their patients, other physicians and health professionals, themselves, and society as a whole.

The physician must be aware of applicable national ethical, legal, and regulatory norms and standards, as well as relevant international norms and standards.

Such norms and standards must not reduce the physician's commitment to the ethical principles set forth in this Code.

The International Code of Medical Ethics should be read as a whole and each of its constituent paragraphs should be applied with consideration of all other relevant paragraphs. Consistent with the mandate of the WMA, the Code is addressed to physicians. The WMA encourages others who are involved in healthcare to adopt these ethical principles.

### GENERAL PRINCIPLES

1. The primary duty of the physician is to promote the health and well-being of individual patients by providing

competent, timely, and compassionate care in accordance with good medical practice and professionalism.

The physician also has a responsibility to contribute to the health and well-being of the populations the physician serves and society as a whole, including future generations.

The physician must provide care with the utmost respect for human life and dignity, and for the autonomy and rights of the patient.

2. The physician must practise medicine fairly and justly and provide care based on the patient's health needs without bias or engaging in discriminatory conduct on the basis of age, disease or disability, creed, ethnic origin, gender, nationality, political affiliation, race, culture, sexual orientation, social standing, or any other factor.
3. The physician must strive to use health care resources in a way that optimally benefits the patient, in keeping with fair, just, and prudent stewardship of the shared resources with which the physician is entrusted.
4. The physician must practise with conscience, honesty, integrity, and accountability, while always exercising independent professional judgement and maintaining the highest standards of professional conduct.
5. Physicians must not allow their individual professional judgement to be influenced by the possibility of benefit to themselves or their institution. The physician must recognise and avoid real or potential conflicts of interest. Where such conflicts are unavoidable, they must be declared in advance and properly managed.

6. Physicians must take responsibility for their individual medical decisions and

must not alter their sound professional medical judgements on the basis of instructions contrary to medical considerations.

7. When medically appropriate, the physician must collaborate with other physicians and health professionals who are involved in the care of the patient or who are qualified to assess or recommend care options. This communication must respect patient confidentiality and be confined to necessary information.
8. When providing professional certification, the physician must only certify what the physician has personally verified.
9. The physician should provide help in medical emergencies, while considering the physician's own safety and competence, and the availability of other viable options for care.
10. The physician must never participate in or facilitate acts of torture, or other cruel, inhuman, or degrading practices and punishments.
11. The physician must engage in continuous learning throughout professional life in order to maintain and develop professional knowledge and skills.
12. The physician should strive to practise medicine in ways that are environmentally sustainable with a view to minimising environmental health risks to current and future generations.

### Duties to the patient

13. In providing medical care, the physician must respect the dignity, autonomy, and rights of the patient. The physician must respect the patient's right to freely accept or refuse care in keeping with the patient's values and preferences.

14. The physician must commit to the primacy of patient health and well-being and must offer care in the patient's best interests. In doing so, the physician must strive to prevent or minimise harm for the patient and seek a positive balance between the intended benefit to the patient and any potential harm.
15. The physician must respect the patient's right to be informed in every phase of the care process. The physician must obtain the patient's voluntary informed consent prior to any medical care provided, ensuring that the patient receives and understands the information needed to make an independent, informed decision about the proposed care. The physician must respect the patient's decision to withhold or withdraw consent at any time and for any reason.
16. When a patient has substantially limited, underdeveloped, impaired, or fluctuating decision-making capacity, the physician must involve the patient as much as possible in medical decisions. In addition, the physician must work with the patient's trusted representative, if available, to make decisions in keeping with the patient's preferences, when those are known or can reasonably be inferred. When the patient's preferences cannot be determined, the physician must make decisions in the patient's best interests. All decisions must be made in keeping with the principles set forth in this Code.
17. In emergencies, where the patient is not able to participate in decision making and no representative is readily available, the physician may initiate an intervention without prior informed consent in the best interests of the patient and with respect for the patient's preferences, where known.
18. If the patient regains decision-making capacity, the physician must obtain informed consent for further intervention.
19. The physician should be considerate of and communicate with others, where available, who are close to the patient, in keeping with the patient's preferences and best interests and with due regard for patient confidentiality.
20. If any aspect of caring for the patient is beyond the capacity of a physician, the physician must consult with or refer the patient to another appropriately qualified physician or health professional who has the necessary capacity.
21. The physician must ensure accurate and timely medical documentation.
22. The physician must respect the patient's privacy and confidentiality, even after the patient has died. A physician may disclose confidential information if the patient provides voluntary informed consent or, in exceptional cases, when disclosure is necessary to safeguard a significant and overriding ethical obligation to which all other possible solutions have been exhausted, even when the patient does not or cannot consent to it. This disclosure must be limited to the minimal necessary information, recipients, and duration.
23. If a physician is acting on behalf of or reporting to any third parties with respect to the care of a patient, the physician must inform the patient accordingly at the outset and, where appropriate, during the course of any interactions. The physician must disclose to the patient the nature and extent of those commitments and must obtain consent for the interaction.
24. The physician must refrain from intrusive or otherwise inappropriate advertising and marketing and ensure that all information used by the physician in advertising and marketing is factual and not misleading.
25. The physician must not allow commercial, financial, or other conflicting interests to affect the physician's professional judgement.
26. When providing medical care remotely, the physician must ensure that this form of communication is medically justifiable and that the necessary medical care is provided. The physician must also inform the patient about the benefits and limitations of receiving medical care remotely, obtain the patient's consent, and ensure that patient confidentiality is upheld. Wherever medically appropriate, the physician must aim to provide care to the patient through direct, personal contact.
27. The physician must maintain appropriate professional boundaries. The physician must never engage in abusive, exploitative, or other inappropriate relationships or behaviour with a patient and must not engage in a sexual relationship with a current patient.
28. In order to provide care of the highest standards, physicians must attend to their own health, well-being, and abilities. This includes seeking appropriate care to ensure that they are able to practise safely.
29. This Code represents the physician's ethical duties. However, on some issues there are profound moral dilemmas concerning which physicians and patients may hold deeply considered but conflicting conscientious beliefs.

The physician has an ethical obligation to minimise disruption to patient care. Physician conscientious objection to provision of any lawful medical interventions may only be exercised if the individual patient is not harmed or discriminated against and if the patient's health is not endangered.

The physician must immediately and respectfully inform the patient of this objection and of the patient's right to consult another qualified physician and provide sufficient information to enable the patient to initiate such a consultation in a timely manner.

Duties to other physicians, health

professionals, students, and other personnel

teachers and students.

## Duties to society

30. The physician must engage with other physicians, health professionals and other personnel in a respectful and collaborative manner without bias, harassment, or discriminatory conduct. The physician must also ensure that ethical principles are upheld when working in teams.
31. The physician should respect colleagues' patient-physician relationships and not intervene unless requested by either party or needed to protect the patient from harm. This should not prevent the physician from recommending alternative courses of action considered to be in the patient's best interests.
32. The physician should report to the appropriate authorities conditions or circumstances which impede the physician or other health professionals from providing care of the highest standards or from upholding the principles of this Code. This includes any form of abuse or violence against physicians and other health personnel, inappropriate working conditions, or other circumstances that produce excessive and sustained levels of stress.
33. The physician must accord due respect to

34. The physician must support fair and equitable provision of health care. This includes addressing inequities in health and care, the determinants of those inequities, as well as violations of the rights of both patients and health professionals.

35. Physicians play an important role in matters relating to health, health education, and health literacy. In fulfilling this responsibility, physicians must be prudent in discussing new discoveries, technologies, or treatments in non-professional, public settings, including social media, and should ensure that their own statements are scientifically accurate and understandable.

Physicians must indicate if their own opinions are contrary to evidence-based scientific information.

36. The physician must support sound medical scientific research in keeping with the WMA Declaration of Helsinki and the WMA Declaration of Taipei.
37. The physician should avoid acting in such a way as to weaken public trust in

the medical profession. To maintain that trust, individual physicians must hold themselves and fellow physicians to the highest standards of professional conduct and be prepared to report behaviour that conflicts with the principles of this Code to the appropriate authorities.

38. The physician should share medical knowledge and expertise for the benefit of patients and the advancement of health care, as well as public and global health.

Duties as a member of the medical profession

39. The physician should follow, protect, and promote the ethical principles of this Code. The physician should help prevent national or international ethical, legal, organisational, or regulatory requirements that undermine any of the duties set forth in this Code.
40. The physician should support fellow physicians in upholding the responsibilities set out in this Code and take measures to protect them from undue influence, abuse, exploitation, violence, or oppression.

## WMA DECLARATION OF BERLIN ON RACISM IN MEDICINE

Adopted by the 73rd WMA General Assembly, Berlin, Germany, October 2022

### PREAMBLE

Racism is rooted in the false idea that human beings can be ranked as superior or inferior based on inherited physical traits. This harmful social construct has no basis in biological reality; however, racist policies and ideas have been used throughout history and are still used to perpetuate, justify, and sustain unequal treatment.

Despite the fact that races do not exist in the genetic sense, in some cultures racial categories are used as a form of cultural expression or identity, or a means of reflecting shared historical experiences. This is one aspect of the concepts of “ethnicity” or “ancestry”.

Acknowledging that the words “race” and “racial” have different connotations in different linguistic and cultural contexts, these terms are used throughout this document to denote socially constructed categories and not a biological reality.

While the false conflation of racial categories with inherent biological or genetic traits has no scientific basis, the detrimental impact racial discrimination has on historically marginalized and minoritized communities is well documented. The experience of racism in all its forms – for example, interpersonal, institutional, and systemic – is recognized as a social determinant of health and a driving force behind persistent health inequities, as noted in the [WMA Declaration of Oslo on Social Determinants of Health](#). These inequities can be compounded by other factors like national origin, age, gender, sexual orientation, religion, socioeconomic status, disabilities, and more. Individuals subjected to racism are often also affected negatively by other social determinants of health.

Racially motivated violence and overt bias, housing and employment discrimination, education and health care

inequity, environmental injustice, daily microaggressions, pay gaps, and the legacy of intergenerational trauma experienced by those who are subjected to racism are just some of the many factors that may impact health and illustrate why racism poses a serious threat to public health. These and other structural barriers faced by historically marginalized communities can lead to disproportionate rates of infant and maternal mortality and certain illnesses, mental health struggles, poorer health outcomes, as well as shorter life expectancies.

### Racism in medicine

With the [WMA Declaration of Geneva](#), the Physician's Pledge, the physician vows to respect the dignity of all patients, to respect teachers, colleagues, and students, and to “not permit considerations of age, disease or disability, creed, ethnic origin, gender, nationality, political affiliation, race, sexual orientation, social standing or any other factor to intervene between [the physician's] duty and [the] patient.”

Nonetheless, racism in all its forms also exists in medicine throughout the world and has a direct impact on patients and their health. Systemic racial disparities in access to care and health resources at a global and local scale can translate to disparities in health outcomes.

At the interpersonal level, prejudice and stereotypes held and acted upon by medical professionals can lead them to be reluctant to see patients or dismissive of symptoms from patients from marginalized communities, which can result in suboptimal communication, as well as inappropriate or delayed treatment. Racism can hinder or undermine the foundation of trust that is essential to a successful patient-physician relationship.

Physicians from marginalized communities also face racism from patients, other physicians, and health professionals. This can take the form of bullying, harassment, and

professional undermining in the workplace. These distressing experiences may not only impact the physician's health and well-being, but consequently the physician's performance. They may also leave marginalized physicians less confident to raise concerns about patient safety for fear of being blamed or suffering adverse consequences. Large and growing racial disparities in adequate professional treatment and advancement opportunities can have an impact on physicians' career trajectories.

Furthermore, systemic racism can create barriers to entry to the medical profession for certain historically excluded groups, leading to a lack of representation, which may contribute to adverse health outcomes for patients. These barriers are caused by a variety of factors, including implicit and explicit bias in admissions and hiring practices, a dearth in inclusive professional environments, and lifelong racial disparities in educational funding.

A medical profession that is representative of the population is crucial to addressing health disparities among patients.

### Racism in medical education

In medical education, implicit and explicit bias not only impact the admissions process, but also the curriculum, faculty development, and how marginalized students are treated and assessed. Non-inclusive and harmful learning environments can leave minoritized students with an increased risk of anxiety and depression. In addition, learning materials and curricula often do not reflect a diversity of experiences, imagery, and disease presentations and fail to address the issue of racism in medicine head-on.

### Racism in medical research / medical journals

Structural racism also influences participation and therefore inclusivity in medical research. Historical examples of unethical



experimentation or research in the absence of informed consent on marginalized communities have led to a high level of mistrust of the medical establishment. On the other hand, exclusion of marginalized groups from clinical trials results in a lack of data about how certain drugs, treatments, or health conditions might impact individuals in those groups. A lack of racial data transparency can lead to a lack of understanding about how racial disparities lead to health inequities. It can also jeopardize the potential of artificial intelligence to reveal and override biases in medicine. Algorithms are only as inclusive as the health and technology professionals who create them.

Furthermore, medical journals – the gatekeepers of evidence-based research – have generally been remiss in addressing the issue of racism and its impact on health inequities, as well as in addressing underrepresentation among journal decision makers and authors.

## DECLARATION

Therefore, the World Medical Association

- condemns unequivocally racism in all its forms and wherever and whenever it occurs;
- declares racism to be a public health threat;
- acknowledges that racism is structural and deeply engrained in health care;
- asserts that racism is based on a social construct with no basis in biological reality and that any effort to claim superiority by exploiting racist assumptions is unethical, unjust, and harmful;
- recognizes that the experience of racism is a social determinant of health

and responsible for persistent health inequities;

- commits to actively promote equity and diversity in medicine and to strive for an inclusive and equitable health environment.

## RECOMMENDATIONS

The WMA urges its members and all physicians to:

1. enact the above-mentioned declaration in their own organizations;
2. acknowledge the harmful impact of racism on the health and well-being of marginalized communities and act upon it;
3. promote equitable access to health and other societal resources locally, nationally and on a global scale;
4. commit to actively work to dismantle racist policies and practices in health care and advocate for antiracist policies and practices that support equity in health care and social justice;
5. implement organizational and institutional changes to foster diversity in the medical profession and the organizations that support it;
6. support and, where possible, implement admissions and curriculum changes in medical education that promote inclusivity and raise awareness about the harmful impact of racism on health;
7. promote just and safe learning environments in medical education;
8. promote equitable access to quality medical and public health education;
9. center the experiences of physicians from underrepresented communities to ensure the visibility of role models and foster a feeling of inclusivity and empowerment among prospective students from historically marginalized communities;
10. ensure safe, supportive, and respectful work environments for all physicians, including those from historically marginalized communities;
11. establish channels for physicians and students of medicine to safely report cases of racially motivated harassment or bias;
12. enact disciplinary measures against perpetrators of racial harassment or bias in the medical profession and implement measures to prevent such harassment and discrimination, to protect those who suffer from it and to eliminate it from the medical field;
13. take measures to identify research gaps and promote evidence-based research on the health impact of racism;
14. encourage medical journals to amplify the voices of medical researchers and health experts from underrepresented and historically excluded communities;
15. make all efforts to promote representation in ethically conducted clinical trials in accordance with the [WMA Declaration of Helsinki](#) as a means of advancing health equity;
16. promote further research on the impact of racism in the health system.

## WMA DECLARATION OF EDINBURGH ON PRISON CONDITIONS AND THE SPREAD OF COMMUNICABLE DISEASES

**Adopted by the 52nd WMA General Assembly, Edinburgh, Scotland, October 2000**

**Revised by the 62nd WMA General Assembly, Montevideo, Uruguay, October 2011 and by the 73rd WMA General Assembly, Berlin, Germany, October 2022**

### PREAMBLE

The WMA Declaration of Lisbon on the Rights of the Patient states 'Every person is entitled without discrimination to appropriate medical care'.

The Constitution of the World Health Organization states that "The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition".

Persons deprived of liberty ("prisoners") should receive the same standard of health care as people outside prisons. They have the same rights as all other people. This includes the right to humane treatment and appropriate medical care. The standards for the treatment of prisoners have been set down in a number of United Nations Declarations and Guidelines, in particular the Standard Minimum Rules for the Treatment of Prisoners – known as the Nelson Mandela Rules in its 2015 revised version, they are supplemented by the UN Bangkok Rules on women.

The term "persons deprived of liberty" refers to all regardless of the reason for their detention as well as of their legal status, from pre-trial detainees to sentenced persons.

It is the responsibility of the states to guarantee the right to life and health of persons deprived of liberty. This implies caring for them with the aim that prison does not become a determining factor of communicable disease.

The relationship between physician and persons deprived of liberty is governed by the same ethical principles as that between the physician and any other patient. However, the particular prison setting can lead to tensions within the patient/physician relationship as a result of the physician potentially being subject to pressure from authorities and seeming to be hierarchically subordinate to his/her employer, the prison service, and of the general attitude of society towards persons deprived of liberty.

Beyond the States responsibilities to treat all persons deprived of liberty with respect for their inherent dignity and value as human beings, there are strong public health reasons for ensuring the adequate implementation of the Nelson Mandela Rules. The high incidence of tuberculosis and other communicable diseases amongst prisoners in a number of countries reinforces the urgent need to consider public health as a critical element when designing new prison regimens, and for reforming existing penal and prison systems.

Individuals facing imprisonment are often from the most vulnerable sections of society. They may have had limited access to health care before imprisonment, may suffer worse health conditions than many other citizens and as a result may have a high risk of entering prison with undiagnosed, undetected and untreated health problems.

Overcrowding, lengthy confinement within tightly enclosed, poorly lit, badly heated and consequently poorly ventilated and often humid spaces are all conditions frequently associated with imprisonment and all of which contribute to the spread of communicable disease and ill-health. Where these factors are combined with poor hygiene, inadequate nutrition and limited access to adequate health care, prisons can represent a major public health challenge.

Keeping persons deprived of liberty in conditions that expose them to substantial

medical risk, poses a serious humanitarian challenge. The most effective and efficient way to reduce disease transmission is to improve the prison environment.

It is the responsibility of states to dedicate sufficient resources to ensure adequate prison conditions, that prison health care is appropriate in relation to the size and needs of the prison population, and to define and implement sustainable health strategies to prevent communicable diseases transmission. The organization of health care in prison requires a suitable team of health personnel capable of detecting and treating communicable diseases as part of its essential mission to provide care and treatment to their patients in detention.

The increase in active tuberculosis in prison populations and the development of resistant, especially "multi-drug" and "extensively-drug" resistant forms of TB, as recognised by the World Medical Association in its Resolution on Tuberculosis, is reaching very high prevalence and incidence rates in prisons in some parts of the world. Likewise, the Covid-19 pandemic has severely impacted prisons with outbreaks reported around the world. Other conditions, such as hepatitis C and HIV disease, pose transmission risks from blood-borne spread, exchange of body fluids. Overcrowded prison conditions also promote the spread of sexually transmitted diseases, while intravenous drug use contributes to the spread of HIV as well as hepatitis B and C.

### RECOMMENDATIONS

Recalling its [Declaration of Lisbon on the Rights of the Patient](#), the World Medical Association calls on all relevant actors to take the necessary measures to guarantee the highest attainable standard of health for persons deprived of liberty, in particular:

*Governments, prison and health authorities*

1. To protect the rights of persons deprived of liberty according to the various United Nations instruments relating to conditions of imprisonment, in particular the [Nelson Mandela Rules](#) for the Treatment of Prisoners.
2. To allocate the necessary resources to health care in prisons, proportionate to the number and needs of the persons deprived of liberty and including adequate funding for health personnel and appropriate level of staffing of such personnel.
3. To define and implement robust health strategies that ensure a safe and healthy prison environment, through vaccination, hygiene, surveillance and other measures to prevent transmission of communicable diseases.
4. To guarantee that persons deprived of liberty with an infectious illness are treated with dignity and that their rights to health care are respected, in particular that they are not isolated, or placed in solitary confinement, as a response to their infected status, without adequate access to health care and the appropriate medical treatment.
5. To ensure that the conditions of detention, at any stage from arrest to sentencing or once sentenced, do not contribute to the development, worsening or transmission of diseases.
6. To ensure that diagnosis and treatment of non-communicable chronic disease and acute non-communicable illness and/or injury is reasonably and adequately treated so as to not cause undue burden on health personnel or increase risk of communicable disease spread due to prisoners with decompensated illness or injury.
7. To ensure the appropriate planning for and provision of continuing care as essential elements of prison health care, coordination of health services within and outside prisons facilitates, including continuity of care and epidemiological monitoring of prisoner patients when they are released.
8. To ensure that, upon admission to or transfer to a different prison, individuals' health status is reviewed within 24 hours of arrival to ensure continuity of care.
9. To avoid disruption of care within the institution, particularly when the prisoner is receiving opiate substitution treatment by continuing the prescribed treatment.
10. Imprisonment is unacceptable in cases where infection or the risk of transmission is the cause of deprivation of liberty. Imprisonment is not an effective way to prevent the transmission of infectious diseases, and further, it is a cause of concealment of the diagnosis due to fear, leading to greater aggregate dissemination.
11. To respect autonomy and responsibilities of physicians working in prisons who must observe principles of medical ethics to protect health of persons deprived of liberty.
12. To conduct independent and transparent investigations to prevent denial of health care to inmates in prison.
13. To work with national and local governments, and health and prison authorities to prioritize health and health care, including that for mental health issues, in prisons and to adopt strategies that ensure a safe and healthy prison environment.
14. In accordance with the ethical principles of the medical profession, to encourage physicians to report and document any deficiency in health care provision, leading to ill-treatments of persons deprived of liberty.
15. To support and protect physicians encountering difficulties as a result of their attempts to denounce deficiencies in prison health care provision.
16. To support improving prison conditions and prison systems from a viewpoint of health of persons deprived of liberty.

*WMA constituent members and the medical profession*

*Physicians working in prisons*

17. To report duly to the health authorities and professional organisations of their country any deficiency in health care, including that for mental health issues, provided to the persons deprived of liberty and any situation involving high epidemiological risk.
18. To follow national public health guidelines, where these are ethically appropriate, particularly concerning the mandatory reporting of infectious and communicable diseases.

## WMA DECLARATION OF VENICE ON END OF LIFE MEDICAL CARE

Adopted by the 35th World Medical Assembly, Venice, Italy, October 1983

Revised by the 57th WMA General Assembly, Pilanesberg, South Africa, October 2006 and by the 73rd WMA General Assembly, Berlin, Germany, October 2022

### PREAMBLE

When a patient is seriously ill and the restoration of health may not be possible, the physician and the patient are often faced with a complex set of decisions regarding medical treatment.

The end of life must be recognized and respected as an important part of a person's life.

Advances in medical science have improved the ability of physicians to address many issues associated with end-of-life care. While the priority of research to cure disease should not be compromised, more attention must be paid to developing palliative treatments and improving assessment and response to the physical, psychological, social and spiritual or existential components of terminal illnesses and other conditions at the end of life.

WMA remains firmly opposed to euthanasia and physician-assisted suicide, as set forth in the WMA Declaration on Euthanasia and Physician-Assisted Suicide.

Ethically-appropriate care at the end of life should routinely promote patient autonomy and shared decision-making, and be respectful of the values of the patient, his or her family or intimate associates, and surrogate(s). The WMA recognizes that attitudes and beliefs toward death and dying vary widely from culture to culture and among different religions, and palliative care resources are unevenly distributed. The approach to medical care at the end of life will be influenced significantly by these factors, and thus attempting to develop detailed universal guidelines on terminal care is neither practical

nor wise. Therefore, the WMA articulates the following:

### RECOMMENDATIONS

#### *Pain and Symptom Management*

1. Palliative care at the end of life is part of good medical care. The objective of palliative care is to maintain patient dignity and freedom from distressing symptoms. Care plans should emphasize keeping a patient as comfortable as possible and the patient's pain controlled while recognizing the importance of attention to the social, psychological and spiritual needs of the patient, and his or her family and intimate associates.
2. The clinical management of pain in patients at the end of life is of paramount importance in terms of alleviating suffering. The WMA Resolution on Access to Adequate Pain Treatment (2020) makes recommendations for physicians and governments that optimize treatment of pain and other distressing symptoms. Physicians and National Medical Associations should promote the dissemination and sharing of information regarding pain management to ensure that all physicians involved in end-of-life care have access to best practice guidelines and the most current treatments and methods available. National Medical Associations should oppose laws or regulations that unduly inhibit physicians from providing intensive, clinically appropriate symptoms management for patients at the end of life in keeping with recognized best practices.
3. When a patient at the end of life experiences severe pain or other distressing clinical symptoms that do not respond to intensive, symptom-specific palliation, it can be appropriate to offer sedation to unconsciousness as an intervention of last resort. Sedation

to unconsciousness must never be used to intentionally cause a patient's death and should be restricted to patients in the final stages of life. Thorough efforts should be made to obtain consent of the patient or the patient's surrogate(s).

4. Palliative care is often provided by multidisciplinary healthcare teams. When possible, the physician should be the leader of the team, being responsible, amongst other obligations, for diagnosis and medical treatment plans. A carefully kept medical record is of the utmost importance. The rationale for all symptom management interventions, including medications for symptom relief, should be documented in the medical record, including the degree and length of sedation and specific expectations for continuing, withdrawing, or withholding future life-sustaining treatments.
5. The health care team should promote collaborative care of the patient and offer bereavement support after the patient's death. The needs of children and families or intimate associates may require special attention and competence, both when children are patients and when they are dependents of patients.

#### *Education and Research*

6. Education of healthcare professionals should include the teaching of end-of-life medical care. Where it does not exist, the establishment of palliative medicine as a medical specialty should be considered. In countries where palliative medicine is not a recognized specialty, post-graduate training in palliative medicine can nevertheless improve the quality of palliative care provided.
7. Physician education should help to develop the skills necessary to increase the prevalence and quality of meaningful patient advance care planning for patients with life-threatening illness and the



right of patients to use written advance directives that describe their wishes and goals regarding care in the event that they are unable to communicate. Physicians should receive education to encourage their patients to formally document their goals, values and treatment preferences and to appoint a substitute health care decision maker with whom the patient can discuss in advance his or her values regarding health care and treatment.

8. Governments and research institutions are encouraged to invest additional resources in developing treatments to improve end-of-life care. This includes, but is not limited to, supporting research on general medical care, specific treatments, psychological implications and organization to improve end-of-life care.
9. When employing treatments, the physician must carefully consider the balance between the intended benefits to the patient and the potential harm. National Medical Associations should support the formulation of palliative treatment guidelines.
10. The physician must also communicate to the patient a willingness to discuss at any time the natural course of the disease and what to expect during the dying process, while also providing guidance about treatments and alternatives that could ease the patient's suffering, including palliative care or psychotherapy. If a patient indicates a desire to die or expresses suicidal thoughts, the physician has a duty to engage in open and confidential discussions with the patient to understand the motives and reasoning

behind these thoughts.

11. Physicians should assist the dying patient in maintaining an optimal quality of life by controlling symptoms and addressing psychosocial and spiritual needs, to enable the patient to die with dignity and in comfort. Physicians should inform patients of the availability, benefits and other aspects of palliative care. Discussions about patient preferences should be initiated early, routinely offered to all patients and should be revisited regularly to explore any changes patients may have in their wishes, especially as their clinical condition changes. Information and communication among the patient, his or her family or intimate associates, surrogates and members of the health care team are one of the fundamental pillars of quality care at the end of life.
12. Physicians should endeavor to identify, understand and address the psychosocial and spiritual needs of their patients, especially as they relate to patients' physical symptoms. Physicians should try to ensure that psychological, social and spiritual resources are available to patients, their families and intimate associates, to help them deal with the anxiety, fear and grief associated with the end of life.
13. Physicians should encourage patients to designate a substitute decision-maker/surrogate to make decisions that are not expressed in an advance directive. In particular, physicians should discuss the patient's wishes regarding the approach to life-sustaining interventions as well as palliative measures that might have the

additional effect of accelerating death. Because documented advance directives are sometimes not available in emergency situations, physicians should emphasize to patients the importance of discussing treatment preferences with individuals who are likely to act as substitute health care decision-makers/surrogates. Whenever possible and consented to by the patient, the patient's substitute decision-makers/surrogates should be included in these conversations.

14. If a patient has decision-making capacity, his or her autonomous right to refuse any medical treatments or interventions must be respected even if the patient's life may be shortened. Physicians should make sure that the patient is adequately treated for pain and discomfort before consent for end-of-life care is obtained in order to ensure that unnecessary physical and mental suffering do not interfere with decision making. Laws regarding the decision-making capacity of minor patients vary greatly, but discussions with the family, and child, if possible, are encouraged.
15. Upon a patient's death, physicians may apply such means as are necessary to keep organs viable for transplantation, provided that they act in accordance with the ethical guidelines established in the WMA Declaration of Sydney on the Determination of Death and the Recovery of Organs. In addition, any transplantation must be in accordance with the principles in the WMA Statement on Organ and Tissue Donation.

## WMA DECLARATION ON DISCRIMINATION AGAINST ELDERLY INDIVIDUALS WITHIN HEALTHCARE SETTINGS

Adopted by the 73rd WMA General Assembly, Berlin, Germany, October 2022

### PREAMBLE

The ageing of the population due to increased life expectancy is one of the main challenges of many health systems given the increasing amount of resources needed to provide healthcare for the elderly population. This puts a strain on these systems, since ageing often causes a higher demand for care, with a high dependence on medical, pharmaceutical and hospital services. On the other hand, older people are perceived as recipients of help, care and financial support, which is inaccurate, as they make significant contributions to the well-being of their environment, which has a high social value.

The increase in longevity must be accompanied by appropriate quality-of-care standards, promoting health, reducing risk factors, and providing accessible and sustainable quality health and social services that are accessible, affordable, sustainable and which are of quality.

Biological age should never be used as a basis for discrimination, although it can be a relevant factor in medical decision-making. Reference to age can therefore be professionally sound.

#### *Health discrimination in elderly patients*

Elderly individuals experience all kinds of discrimination with one of the main types of discrimination being related to health. The elderly may be perceived as a burden on the healthcare systems and their financial sustainability. Elderly individuals are not uniquely responsible for the increase in healthcare costs in developed countries. There are other factors that play a key role in healthcare costs, such as the improvement in standards of living, accessibility to health services, quality of care and the use of new

technologies.

Rationing of certain costly and time-consuming diagnostic or therapeutic procedures or particular settings that have a certain more expensive intensity of care is more common in the elderly population. Clinical trials often exclude patients of a certain age, even if they meet the criteria for enrolment.

Age has become a barrier when putting patients forward for certain interventions. The reasons tend to be physical; however, these may be underpinned by economic motivations, such as the recovery time being higher which increases the length of hospital stay, or by arguing that there are scarce resources and that elderly people have a shorter life expectancy.

There is consensus that from a physiological and psychological point of view, the determining factors for health in ageing patients are intrinsically linked to gender; therefore, the solutions need to address the differences between genders in order to reduce inequalities.

Health discrimination experienced by elderly individuals may have a negative impact on their physical, mental and social well-being and contributes to deterioration in their quality of life, loss of autonomy, confidence, safety and an active lifestyle, in turn, decreasing their levels of health. Is therefore a complex topic that requires the involvement of professionals, institutions, healthcare systems and authorities. Dealing with such discrimination requires awareness and coordination aided by moral and legal principles.

#### *The need for a holistic approach*

Healthcare systems do not always adapt to the changing population needs, as may occur with some hospitals, designed to care for adult patients with acute illnesses yet not elderly

patients with chronic illnesses.

An increase in longevity must be accompanied by the highest quality-of-care standards, and should promote health, reduce risk factors, and provide accessible, sustainable and quality health and social services. Emphasis should be on patient-focused medicine that heals, cares for, alleviates and comforts.

#### *The ethical duty of physicians*

In line with the WMA Declaration of Geneva, physicians must strive to improve the health, well-being and quality of life for all patients without any forms of discrimination towards the elderly.

### RECOMMENDATIONS

Recalling its Declarations of [Geneva](#) and of [Lisbon](#) on the Rights of the Patient, and its [Statement on Ageing](#), the WMA makes the following recommendations:

#### *To governments, medical associations and physicians*

1. As priority actions, to defend the human rights and health of all individuals, including the elderly, as well as to ensure that their dignity is respected;

#### *To governments*

2. Develop appropriate and non-discriminatory healthcare policies for the elderly based on the efficient use of available healthcare resources;
3. To establish measures to eradicate discrimination against elderly individuals in healthcare;
4. Provide sufficient resources which ensure adequate healthcare for elderly individuals;

*To the WMA, its members and the medical profession in general*

5. To commit to eliminating all forms of discrimination due to health and age;
6. Promote training for primary care physicians on how to approach health problems in elderly individuals;
7. Promote development of the geriatric specialty or supplementary post-graduate training and increase of the number of physicians in this field, an increase of the number of physicians in this speciality and an adequate number of geriatric departments in hospitals

and consultants, in order to ensure the availability of comprehensive care for elderly individuals;

8. Raise awareness and take action against discrimination of elderly individuals;
9. Promote ethical, responsible, effective and efficient practices for treating the elderly;
10. To set ethical standards that aim to prevent discrimination against any individual due to age;
11. To actively try to include elderly patients in medical scientific research;

*To physicians*

12. Not limit or impede patients' autonomy on the basis of their age;
13. Provide healthcare of scientific and human quality according to good medical practice to all patients, without any discrimination;
14. Not apply limitations solely based on age in protocols for diagnosis and treatment;
15. To report any discrimination against the elderly that is observed in healthcare.

## WMA DECLARATION ON PATIENT SAFETY

**Adopted by the 53rd WMA General Assembly, Washington, DC, USA, October 2002, reaffirmed by the 191st WMA Council Session, Prague, Czech Republic, April 2012, and revised by the 73rd WMA General Assembly, Berlin, Germany, October 2022**

### PREAMBLE

Physicians strive to provide safe, high-quality health and medical care to patients.

Progress in medical and allied science and technology has transformed how modern medicine is delivered in advanced and complex health systems.

Inherent risks always exist in clinical medicine. Developments in modern medicine often reduce risk but may also introduce new or increased risks – some avoidable, others inherent.

Physicians and healthcare organisations should attempt to foresee these risks and manage them to the best of their ability.

Many health services continue to struggle with demand exceeding capacity, often with an inadequate infrastructure due to underinvestment by governments or other providers of healthcare. Patient safety is at risk where physicians work in systems under pressure.

Patient safety is affected by the working culture that physicians operate within. In many healthcare systems there is often a culture of blame, where individuals are targeted rather than examining wider organisational causes of error (such as resource constraints, workforce shortages, or systemic failures).

Many physicians fear being unfairly blamed for medical errors which may have been caused or exacerbated by systemic factors, and often feel unable to be open or raise concerns.

A workplace culture of learning assures and improves patient safety. Embedding a just and

learning culture approach can be an antidote to cultures of blame and fear.

In a just and learning culture, the initial focus is on what went wrong when patient safety incidents took place, rather than seeking to determine who may individually be responsible.

Medical regulation and a fear of litigation can compromise physicians' ability to be open about medical error. A system where physicians feel unable to speak up, due to fear of personal recrimination, will compromise the identification of systemic causes of error or poor care and impede measures to improve patient safety.

Working in a system under pressure that has a culture of fear and blame can erode physician wellbeing. Physicians' performance in stressful working environments may be impaired, potentially leading to error or poor patient outcomes.

Improving physician wellbeing significantly improves productivity, care quality, patient safety and the sustainability of health services.

Positive cultures within workplaces are vital to minimize medical error, improve physician wellbeing and assure patient safety.

### PRINCIPLES

1. Physicians must ensure that patient safety is always considered during their medical decision-making.
2. Individuals and processes are rarely solely responsible for errors. Rather, separate elements combine and together produce a high-risk situation. Therefore, there should be a non-punitive culture for confidential reporting healthcare errors that focuses on preventing and correcting systems failures and not on individual or organization culpability.
3. A realistic understanding of the risks

inherent in modern medicine requires physicians to cooperate with all relevant parties, including patients, to adopt a proactive systems approach to patient safety.

4. To create such an approach, physicians must continuously absorb a wide range of advanced scientific knowledge and continuously strive to improve medical practice.
5. All information that concerns a patient's safety must be shared with the patient and all relevant parties. However, patient confidentiality must be strictly protected.
6. When medical error or a patient safety incident occurs, investigations should always begin by fully reviewing the wider environment that the physician operates within to identify systemic factors and pressures that may have contributed to the error.
7. Where medical error is found to have been caused fully or partly by systemic factors, any judgement by the regulator(s) should also hold the healthcare providing organisation to account.
8. Regulators of healthcare providing organisations must promote and ensure positive, just, and learning workplace cultures, where physicians and patients feel supported and empowered to learn when adverse events occur.
9. Regulators have a responsibility to identify systemic and contextual constraints that impact on patient safety, including a lack of resources and infrastructure.

### RECOMMENDATIONS

Recognizing the importance of system pressures, workplace culture, physician wellbeing, and healthcare regulation on patient safety, the WMA recommends that its



Constituent members:

1. promote policies on patient safety to all physicians in their countries;
2. encourage individual physicians, other health care professionals, patients and other relevant individuals and organizations to work together to establish systems that secure patient safety;
3. encourage the development of effective models to promote patient safety through continuing medical education/ continuing professional development;
4. cooperate with one another and exchange information about adverse events, including errors, their solutions, and “lessons learned” to improve patient safety;
5. demand that the investigation of medical error and patient safety incidents always consider wider contextual and systemic factors or pressures;
6. demand that healthcare providing organisations foster a culture of learning, support and improvement that facilitates patient safety;
7. work to ensure that the regulation of the medical profession encourages and supports patient safety;
8. support regulation that works to prevent medical error, promoting good practice and learning among individuals and organisations providing healthcare;
9. work to ensure healthcare environments have the necessary resources, infrastructure, and workforce to support patient safety.

## WMA STATEMENT ON ASSISTED REPRODUCTIVE TECHNOLOGIES

Adopted by the 57th WMA General Assembly, Pilanesberg, South Africa, October 2006, and revised by the 73rd WMA General Assembly, Berlin, Germany, October 2022

### PREAMBLE

Assisted Reproductive Technology [ART] encompasses a wide range of techniques designed primarily to aid individuals unable to conceive without medical assistance.

ART is defined as any fertility treatments in which either gametes or embryos are handled.

Assisted reproductive technologies may raise profound ethical and legal issues. Views and beliefs on assisted reproductive technologies vary both within and among countries and are subject to different regulations in different countries.

Central to much of the debate in this area are issues around the moral status of the embryo, the way in which ART is viewed morally, societally and religiously, the child/ren born from ART, and the rights of all participants involved, i.e. donors, surrogates, the child/ren and the intended parents are just some of the issues central to the debate in ART. Whilst consensus can be reached on some issues, there remain fundamental differences of opinion that are more difficult to resolve.

Assisted conception differs from the treatment of illness in that the inability to become a parent without medical intervention is not always regarded as an illness. Notwithstanding, the inability to conceive may also be as a result of prior illness.

In many jurisdictions, the process of obtaining consent must follow a process of information giving and the offer of counselling and might also include a formal assessment of the patient in terms of the welfare of the potential child.

Faced with the progress of new technologies of assisted reproduction, physicians should

keep in mind that not everything that is technically feasible is ethically acceptable. Genetic manipulation that does not have a therapeutic purpose is not ethical, nor is the manipulation on the embryo or foetus without a clear and beneficial diagnostic or therapeutic purpose.

### RECOMMENDATIONS

1. Physicians involved in providing assisted reproductive technologies should always consider their ethical responsibilities towards all parties involved in a reproductive plan, which may include the future child/ren, donor, surrogate or parents. If there is compelling evidence that a future child, donor, surrogate or parent would be exposed to serious harm, treatment should not be provided.

2. As with all other medical procedures, physicians have an ethical obligation to limit their practice to areas in which they have relevant expertise, skill, and experience and to respect the autonomy and rights of patients.

3. In practice this means that informed consent is required as with other medical procedures; the validity of such consent is dependent upon the adequacy of the information offered to the patient and their freedom to make a decision, including freedom from coercion or other pressures or influences to decide in a particular way.

4. The consent process should include providing the participant/s with understandable, accurate and adequate information about the following:

- the purpose, nature, procedure, and benefits of the assisted reproductive technology that will be used.
- the risks, burdens and limitations of the assisted reproductive technology that will be used.

- the success rates of the treatment and possible alternatives, such as adoption.

- the availability of psychological support for the duration of the treatment and, in particular, if a treatment is unsuccessful.

- the measures protecting confidentiality, privacy and autonomy, including data security measures.

5. The following should be discussed during the informed consent process:

- detailed medical risks;
- whether or not all biological samples involved in ART, including but not limited to donor eggs, sperm, gametes and genetic information, may be used for research purposes;

- the risks of multiple donations and donating at multiple clinics;

- confidentiality and privacy issues;

- compensation issues.

6. Donors, surrogates and any resulting child/ren seeking assisted reproductive technologies are entitled to the same level of confidentiality and privacy as for any other medical treatment.

7. Assisted reproductive technology involves handling and manipulation of human gametes and embryos. There are different levels of concern with the handling of such material, yet there is general agreement that such material should be subject to specific safeguards to protect from inappropriate, unethical, or illegal use.

8. Physicians should uphold the principles in the [WMA Statement on Stem Cell Research](#), [WMA Statement on Human Genome Editing](#), the [WMA Declaration of Helsinki](#), and the [WMA](#)

## Declaration of Reykjavik – Ethical Considerations Regarding the Use of Genetics in Health Care.

9. Physicians should, where appropriate, provide ART in a non-discriminatory manner. Physicians should not withhold services based on nonclinical considerations such as marital status.

### *Multiple pregnancies*

10. Replacement of more than one embryo will raise the likelihood of more than one embryo implanting. This is offset by the increased risk of premature labour and other complications in multiple pregnancies, which can endanger the health of both the mother and child/ren. Practitioners should follow professional guidance on the maximum number of embryos to be transferred per treatment cycle.
11. If multiple pregnancies occur, selective termination or fetus reduction will only be considered on medical grounds and with the consent of all participants involved to increase the chances of the pregnancy proceeding to term, provided this is compatible with applicable laws and codes of ethics.

### *Donation*

12. Donation should follow counselling and be carefully controlled to avoid abuses, including coercion or undue influence of potential donors. Explicit instructions should be provided about what will be done with any donated samples if the donor is known to have died prior to implantation.
13. The WMA holds the view that gamete donation should at best not be commodified, thus serving a humanitarian benefit.
14. To ensure appropriate controls and limits on methods used to encourage donations, this must be done in a manner that

complies with national law and ethical guidance. Physicians should advocate for and contribute to such ethical guidance if it does not exist.

15. Due to the widespread use of genetic technology and registries, it has become possible to identify donors, despite clinics and donors' attempts to maintain strict confidentiality. A child/ren born as a result of donation may in future contact donors. Potential donors must be made aware of this possibility as part of the consent process.
16. Where a child is born following donation, families should be encouraged and supported to be open with the child about this, irrespective of whether or not domestic law entitles the child to information about the donor. This may require the development of supportive materials, which should be produced to a national normative standard.

### *Surrogacy*

17. Where a woman is unable, for medical reasons, to carry a child to term, surrogate pregnancy may be used to overcome childlessness unless prohibited by national law or the ethical rules of the National Medical Association or other relevant organizations. Where surrogacy is legally practiced, great care must be taken to protect the interests of all parties involved.
18. Prospective parents and surrogates should receive independent and appropriate legal counsel.
19. Medical tourism for surrogacy purposes should be discouraged.
20. Commercial surrogacy should be condemned. However, this must not preclude compensating the surrogate mother for necessary expenses.
21. The rights of surrogate mothers must be upheld, and great care must be taken to

ensure that they are not exploited. The rights of surrogate mothers include, but are not limited to:

- having her autonomy respected;
- where appropriate, having health insurance;
- being informed about any medical procedure and the potential side effects;
- where possible, choosing her medical team if side effects develop;
- having psychological help at any point during the pregnancy;
- having medical expenses such as doctor visits, the actual birthing process, fertilization and any examinations related to the surrogacy covered by the intended parent/s;
- loss if income covered if unable to work during the pregnancy;
- receiving the compensation and/or reimbursements agreed to in any legal agreement

### *Pre-implantation Genetic Diagnosis (PGD)*

22. Pre-implantation genetic diagnosis (PGD) and pre-implantation genetic screening (PGS) may be performed on early embryos to search for the presence of genetic or chromosomal abnormalities, especially those associated with severe illness and very premature death, and for other ethically acceptable reasons, including identifying those embryos most likely to implant successfully in women who have had multiple spontaneous abortions.
23. It is recommended to encourage screening for infectious diseases in sperm donors and to determine whether to inform donors of positive tests.
24. Physicians must never be involved

with sex selection unless it is used to avoid a serious sex-chromosome related condition, such as Duchenne's Muscular Dystrophy.

## *Research*

25. Physicians have an ethical duty to comply with such regulation and to help inform public debate and understanding of these issues.
26. Research on human gametes and embryos should be carefully controlled and monitored and in accordance with all applicable national laws and ethical guidelines.
27. Views and legislation differ on whether embryos may be created specifically for, or in the course of, research. Physicians should act in accordance with the declarations of Taipei and Helsinki, as well as all applicable local laws and ethical and professional standards advice.
28. The principles of the [Convention on Human Rights and Biomedicine](#) should be followed.



## WMA STATEMENT ON DIGITAL HEALTH

Adopted by the 60th WMA General Assembly, New Delhi, India, October 2009 and revised by the 73rd WMA General Assembly, Berlin, Germany, October 2022

### PREAMBLE

1. Digital health is a broad term that refers to “the use of information and communication technologies in medicine and other health professions to manage illnesses and health risks and to promote wellness.” Digital health encompasses electronic health (eHealth) and developing areas such as the use of advanced computer sciences (including ‘big data’, bioinformatics and artificial intelligence). The term also includes telehealth, telemedicine, and mobile health (mHealth).
2. The term “digital health” may be used interchangeably with “eHealth.” These terms also include within them: “Telehealth” or “Telemedicine,” which both utilize information and communications technology to deliver healthcare services and information at a distance (large or small). They are used for remote clinical services, including real-time patient monitoring such as in critical care settings. Also, they serve for patient-physician consultation where access is limited due to physicians’/ patients’ schedules or preferences, or patient limitations such as physical disability. Alternatively, they can be used for consultation between two or more physicians. The difference between the two terms is that “Telehealth” refers also to remote clinical and non-clinical services: preventive health support, research, training, and continuing medical education for health professionals.
3. Technological developments and the increasing availability and affordability of mobile devices have led to an exponential increase in the number and variety of digital health services in use in both

developed and developing countries. Simultaneously, this relatively new and rapidly evolving sector remains largely unregulated, which could have potential patient safety and ethical

4. The driving force behind digital health should be improving quality of care, patient safety and equity of access to services otherwise unavailable.
5. Digital health differs from conventional health care in the medium used, its accessibility, and its effect on the patient-physician relationship, as well as on the traditional principles of patient care.
6. The development and application of digital health has expanded access to health care and health education in both regular and emergency situations. At the same time, its effect on the patient-physician relationship, accountability, patient safety, multistakeholder interactions, privacy and data confidentiality, fair access, and other social and ethical principles should be taken into consideration. However, the scope and application of digital health, telemedicine or telehealth are context-dependent. Factors such as human resources for health, size of service area and level of healthcare facilities should also be taken into consideration.
7. Physicians should be involved in the development and implementation of digital health solutions to be used in health care, in order to ensure they meet the needs of patients and health professionals.
8. Consistent with the mandate of the WMA, this statement is addressed primarily to physicians and their role in the health care setting. The WMA encourages others who are involved in healthcare to develop and adhere to similar principles, as appropriate to their role in the healthcare system.

### *Physician autonomy*

9. Acceptable boundaries in the patient-physician relationship necessary for the provision of optimal care, should exist in digital as well as physical practice. The nearly continuous availability of digital health care has the potential to unduly interfere with a physician’s work-life balance due to theoretical 24/7 availability. The physician should inform patients about his or her availability and recommend services when he or she is not available.
10. Physicians should exercise their professional autonomy in deciding whether digital health consultation is appropriate. This autonomy should consider the type of visit scheduled, the physician’s comfort with the medium, and the physician’s assessment, together with the patient, of the patient’s comfort level with this type of care.

### *Patient-physician relationship*

11. Face to face consultation should be the gold standard where a physical examination is required to establish a diagnosis, or where there is a wish on the part of the physician or patient to communicate in person as part of establishing a trusted physician-patient relationship. Face to face consultations may be preferable in some circumstances to take stock of non-verbal cues, and for consultations where there may be communication barriers or discussion of sensitive matters. Ideally, the patient-physician relationship in the context of digital health, should be based on a previously established relationship and sufficient knowledge of the patient’s medical history.
12. However, in emergency and critical situations, or in settings where access to doctors is not available other than via telemedicine, delivery of care via

telemedicine should be prioritized even when a prior patient-physician relationship was not established. Telemedicine can be employed when a physician cannot be physically present within a safe and acceptable period. It can also be used to manage patients remotely including self-management and for chronic conditions or follow-up after initial treatment, where it has been proven to be safe and effective.

13. The physician providing telemedicine services should be familiar with the technology and/or should receive sufficient resources, training and orientation in effective digital communication. Additionally, the physician should strive to ensure that quality of communication during a digital health encounter is maximized. It is also important that the patient is comfortable using the technology employed. Any significant technical deficiencies should be noted in the documentation of the consultation and reported, if applicable.
14. The patient-physician relationship is based on mutual trust and respect. Therefore, the physician and the patient must identify each other reliably when telemedicine is employed. However, it must be recognized that sometimes third parties or 'surrogates' such as a family member should become involved in the case of minors, the frail, the elderly, or in an emergency situation.
15. The physician should give clear and explicit direction to the patient during the telemedicine encounter regarding who has ongoing responsibility for any required follow-up and ongoing health care.
16. In a digital consultation between two or more professionals, the primary physician remains responsible for the patient's care and coordination. The primary physician remains responsible for protocols, conferencing, and medical record review in all settings and circumstances. Physicians providing consultation

should be able to contact other health professionals and technicians, as well as patients, in a timely manner.

## *Informed consent*

17. Proper informed consent requires that the patient be informed of, have capacity for, and provide consent specific to the type of digital health being used. All necessary information regarding the distinctive features of digital health, in general, and telemedicine, in particular, must be explained fully to patients including, but not limited to: how telemedicine works, how to schedule appointments, privacy concerns, the possibility of technological failure, including confidentiality breaches; possible secondary use of data; protocols for contact during virtual visits, prescribing policies and coordinating care with other health professionals. This information should be provided clearly and understandably without coercion or undue influence of the patient's voluntary choices, while taking into account the patient's perceived level of health literacy and other resource limitations specific to the type of digital health being used.

## *Quality of care*

18. The physician must ensure the standard of care delivered via digital health is at least equivalent to any other type of care given to the patient, considering the specific context, location and timing, and relative availability of face to face care. If the standard of care cannot be satisfied via digital technology, the physician should inform the patient and suggest an alternative form of healthcare delivery.
19. The physician should have clear and transparent protocols for delivering digital health care such as clinical practice guidelines, whenever possible, to guide the delivery of care in the digital setting, recognizing that certain modifications may need to be made to accommodate specific circumstances. Changes to clinical practice guidelines for the digital setting should be approved

by the appropriate governing and/or regulatory body or association. If the digital health solution is equipped with automated clinical practice support, this support must be strictly professionally based and not influenced by economic interests in any way.

20. The physician providing digital services should follow all regulatory requirements and relevant protocols and procedures related to informed consent (verbal, written, and recorded); privacy and confidentiality; documentation; ownership of patient records; and appropriate video/telephone behaviors.
21. The physician providing care by means of telehealth should keep a clear and detailed record of the advice delivered, the information on which the advice was based and the patient's informed consent.
22. The physician should be aware of and respect the particular challenges and uncertainties that may arise when in contact with the patient through telecommunication. The physician must be prepared to recommend direct patient-physician contact whenever possible if he/she believes it is in the patient's best interests or will improve compliance.
23. The possibilities and weaknesses of digital health in emergencies must be duly identified. If it is necessary to use telemedicine in an emergency, the advice and treatment suggestions will be influenced by the severity of the patient's medical condition and the patient's technological and health literacy. To ensure patient safety, entities that deliver telemedicine services should establish protocols for referrals in emergency situations.

## *Clinical Outcomes*

24. Entities providing digital health programs should monitor and continuously strive to improve the quality of services to achieve the best possible outcomes.

25. Entities providing digital health programs should have a systematic protocol for collecting, evaluating, monitoring and reporting meaningful health care outcomes, safety data and clinical effectiveness. Quality indicators should be identified and utilized. Like all health care interventions, digital technology must be tested for its effectiveness, efficiency, safety, feasibility, and cost-effectiveness. Quality assurance and improvement data should be shared to improve its equitable use.

26. Entities implementing digital health are urged to report unintended consequences to help improve patient safety and further the overall development of the field. Countries are encouraged to implement these guiding principles in their own legislation and regulation.

## *Equity of care*

27. Although digital health can provide greater access to distant and underserved populations, it may also exacerbate existing inequalities due to, among other things, age, race, socioeconomic status, cultural factors, or literacy issues. Physicians must be aware that certain digital technologies might be unavailable or unaffordable to patients, impeding access and further widening the health outcomes gaps.

28. Digital technologies should be implemented and monitored carefully to avoid inequity of access to these technologies. Where appropriate, social or healthcare services should facilitate access to technologies as part of basic benefit packages while taking all necessary precautions to guarantee data security and privacy. Access to vital technologies should not be denied to anyone based on financial status or a lack of technical expertise.

## *Confidentiality and data security*

29. In order to ensure data confidentiality, officially recognized data protection

measures must be used. Data obtained during a digital consultation must be secured to avoid unauthorized access and breaches of identifiable patient information through appropriate and up-to-date security and privacy measures. If data breaches do occur, the patient must be notified immediately in accordance with the law.

30. Digital health technologies generally involve the measurement or manual input of medical, physiological, lifestyle, activity, and environmental data to fulfill their primary purpose. The large amount of data generated also may be used for research or other purposes to improve healthcare and disease prevention. However, secondary uses of personal mHealth data can result in misuse and abuse.

31. Robust policies and safeguards to regulate and secure the collection, storage, protection, and processing of digital health users' data, especially personal health data, must be implemented to assure valid informed consent and guarantee patients' rights.

32. If patients believe that their privacy rights have been violated, they may file a complaint with the covered entity's Privacy Officer or data protection authorities, in accordance with local regulations.

## *Legal principles*

33. A clear legal framework must be drawn up to address potential liability arising from the use of digital technologies. Physicians should only practice telemedicine in countries/jurisdictions where they are licensed to practice and should adhere to the legal framework and regulations as defined by the country/jurisdiction where the physician originates care and the countries in which they practice. Physicians should ensure that their medical indemnity includes telemedicine and digital health coverage.

34. Reimbursement models must be set up in consultation with national medical associations and healthcare providers to ensure that physicians receive appropriate reimbursement for providing digital health services.

## *Specific principles of mHealth technology*

35. Mobile health (mHealth) is a form of electronic health (eHealth) for which there is no fixed definition. It has been described as medical and public health practice supported by mobile devices, such as mobile phones, patient monitoring devices, personal digital assistants (PDAs), and other devices intended to be used in connection with mobile devices. It includes voice and short messaging services (SMS), applications (apps), and the use of the global positioning system (GPS).

36. A clear distinction must be made between mHealth technologies used for lifestyle purposes and those that require physicians' medical expertise and meet the definition of medical devices. The latter must be appropriately regulated, and users must be able to verify the source of medical information provided, as these applications could potentially recommend non-scientific or non-evidence-based treatments. The information provided must be comprehensive, clear, reliable, non-technical, and easily understood by laypeople.

37. Concerted work must improve the interoperability, reliability, functionality, and safety of mHealth technologies, e.g., through the development of standards and certification schemes.

38. Comprehensive and independent evaluations must be carried out regularly by competent authorities with appropriate medical expertise to assess the functionality, limitations, data integrity, security, and privacy of mHealth technologies. This information must be made publicly available.



39. mHealth can only positively contribute to improvements in care if services are based on sound medical rationale. As evidence of clinical usefulness is developed, findings should be published in peer-reviewed journals and be reproducible.

RECOMMENDATIONS

- 1. The WMA recognizes the value of digital health to supplement traditional ways of managing health and delivering healthcare. The driving force behind digital health should be improving quality of care and equity of access to services otherwise unavailable.
- 2. The WMA emphasizes that the principles of medical ethics, as outlined in The Declaration of Geneva: The Physician's Pledge and the International Code of Medical Ethics, must be

respected in the practice of all forms of digital health.

- 3. The WMA recommends that the training of digital health literacy and skills be included in medical education and continuing professional development.
- 4. The WMA urges patients and physicians to be discerning in their use of digital health and to be mindful of potential risks and implications.
- 5. The WMA recommends further research in digital health to assess safety, efficacy, cost-effectiveness, feasibility of implementation, and patient outcomes.
- 6. The WMA recommends monitoring the risks of excessive or inappropriate use of digital health technologies and the potential psychological impact on patients and ensuring that the benefits

of such technologies outweigh the risks.

- 7. The WMA recommends special attention be given to patients' disabilities (audio-visual or physical) and patients who are minors, when using digital healthcare.
- 8. Where appropriate, National Medical Associations should encourage the development and update of ethical norms, practice guidelines, national legislation, and international agreements on digital health.
- 9. The WMA recommends that other regulatory bodies, professional societies, organizations, institutions, and private industry, monitor the proper use of digital health technologies and share these findings widely.



## WMA STATEMENT ON HEALTH HAZARDS OF TOBACCO PRODUCTS AND TOBACCO-DERIVED PRODUCTS

Adopted by the 40th World Medical Assembly, Vienna, Austria, September 1988

Revised by the 49th WMA General Assembly, Hamburg, Germany, November 1997, the 58th WMA General Assembly, Copenhagen, Denmark, October 2007, the 62nd WMA General Assembly, Montevideo, Uruguay, October 2011 and the 73rd WMA General Assembly, Berlin, Germany, October 2022

### PREAMBLE

Over 80 percent of the world's 1.3 billion smokers live in low- and middle-income countries. Smoking and other forms of tobacco use adversely affect every organ system in the body, and are major causes of cancer, heart disease, stroke, chronic obstructive pulmonary disease, fetal damage, and many other conditions. Smokers have up to a 50% higher risk of developing severe disease and death from COVID-19. Eight million deaths occur worldwide each year due to tobacco and tobacco-derived products. Tobacco will kill one billion people in the 21st century unless effective interventions are implemented.

Exposure to secondhand smoke occurs anywhere the burning of tobacco products occurs in enclosed spaces. There is no safe exposure level to secondhand smoke, which causes millions of deaths each year. It is especially damaging to children and pregnant patients. On May 29, 2007, the WHO called for a global ban on smoking at work and in enclosed public places to eliminate secondhand smoke and encourage people to quit.

The phenomenon known as "thirdhand smoke" occurs when nicotine and other chemical residues occur on indoor surfaces from smoking, which can persist long after the smoke itself has cleared. It is increasingly recognized as a potential danger, especially to children, who not only inhale fumes released

by these residues but also ingest residues that get on their hands after crawling on floors or touching walls and furniture.

### World Health Organization Action

With the hope of mitigating the effects of tobacco use, the World Health Organization (WHO) Member States unanimously adopted the WHO Framework Convention on Tobacco Control (WHO FCTC) in 2003. In force since 2005, it currently has 182 parties covering more than 90 percent of the world's population. Further strengthening implementation of the milestone treaty is specifically included in the 2030 Agenda for Sustainable Development Goals (SDG) as Target 3.a. The WMA has long supported the WHO FCTC (see [WMA Resolution on Implementation of the WHO Framework Convention on Tobacco Control](#)). The Protocol to Eliminate Illicit Trade in Tobacco Products, the first protocol to the WHO FCTC, was adopted in 2012 in response to the growing international illicit trade in tobacco products. The objective of the Protocol is the elimination of all forms of illicit trade in tobacco products, in accordance with the terms of Article 15 of the WHO FCTC.

### New and Emerging Nicotine Products

The [WMA Statement on Electronic Cigarettes and Other Electronic Nicotine Delivery Systems](#) outlines the still-unknown risks associated with these products. The use of e-cigarettes by young people has risen dramatically, and in some regions is more popular than tobacco smoking. Nicotine exposure, no matter how it is delivered, can affect brain development and lead to addiction.

New and rediscovered forms of tobacco and nicotine ingestion are also emerging, including:

- dissolvable tobacco, from sweet, candy-like lozenges that contain tobacco and

nicotine that are held in the mouth, chewed, or sucked until they dissolve;

- snus, a finely ground form of moist snuff that contains carcinogens and is usually packaged in small pouches;
- hookahs, a water pipe that burns tobacco mixed with flavors such as honey, molasses or fruit, where the smoke is inhaled through a long hose. The WHO reports that one hookah smoking session is the same as smoking 100 cigarettes, largely due to the length of time a user smokes;
- bidis, flavored cigarettes that are unfiltered and deliver up to five times more nicotine than regular cigarettes, and clove cigarettes (also called Kreteks) also deliver more nicotine, carbon monoxide, and tar than regular cigarettes;
- other heated tobacco products that typically use an electronic heating element to heat specially designed sticks, plugs, or capsules containing tobacco. The heat releases nicotine (and other chemicals) that can then be inhaled into the lungs, but the tobacco does not get hot enough to burn. These devices are not the same as e-cigarettes, and
- nicotine pouches, tobacco free pouches of nicotine with different flavors which are placed in the mouth.

### Pregnant Patients and Children

Smoking or using nicotine during pregnancy is linked with a range of poor birth outcomes including low birth weight and preterm birth, restricted head growth, placental problems, increased risk of still birth and increased risk of miscarriage. Breathing secondhand smoke during pregnancy also increases the risk of having a low-birth-weight baby, and babies who are exposed to secondhand smoke have

an increased risk of Sudden Infant Death Syndrome.

Health and developmental consequences among children have also been linked to prenatal smoke exposure, including poorer lung function, (including coughs, colds, bronchitis and pneumonia), persistent wheezing, asthma and visual difficulties such as strabismus, refractive errors and retinopathy. Children who breathe more secondhand smoke have more ear infections, coughs, colds, bronchitis and pneumonia. Children who grow up with parents who smoke are themselves more likely to smoke and to have long term health effects similar to adults who smoke.

## *Health Equity*

Health equity in tobacco prevention and control focuses on the opportunity for all people to live a healthy life, regardless of their race, level of education, gender identity, sexual orientation, occupation, geographic location, or disability status. Tobacco control programs, including evidence-based cessation services, can work toward health equity by focusing efforts on decreasing the prevalence of tobacco use, and second-hand and thirdhand smoke exposure, and by improving access to tobacco control resources, among populations experiencing greater tobacco-related health and economic burdens.

## *Tobacco Industry Marketing*

The tobacco industry spends billions of dollars annually around the globe on advertising, promotion and sponsorship. The tobacco industry's manipulative and predatory marketing tactics increase consumption of its products and replace smokers who quit or die. By investing huge sums of money in low- and middle-income countries, the industry hopes to increase the social acceptability of tobacco and tobacco companies. The tobacco industry has also long employed strategies targeting children, from developing special packaging or candy-flavored cigarettes and e-cigarette cartridges, and has used the internet, text messaging and youth-oriented social networking sites to advertise sponsored events or promotions.

The best strategy to combat the tobacco industry's marketing tactics is to adopt and enforce comprehensive bans on tobacco advertising, promotion and sponsorship, as set forth in the WHO FCTC.

The tobacco industry claims that it is committed to determining the scientific truth about the health effects of tobacco, both by conducting internal research and by funding external research through jointly funded industry programs. However, the industry has consistently denied, withheld, and suppressed information concerning the deleterious effects of tobacco smoking.

Tobacco companies also manipulate the public's attitude about their reputation and have often engaged in so-called 'corporate social responsibility', which are activities to promote their products while portraying themselves as good corporate citizens.

## RECOMMENDATIONS

The WMA recommends that national governments:

1. Increase taxation of tobacco and tobacco-derived products, which is the single most effective tobacco control measure to reduce tobacco use according to the World Health Organization (WHO). Taxation is also a highly cost-effective and inexpensive tool. Increased revenues should be used for prevention programs, evidence-based cessation programs and services, and other health care measures.
2. Urge the WHO to add tobacco cessation medications with established efficacy to the WHO's Model List of Essential Medicines.
3. Ratify and fully implement the WHO Framework Convention on Tobacco Control.
4. Implement comprehensive regulation of the manufacture, sale, distribution, and promotion of tobacco and tobacco-derived products, including total bans on tobacco advertising, promotion and

partnership, including abroad. Require plain packaging of tobacco products (as set forth in the [WMA Resolution on Plain Packaging of Cigarettes, e-Cigarettes and Other Smoking Products](#)), and packaging that includes prominent written and pictorial warnings about health hazards of tobacco.

5. Prohibit smoking in all enclosed public places, including public transportation, prisons, airports and on airplanes. Require all medical schools, biomedical research institutions, hospitals, and other health care facilities to prohibit smoking, and the use of smokeless tobacco and other tobacco-derived products on their premises.
6. Prohibit the sale, distribution, and accessibility of cigarettes and other tobacco products to children and adolescents. Ban the production, distribution and sale of candy products that depict or resemble tobacco products.
7. Prohibit all government subsidies for tobacco and tobacco-derived products and assist tobacco farmers in switching to alternative crops. Exclude tobacco products from international trade agreements, and work to curtail or eliminate illegal trade in tobacco and tobacco-derived products and the sale of smuggled tobacco products.
8. Provide for research into the prevalence of tobacco use and the effects of tobacco and tobacco-derived products on the health status of the population.

*The WMA recommends that national medical associations:*

9. Refuse funding or educational materials from the tobacco industry, and urge medical schools, research institutions, and individual researchers to do the same.
10. Adopt policies opposing smoking and the use of tobacco and tobacco-derived products and publicize the policy. Endorse or promote clinical practice

guidelines on the treatment of tobacco use and dependence.

11. Prohibit smoking, including use of smokeless tobacco and vaping, in national medical association premises and at all business, social, scientific, and ceremonial meetings of national medical associations, in line with the decision of the World Medical Association to impose a similar ban.
12. Develop, support, and participate in programs to educate the profession and the public about the health hazards of tobacco use (including addiction) and exposure to secondhand smoke.
13. Introduce or strengthen educational programs for medical students and physicians to prepare them to identify and treat tobacco dependence in their patients.
14. Speak out against the shift in focus of

tobacco marketing from developed to less developed nations, from adults to youth, and urge national governments to do the same.

15. End investment in companies or firms producing or promoting the use or sale of tobacco or tobacco-derived products. Divest current assets that support tobacco production or promotion.

*The WMA recommends that physicians:*

16. Be positive role models by not using tobacco or tobacco-derived products, and by acting as spokespersons to educate and raise the awareness of the public about the deleterious health effects of tobacco use and the benefits of tobacco-use cessation.
17. Support widespread access to evidence-based treatment for tobacco dependence through individual patient encounters, counseling, pharmacotherapy, cessation

classes, telephone quit-lines, web-based cessation services, and other appropriate means.

18. Recognize that tobacco and second-hand smoke exposure to adult tobacco use cause harm to children. Special efforts should be made by physicians to:
  - promote tobacco-free environments for children
  - target parents and pregnant patients who smoke for tobacco cessation interventions
  - promote programs that contribute to the prevention and decreased use of tobacco and tobacco-derived products by youth
  - support policies that control access to and marketing of tobacco and tobacco-derived products and make pediatric tobacco-control research a higher priority.

## WMA STATEMENT ON PHYSICIANS TREATING RELATIVES

Adopted by the 73rd WMA General Assembly, Berlin, Germany, October 2022

### PREAMBLE

The interaction between the physicians and their relatives seeking medical care can be complex. Moreover, this possibility is highly conditioned by cultural aspects. Interaction can start with asking for simple advice, consultation for minor ailments, and general questions about healthcare and health promotion. This can escalate to seeking medical care and even surgery. Physicians are often their relatives' first point of call for medical and emotional support. Physicians may be able to offer immediate care in cases of emergency and contribute to well-informed, evidence-based self-care. Other than in emergencies, offering general health information or for minor health problems, physicians should avoid treating those close to them.

The ethical principles governing the work of physicians are equally important and valid when treating relatives. Respect for autonomy may be compromised by lack of privacy, unintentional breaches of confidentiality, and failure to seek informed consent. The relationship with the physician might compromise the patient's ability to make independent decisions.

Treating relatives may pose challenges in the following circumstances:

- when objectivity is compromised and decisively affected by emotional factors, there could be a risk of either under- or over-treating relatives or of encountering problems that are beyond the physician's expertise or abilities, which could cause serious harms.
- when there are potential barriers to considering sensitive medical history and/or conducting an appropriate physical examination, which may result in incorrect medical diagnosis and

treatment.

- when the physician fails to fulfil requirements concerning patient clinical records, which may result in difficulties if the related patient needs follow-up treatment or when liability issues arise.
- when a negative medical outcome could compromise the relationship between the physician and the related patient.
- when the treatment is not in the best interest or against the will of the related patient.
- when the physician risks providing relatives, perhaps unintentionally and unconsciously, with undue advantages.

### RECOMMENDATIONS

1. Physicians should avoid routinely acting as a relative's primary care physician or serving as the attending physician when treating a potentially life-threatening condition. Physicians may provide care to a relative in emergencies, for minor health problems or when there is no other qualified physician available.
2. Related patients may ask for a second opinion about another physician's care. If a second opinion is shared, it should be consistent with these recommendations and fulfil the duties of physicians to colleagues. Care should be taken to only discuss the treatment, which is most appropriate and recommended, rather than any judgements about the other treating physician's care and advice.
3. If a physician treats a relative, the physician should be mindful of the following:
  - strict respect for medical ethics, the patient's autonomy and consent, with special consideration for minors.
4. If the physician cannot accommodate the recommendations above, the physician should avoid treating relatives.
5. While physicians are encouraged not to treat relatives except in certain circumstances, it is acknowledged that physicians are often approached by their relatives for medical advice or treatment, and their help is frequently beneficial and appreciated.
6. In all circumstances, physicians shall maintain the highest professional and ethical standards, in accordance with the Declaration of Geneva, the WMA International Code of Medical Ethics, and the WMA Declaration of Lisbon on the Rights of the Patient.

- the physician has the duty to respect a patient's right to confidentiality and should not share information with anyone else without a lawful basis, including other family members, with the exception of necessary clinical documentation when referring to other health care personnel.

- if a relative indicates an intention to seek a second opinion about another physician's care, that intention must be respected.

- consent for treatment must be given by the patient, including competent minors, and for that consent to be valid, it must be fully informed.

- depending on the nature of the relationship, taking a sensitive history and performing a physical examination may be emotionally difficult or uncomfortable for the patient or the physician. In such situations the physician and the patient should consider consulting another physician.

- clear and concise patient records must be maintained at all times.



## WMA STATEMENT ON THE PROFESSIONAL AND ETHICAL USE OF SOCIAL MEDIA

**Adopted by the 62nd WMA General Assembly, Montevideo, Uruguay, October 2011 and revised by the 73rd WMA General Assembly, Berlin, Germany, October 2022**

### PREAMBLE

Social media is a collective term for the different interactive platforms, websites and applications intended for digital networking, that allow individuals and organizations to create and share user-generated content digitally.

The objectives of this policy are to:

- examine the professional and ethical challenges related to the increasing usage of social media by physicians, medical students, and patients.
- establish a framework that protects their respective interests.
- ensure trust and reputation by maintaining high professional and ethical standards.
- promote the availability of quality information across social media.
- stand against misinformation and disinformation on social media.

The use of social media has become a fact of life for billions of people worldwide including physicians, medical students, and patients.

Interactive, collaborative tools such as wikis, social networking platforms, chat applications and blogs have transformed passive Internet users into active participants. These tools are means for gathering, sharing and disseminating information, including healthcare and science information, socializing and connecting with friends, relatives, professionals etc. They can be used to seek medical advice, and patients share their health and healthcare experiences. They can also be used in research, public health, and education.

The positive aspects of social media should be recognized such as in promoting a healthy lifestyle, the dissemination of medical knowledge to society and in reducing patients' isolation.

Areas, which may require special attention include:

- sensitive content, photographs, videos, other personal materials posted on online social forums often exist in the public domain and have the capacity to remain on the internet permanently. Individuals may not have control over the ultimate distribution of material they post on-line.
- patient portal, blogs and tweets are not a substitute for one on one consultation with physicians but may widen engagement with health services amongst certain groups. Online "friendships" with patients may also alter the patient-physician relationship, and may result in unnecessary, possibly problematic physician and patient self-disclosure.
- each party's privacy may be compromised in the absence of adequate and conservative privacy settings or by their inappropriate use. Privacy settings are not absolute; social media sites may change default privacy settings unilaterally, without the user's knowledge. Social media sites may also make communications available to third parties.
- misinformation and disinformation often spread more rapidly through social media than fact-based accurate information. It may cause harm to the health of individuals as well as to public health and foster doubt and distrust towards professionals seeking to promote truth and science-based evidence.
- appropriate disclaimers to include in biographical information (e.g., "my opinions are my own", "posts are not personalized medical advice", etc).

The dissemination of medical knowledge, best practices and treatment options on social media can increase and expedite access to new and valid information among medical professionals. However, individuals or companies can take advantage of these channels in misleading ways, including to market or promote their medical products or treatments.

### RECOMMENDATIONS

The WMA urges National Medical Associations (NMA) to establish social media guidelines for their members addressing the following objectives:

1. To maintain appropriate boundaries of the patient-physician relationship in accordance with professional ethical guidelines just as they would in any other context.
2. To ensure that no identifiable patient information is posted in any social media by their physician, by increasing the understanding of privacy provisions of social networking sites and their limitations while considering intended audience and the technical feasibility to restrict access to the content to predefined individuals or groups.
3. To exercise care when using applications that might compromise the security of the data, including when consulting with colleagues.
4. To promote and apply the principles in the WMA Guidelines on Promotional Mass Media Appearances by Physicians to all social media activities by physicians.
5. To encourage physicians to routinely monitor their own Internet presence to ensure that the personal and professional information on their own sites and, to the extent possible, content posted about them by others is accurate and appropriate.

6. To prevent the use of technological devices from diverting our attention during direct consultation with the patient.
7. To provide factual, concise, understandable information, declare any conflicts of interest and adopt a sober tone when discussing professional matters.
8. To avoid inappropriate use of the networks, frivolous, insensitive attitudes or light-hearted opinions on medical matters.
9. To draw the attention of physicians to the fact that social media content posted by health professionals may contribute to the public perception of the profession and should be done in accordance with the principles in the [WMA Declaration of Geneva](#) and the [International Code of Medical Ethics](#).
10. To include education on the use of social media in medical curricula and continuing medical education.
11. To behave in the media and on social networks with the same scientific rigor and the same approach as in a consultation and show the same respect to patients and colleagues.
12. To create mechanisms for accountability in professional settings when inappropriate behavior on social media is observed and reported.
13. To promote health literacy and knowledge among populations and with individual patients by using objective and evidence based messages in accordance with the principles in the [WMA Declaration of Geneva](#), the [WMA International Code of Medical Ethics](#), and the [WMA Statement on Healthcare Information for All](#).
14. To combat misinformation, disinformation, and the promotion of pseudoscience and pseudotherapy on social media, all of which can result in negative health outcomes for patients and communities.
15. To counsel fellow physicians who engage in misinformation, disinformation, or violation of patient trust on social media and/or report to relevant authorities for ongoing deliberate acts of the same.
16. To raise awareness among physicians and medical students about the possibility that information shared on social media could be used in misleading ways by individuals or companies.

## WMA STATEMENT ON THE GLOBAL BURDEN OF CHRONIC NON-COMMUNICABLE DISEASE

**Adopted by the 62nd WMA General Assembly, Montevideo, Uruguay, October 2011 and revised by the 73rd WMA General Assembly, Berlin, Germany, October 2022**

### PREAMBLE

Chronic non-communicable diseases (NCDs), are the leading cause of mortality and disability in both the developed and developing world. The four main NCDs are cancers, cardiovascular diseases, chronic respiratory diseases, and diabetes (referred to as NCD4 hereafter) and they account for seven of every ten deaths worldwide. Eighty per cent of deaths due to NCDs occur in low- and middle-income countries (WHO).

NCD4 are not replacing existing causes of disease and disability, such as infectious disease and trauma, but are adding to the disease burden. While all countries face the triple burden of infectious diseases, traumas and chronic diseases, it is a much more difficult challenge for developing countries. This increased burden is straining the capacity of many countries to provide adequate healthcare services as well as increase life expectancy.

Chronic diseases are not equally distributed, which has a significant effect on health inequalities. For example, NCDs occur more frequently among socioeconomically underprivileged individuals with inferior chronic disease outcomes. Conversely, life expectancy and other health outcomes are markedly higher in more developed countries than in less developed countries, and in the higher socio-economic segments of society.

In addition, this burden is also undermining nations' efforts to spur economic growth. NCDs are a barrier to development. In low- and middle-income countries (LMICs), poverty exposes people to lifestyle-mediated risk factors for NCDs and in turn, resulting NCDs become an important driver for poverty. Chronic diseases and poverty are linked in a vicious circle, hindering economic development and worsening poverty.

Ongoing and anticipated global trends that will lead to more chronic disease problems in the future include an aging population, urbanization and inadequate community planning, increasingly sedentary lifestyles, increasing psychosocial stress, climate change and the rapidly increasing cost of medical technology to treat NCDs. Chronic disease prevalence is closely linked to global social and economic development, globalization and mass marketing of unhealthy foods and other products.

The prevalence and cost of addressing the chronic disease burden is expected to rise in coming years. In addition to the individual and public expenses, chronic diseases lead to a marked economic burden because of the mutual effects of healthcare costs and lost productivity from disability and death. The WHO considers the global burden of chronic diseases as one of the most important challenges facing the field of health for this century.

The rapid increase in chronic diseases represents a major health challenge for global development, for which immediate global action is needed.

Eighty percent of the global burden of chronic diseases affects LMICs, where most of the world's population lives. The impact of this devastating burden is constantly growing. Chronic diseases and poverty are linked in a vicious circle, hindering economic development and worsening poverty.

### Solutions

The NCD4 merit global attention. The primary solution for these diseases is prevention. Tobacco use, poor diet, physical inactivity and alcohol abuse are the four most common modifiable risk factors for NCDs. Poor mental health has recently been included as an additional risk factor for NCD. National policies that help people achieve healthy lifestyles and behaviours are the foundation for all possible solutions.

Increased access to primary care combined with well-designed and affordable disease-control, disease prevention and health promotion programs can greatly improve healthcare. Partnerships of national ministries of health with institutions in developed countries may overcome many barriers in the poorest settings. In addition, having health insurance improves health outcomes. Conversely, in some countries the lack of health insurance hinders the practice of preventive and primary care and is linked with adverse health outcomes. Uninsured individuals may postpone pursuing assistance when ill or injured, and they are more likely to be hospitalized for chronic illnesses such as diabetes or hypertension. Furthermore, children without health insurance are less likely to receive immunizations, and regular primary care.

Medical education systems should become more socially accountable. The World Health Organization (WHO) defines social accountability of medical schools as the obligation to direct their education, research and service activities towards addressing the priority health concerns of the community, region, or nation they have a mandate to serve. The priority health concerns are to be identified jointly by governments, health care organizations, health professionals and the public. There is an urgent need to adopt accreditation standards and norms that support social accountability and community engagement. Educating physicians and other health care professionals to deliver health care that is concordant with the needs of the population and the resources of the country must be a primary consideration. Led by primary care physicians, teams of physicians, nurses and community health workers will provide care that is driven by the principles of quality, equity, relevance and effectiveness.

Distributions of funds for health should be based on all individual nation needs. No nation can accomplish positive NCD4 outcomes by tackling a single cause of death.

Strengthening the healthcare infrastructure, including training the primary healthcare team, chronic disease surveillance, public health promotion campaigns, quality assurance and establishment of national and local standards of care, is important in caring for the increasing numbers of patients with NCDs. Most premature deaths due to NCDs are preventable; however, in most developing countries health systems are inadequate, or unprepared to appropriately act on NCDs.

One of the most important components of healthcare infrastructure is human resources; well-trained and motivated health care professionals led by primary care physicians are crucial to success. International aid and development programs need to move from “vertical focus” on single diseases or objectives to a more sustainable and effective primary care health infrastructure development.

## RECOMMENDATIONS

Recalling its Statement on [Hypertension and Cardiovascular Disease](#) and its [Declaration of Oslo on Social Determinants of Health](#), the WMA calls on:

### *National Governments to:*

1. Recognize the importance of socio-economic development for health and reduce socioeconomic status disparities in income, education, and occupation;
2. Support global immunization strategies;
3. Support global tobacco and alcohol control strategies, as well as control strategies addressing other forms of addiction, particularly drug use;
4. Promote healthy living and implement comprehensive, collaborative policies and strategies at all relevant levels and divisions of government that support prevention and healthy lifestyle behaviours;
5. Set aside a fixed percentage of the national budget for healthcare infrastructure development and promotion of healthy

lifestyles and invest in better management of NCDs<sup>4</sup> including detection, care and treatment;

6. Advocate for trade / commercial agreements that protect rather than undermine public health;
7. Develop and execute global and national action strategies for mitigating the health effects of climate change;
8. Promote research for prevention and treatment of NCDs, including research on occupational health hazards leading to chronic diseases;
9. Promote access to good quality effective medicines to treat NCDs;
10. Develop monitoring and surveillance systems for NCDs and,
11. Reinforce primary health care, human resources and infrastructure.

### *Its Constituent Members to:*

12. Increase physician, public and NGO awareness of optimal disease prevention behaviours;
13. Enhance skills and capacity to promote a team-based multidisciplinary approach to chronic disease management;
14. Advocate for integration of NCD prevention and control strategies in government-wide policies;
15. Promote high quality training and professional associations for more primary care physicians and advocate for their equitable distribution;
16. Advocate for high quality readily accessible resources for continuing medical education that is responsive to societal needs;
17. Support establishing evidence-based standards of care for NCDs;

18. Promote an environment of support for continuity of care for NCDs, including collaborative efforts to encourage patient education and self-management;

19. Support strong public health infrastructure and,

20. Recognize and support the concept that addressing and acting on social determinants are part of prevention and health care.

### *Medical Schools to:*

21. Develop curriculum objectives that meet current societal needs;
22. Create primary care departments;
23. Provide community-oriented and community-based primary care training opportunities in primary care specialties that allow students to become acquainted with the basic elements of chronic care infrastructure and continuity of care;

24. Promote the use of interdisciplinary, interprofessional, intersectoral and other collaborative training methodologies within primary and continuing education programs and,
25. Include instruction in chronic disease prevention, including nutrition and lifestyle promotion counselling, in the general curriculum.

### *Individual Physicians to:*

26. Work to create communities that promote healthy lifestyles and prevention behaviours;
27. Offer patients smoking cessation, weight control strategies, substance abuse counselling, early screening, self-management education and support, nutritional counselling, and ongoing coaching;
28. Inform patients about the dangers of illusory or insufficiently proven remedies



- or procedures, and charlatanism practices;
29. Promote a team-based multidisciplinary and value-based approach to chronic disease management;
  30. Ensure continuity of care for patients with chronic disease;
  31. Model healthy lifestyles by maintaining personal health;
  32. Become community advocates for improved social determinants of health, equity in health care and for best prevention methods and,
  33. Work with parents and the community at large to ensure that parents have the best advice on maintaining the health of their children.

# WMA DECLARATION ON THE PROTECTION AND INTEGRITY OF MEDICAL PERSONNEL IN ARMED CONFLICTS AND OTHER SITUATIONS OF VIOLENCE

Adopted by the 62nd WMA General Assembly, Montevideo, Uruguay, October 2011 and revised by the 73rd WMA General Assembly, Berlin, Germany, October 2022

## PREAMBLE

The right to health and medical assistance is a basic human right that should be guaranteed at all times; ethical principles of healthcare remain the same in times of emergencies and in times of peace. Healthcare personnel must be duly protected.

Various international agreements, including the Geneva Conventions (1949), Additional Protocols to the Geneva Conventions (1977, 2005) and the Basic Principles on the Use of Force and Firearms by Law Enforcement Officials of the United Nations, must guarantee safe access to medical assistance as well as the protection of healthcare personnel.

The [United Nations Security Council Resolution 2286](#) (2016) condemns attacks and threats against health care personnel, demands an end to impunity for those responsible, and that all parties to armed conflict comply fully with their obligations under international law.

Despite recognized international standards and the mobilization of humanitarian and human rights stakeholders over the last years denouncing the surge of violence against healthcare worldwide, the WMA notes with great concerns persistent attacks and misuses of hospitals and other medical facilities, as well as threats, killings and other violence against patients and healthcare personnel in emergency contexts.

The WMA condemns in the strongest terms this scourge of violence against healthcare personnel and facilities, which has disastrous humanitarian implications with critical impacts on the capacity of the health system to provide the care needed, resulting in unjustifiable suffering and death. Violence

against healthcare personnel constitutes an international emergency, requiring urgent actions.

Recalling its [Statement on Armed Conflicts](#), the WMA reaffirms that armed conflicts should always be a last resort and that States and other authorities who enter into armed conflict must accept responsibility for the consequences of their actions.

The safety and personal security of physicians and other healthcare personnel are essential in enabling them to provide care and save lives in situations of conflicts. They must always be respected as neutral and should never be prevented from fulfilling their duties. Healthcare personnel and facilities should never be instrumentalised as means of war.

Recalling its [Regulations in Times of Armed Conflict and Other Situations of Violence](#), the WMA reaffirms that the primary obligation of physicians and other healthcare personnel is always to their patients; they have the same ethical responsibilities in situation of violence or armed conflicts as in peacetime, the same duty of preserving health and saving lives; they shall at all times act in accordance with the ethical principles of the profession, relevant international and national law, and their conscience.

## RECOMMENDATIONS

*The WMA calls upon all parties involved in situations of violence to:*

1. Fully comply with their obligations under international law, including human rights law and international humanitarian law, in particular with their obligations under the Geneva Conventions of 1949 and the obligations applicable to them under the Additional Protocols of 1977 and 2005;
2. Ensure the safety, independence and personal security of healthcare

personnel at all times, including during armed conflicts and other situations of violence, in accordance with the Geneva Conventions and their additional protocols;

3. Respect and promote the principles of international humanitarian and human rights law which safeguard medical neutrality in situations of conflict;
4. Protect medical facilities, medical transport and the people being treated in them, provide the safest possible working environment for healthcare personnel, and protect them from threats, interference and attack;
5. Never misuse hospitals and other health facilities for military purposes and dedicate them exclusively to health care;
6. Enable healthcare personnel to treat injured and sick patients, regardless of their role in a conflict, and to carry out their medical duties freely, independently and in accordance with the principles of their profession without fear of punishment or intimidation;
7. Ensure that safe access to adequate medical facilities for the injured and others in need of medical aid is not unduly impeded;
8. Ensure that the equipment, including personal protection equipment, necessary for the safety of healthcare workers, is available to them as needed, and that the staffing is adequate;
9. Support and strictly respect the ethical rules of the medical profession as defined, among other documents, in the [Ethical Principles of Health Care in Times of Armed Conflict and Other Emergencies](#) and in the [WMA Regulations in Times of Armed Conflict and Other Situations](#)

[of Violence](#), and to never require from physicians or force them to breach or renounce these rules, in particular:

- privileges and facilities afforded to physicians and other health care professionals in times of armed conflict and other situations of violence must never be used for purposes other than health care;
- physicians must at all times show appropriate respect for medical confidentiality;
- physicians must never accept acts of torture or any other form of cruel, inhuman or degrading treatment under any circumstances; they must never be present at nor take part in such acts;
- physicians have a duty to recognize and support vulnerable populations, including women, children, refugees, the disabled and displaced persons;
- physicians and WMA constituent members should alert governments and non-state actors of the human consequences of warfare;
- where conflict appears to be imminent and inevitable, physicians should ensure that authorities are planning for the protection of the public health infrastructure and for any necessary

repair in the immediate post-conflict period.

*The WMA calls upon governments to:*

10. Establish efficient, secure and unbiased reporting mechanisms with sufficient resources to collect and disseminate data regarding assaults on physicians, other healthcare personnel and medical facilities;
11. Provide to the WHO the necessary support to fulfil its leadership role in documenting attacks on healthcare personnel and facilities [1];
12. Foster the mechanisms of investigating and bringing to justice those responsible for reported violations of the international agreements pertaining to the protection of healthcare personnel in armed conflicts and other situations of violence, and of enforcing the sanctions when such have been decided;
13. Develop and implement more efficient legal protection for medical and other healthcare personnel, so that whoever attacks a nurse, physician or another healthcare personnel knows that such actions will be severely penalised.

*The WMA calls upon governments, its member organisations and the appropriate international bodies to:*

14. Raise awareness of international norms on the protection of healthcare personnel and cooperate with different actors to identify strategies to tackle threats to healthcare and strengthen the mechanism of investigating the reported violations;
15. Raise awareness at both national and local level of the fundamental importance of protecting the healthcare personnel and of upholding their neutrality in times of conflict;
16. Support the development of pregraduate, postgraduate and continuous education for the healthcare personnel to ensure their competencies and their security and to minimize the psychological toll when confronted with armed conflicts and other situations of violence.

The WMA recognizes that in some circumstances, documenting and denouncing acts of torture or other violence may put the physician, and those close to him or her, at great risk. Doing so may have excessive personal consequences. Physicians must avoid putting individuals in danger while assessing, documenting or reporting signs of torture and cruel, inhuman and degrading treatment and punishments.

## WMA STATEMENT ON WORKPLACE VIOLENCE IN THE HEALTH SECTOR

Adopted by the 63rd WMA General Assembly, Bangkok, Thailand, October 2012 and revised by the 73rd WMA General Assembly, Berlin, Germany, October 2022

### PREAMBLE

Violence in the health sector has increased substantially in the new millennium, especially in time of COVID-19 pandemic. All persons have the right to work in a safe environment without the threat of violence. Workplace violence includes both physical and non-physical, such as (psychological) violence, intimidation and cyber harassment, among others.

Cyber and social media harassment particularly includes online threats and intimidation towards physicians who take part in a public debate in order to give adequate information and fight disinformation. These physicians are increasingly confronted with, amongst others, malicious messages on social media, death threats and intimidating home visits.

For the purposes of this document, the broad WHO definition of workplace violence will be used: "The intentional use of power, threatened or actual, against another person or against a group, in work-related circumstances, that either results in or has a high degree of likelihood of resulting in injury, death, psychological harm, mal-development, or deprivation".

In addition to the numerous consequences on victims' health, violence against health personnel has potentially destructive social effects. It affects the entire healthcare system and undermines the quality of the working environment, ultimately impacting the quality of patient care. Furthermore, violence can affect the availability of health care, particularly in impoverished areas.

While workplace violence is indisputably a global issue, various cultural differences among countries must be taken into consideration in

order to accurately understand the concept of violence on a universal level. Significant differences exist in terms of what defines various levels of violence and what specific forms of workplace violence are most likely to occur. This may create tolerance for some levels of violence in those places. However, threats and other forms of psychological violence are widely recognized to be more prevalent than physical violence.

Causes of violence in the healthcare setting are extremely complex. Several studies have identified common triggers for acts of violence by patients and relatives to be delays in receiving treatment, dissatisfaction with the treatment provided, aggressive patient behavior caused by the patient's medical condition, the medication they take or the use of alcohol and other drugs. Additionally, individuals may threaten or perpetrate violence against health personnel because they oppose a specific area of medical practice, based on their social, political or religious beliefs. Cases of violence from the bystanders are reported as well. Co-worker violence, such as bullying, including initiation ceremonies and practical jokes, or harassment, constitutes another important pattern of workplace violence in the health sector.

Collaboration among various stakeholders (including governments, medical associations, hospitals, general health services, management, insurance companies, trainers, preceptors, researchers, media, police and legal authorities) together with a multi-faceted approach encompassing the areas of legislation, security, data collection, training/education, environmental factors, public awareness and financial incentives is required in order to successfully address this issue. As the representatives of physicians, medical associations should take a proactive role in combating violence in the health sector and also encourage other key stakeholders to act, thus further protecting the quality of the working environment for health personnel and the quality of patient care.

### RECOMMENDATIONS

The WMA condemns in the strongest terms any forms of violence against healthcare personnel and facilities, which may include coworker violence, aggressive behavior exhibited by patients or family members, as well as acts of malicious intent from individuals in the general public, and calls on its constituent members, the health authorities and other relevant stakeholders to act through a collaborative, coordinated and effective strategy approach:

#### *Policy-making*

1. The state has obligations to ensure the safety and security of patients, physicians, and other health personnel. This includes providing an appropriate physical environment.
2. Governments should provide the necessary framework so that the prevention and elimination of workplace violence in the health sector be an essential part of national/regional/local policies on occupational health and safety, human rights protection, healthcare-facility management standards and gender equality.

#### *Financial*

3. Governments should allocate appropriate and sustainable funds in order to effectively tackle violence in the health sector.

#### *Protocols for situation of violence in healthcare facilities*

4. Healthcare facilities should adopt a zero-tolerance policy towards workplace violence eliminating its "normalization" through the development and implementation of adequate protocols including the following:

- a predetermined plan for maintaining



security in the workplace; including recognition of non-physical abuse as a risk factor for physical abuse.

- a designated plan of action for health personnel when violence takes place.
  - a strengthened internal communication strategy, involving the staff in decisions concerning their security.
  - a system for reporting and recording acts of violence, which may include reporting to legal and/or police authorities.
  - a means to ensure that employees who report violence do not face reprisals.
5. In order for these protocols to be effective, the management and administration of healthcare facilities should communicate and take the necessary steps to ensure that all staff are aware of the protocols. Managers should be urged to verbalize a no-tolerance policy towards violence in healthcare settings.
  6. Patients with acute, chronic or illness-induced mental health disturbances or other underlying medical conditions may act violently toward health personnel; those taking care of these patients must be adequately protected. Except in emergency cases, physicians might have the right to refuse to treat and, in such situations, they must ensure that adequate alternative arrangements are made by the relevant authorities in order to safeguard the patient's health and treatment.

#### *Training/Education*

7. A well-trained and vigilant staff supported by management can be a key deterrent of violent acts. Constituent members should work with undergraduate and postgraduate education providers to ensure that health personnel are trained in the following areas: communication skills, empathy as well as recognising and handling potentially violent persons and high-risk situations in order to prevent incidents of violence.

8. Continuous education should include ethical principles of healthcare and the cultivation of the patient-physician relationships based on respect and mutual trust. This not only improves the quality of patient care but also fosters feelings of security resulting in a reduced risk of violence.

#### *Communication and Social Awareness*

9. Medical associations, health authorities and other stakeholders should work together to increase awareness of violence in the health sector, creating networks of information and expertise in this area. When appropriate, health personnel and the public should be informed of acts of violence.
10. Broadcasting agencies, newspapers, and other news outlets are encouraged to thoroughly verify their sources in order to keep the information shared to the highest standard of professional reporting. Social media companies and associated stakeholders should also take active steps to create a cyber-violence-free environment for its users. This includes strengthening policies to protect user data, making reporting and flagging such violence easy and accessible, and engaging law enforcement for proper legal action when warranted.

#### *Security*

11. Appropriate security measures should be in place in all healthcare facilities and acts of violence should be given a high priority by law-enforcement authorities. A routine violence risk audit, including a risk assessment, should be implemented in order to identify which jobs and locations are at highest risk for violence, especially in places where violence has already occurred, and to determine weaknesses in facilities' security. Examples of high-risk areas include general practice premises, mental health treatment facilities and high traffic areas of hospitals including the emergency department.

12. The risk of violence may be ameliorated by a variety of means which include placing security personnel in high-risk areas and at the entrance of buildings, the installation of security cameras and alarm devices for use by health personnel, the use distinguishable items to identify the staff and by maintaining sufficient lighting in work areas, contributing to an environment conducive to vigilance and safety. The implementation of a system to screen patients and visitors for weapons upon entering certain areas, especially the high-risk ones, should be considered.

#### *Support to Victims*

13. Adequate medical, psychological and legal support should be provided to victims of violence. Such support should be free of access for all the health personnel.

#### *Investigation*

14. In all cases of violence there should be investigation to better understand the causes and to aid in prevention of future violence. The investigation may lead to prosecution of perpetrators under civil or criminal codes. The procedure should be led by relevant officials in law enforcement and should not expose the victim to further physical or psychological harm.

#### *Data Collection*

15. Appropriate reporting systems should be established to enable health personnel to report anonymously and without reprisal, any threats or incidents of violence. Such a system should assess in terms of number, type and severity, incidents of violence within an institution and resulting injuries. The system should be used to analyse the effectiveness of preventative strategies. Aggregated data and analyses should be made available to health professional organizations and other relevant stakeholders.

## WMA RESOLUTION FOR PROVIDING COVID-19 VACCINES FOR ALL

Adopted by the 73rd WMA General Assembly, Berlin, Germany, October 2022

### PREAMBLE

SARS-COV-2 Pandemic caused more than 400 million cases and nearly 6 million deaths. It is quite comforting that vaccines that ensure protection from the disease have been produced, and data relating to the course of the pandemic in countries with high vaccination coverage is promising. 62.3% of the world population has received at least one dose of a COVID-19 vaccine. Only 11.4% of people in low-income countries have received at least one dose. Deep inequalities in access to vaccines are still observed globally and failure to achieve collective immunity leads to the further spread of new, more contagious and immunity-evading variants of the disease through mutation. Worldwide application of vaccines is of critical importance in terminating the Covid-19 pandemic. Every minute of delay in vaccinations means further spread of the disease at global scale and more lives lost. It is not sufficient to immunize all citizens in any given country; immunization has to reach a sufficient level in the world as a whole to effectively combat and control the pandemic.

### RECOMMENDATIONS

*The WMA urges all parties to:*

1. Remove barriers to promote equity of access to COVID-19 vaccines that are globally proven to be safe and effective;
2. Work with governmental and appropriate regulatory bodies to encourage prioritization of equity when providing COVID-19 pandemic-related resources such as diagnostics, free medications,

therapeutics, vaccines, raw materials for vaccine production, personal protective equipment, and/or financial support, and guarantee universal accessibility and free distribution;

3. Establish vaccination strategies that consider the specific peculiarities, challenges and vulnerabilities of each region, prioritising the most vulnerable people, including health professionals;
4. Insist on the importance of vaccination and take action to achieve maximum coverage and protect the population in need;

*In this context,*

5. Confront vaccine hesitancy by providing evidence-based guidance on the safety and necessity of vaccines;
6. Share of knowledge required for vaccine production to the COVID-19 Technology Access Pool created by WHO to ensure that vaccines are produced at as many centres as possible and sharing of this knowledge;
7. Allocate public funds to improve the capacity of vaccine production centres and increase the channels of safe distribution so as to ensure fair access, to provide equitable and efficient vaccine supply and distribution;
8. Design national vaccine programmes that take into account a global analysis rather than only national considerations;
9. Promote sustainable solutions to patent issues. This may include the temporary lifting of patents on COVID-19

vaccines under the Trade-Related Aspects of Intellectual Property Rights (TRIPS) and similar agreements to promote equity of access in global emergency situations, while ensuring fair compensation for the intellectual property of the patent holders if asked, global investment in manufacturing sites, training of personnel, quality control, and the transfer of knowledge, technology and manufacturing expertise;

10. Support WHO efforts and initiatives to increase production and distribution of therapeutics and vaccines necessary to combat COVID-19 and future pandemics in order to provide vaccine doses to low and middle-income countries with limited access, including:

- technological transfers relevant for vaccine production;
- other support, financial and otherwise, necessary to scale up global vaccine manufacturing; and
- measures that ensure the safety and efficacy of products manufactured by such means.

11. Call on governments and the United Nations to take all necessary measures to facilitate equitable access to vaccines throughout the world by supporting and promoting the sharing of all vaccine-related processes for combating pandemics (R&D, patenting, production, licensing, procurement and application).

## WMA RESOLUTION IN SUPPORT OF MEDICAL PERSONNEL AND CITIZENS OF UKRAINE IN THE FACE OF THE RUSSIAN INVASION

Adopted as Council Resolution by the 220th WMA Council Session, Paris (hybrid), France, April 2022 and as Resolution by the 73rd WMA General Assembly, Berlin, Germany, October 2022

### PREAMBLE

Reminding that the World Medical Association was founded on the backdrop of the atrocities of war and how the medical profession was abused for violation of human rights and dignity;

Reaffirming the [WMA Declaration of Geneva](#) as a beacon of fundamental principles to which the world's physicians are committed;

Deeply shocked by the Russian army's bombing of Ukrainian civilians and hospitals, including maternity wards, thus infringing on medical neutrality in conflict zones. The WMA and its members express their solidarity with the Ukrainian people and provide their support for Ukrainian and international healthcare workers mobilized under extremely difficult conditions;

Recalling the [WMA's Statements on the Cooperation of National Medical Associations during or in the Aftermath of Conflicts, on Armed Conflicts, the Regulations in Times of Armed Conflict and Other Situations of Violence, the Statement on the Protection and Integrity of Medical Personnel in Armed Conflicts and Other Situations of Violence](#), the [Declaration on the protection of healthcare workers in emergency situations](#) and the [Statement on Medical Care for Migrants](#);

Emphasizing the need to respect the [Geneva Conventions](#) and their protocols as the core of international humanitarian law, as well as the United Nations Security Council Resolution 2286;

Considering the suffering and human tragedy

caused by the Russian invasion of Ukraine, including a refugee crisis on a massive scale;

### RECOMMENDATIONS

1. The Constituent Members of the WMA stand in solidarity with the Ukrainian Medical Association and all healthcare professionals.
2. The WMA condemns Russia's invasion of Ukraine and calls for an end to hostilities.
3. The WMA considers that Russia's political leadership and armed forces bear responsibility for the human suffering caused by the conflict.
4. The WMA calls on Russian and Ukrainian doctors to hold high the principles in the [WMA Declaration of Geneva](#) and other documents that serve as guidance for medical personnel during times of conflict.
5. The WMA demands that the parties to the conflict respect relevant Humanitarian Law and do not use health facilities as military quarters, nor target health institutions, workers and vehicles, or restrict the access of wounded persons and patients to healthcare, as set out in the WMA Declaration on the Protection of Health Workers in Situations of Violence.
6. The WMA stresses that the parties to the conflict must strive to protect the most vulnerable populations.
7. The WMA underlines that it is essential that access to medical care be guaranteed to all victims, civil or military, of this conflict, without distinction.
8. Physicians and all other medical personnel, both Ukrainian and international, involved in NGOs, must not under any circumstances be hindered in the exercise of their unwavering duty, in accordance with the international recommendations provided in the [WMA declaration on the protection of healthcare workers in emergency situations, the WMA's position on the protection and integrity of medical personnel in armed conflicts and other violent situations](#) and in the [declaration of the United Nations General Assembly on the rights and responsibility of individuals, groups and organs of society to promote and protect human rights and universally recognized fundamental freedoms](#).
9. The WMA calls on the parties to ensure that essential services are provided to those within areas damaged and disrupted by conflict.
10. The WMA calls on the international community and governments to come to the aid of all persons displaced by this conflict who may choose their country as a destination following their departure from Ukraine.
11. The WMA urges all nations receiving persons fleeing the conflict to ensure access to safe and adequate living conditions and essential services to all migrants, including appropriate medical care, as needed.
12. The WMA calls on the parties to the conflict as well as the international community to ensure that when the conflict ends, priority must be given to rebuilding the essential infrastructure necessary for a healthy life, including shelter, sewerage, fresh water supplies, and food provision, followed by the restoration of educational and occupational opportunities.

## WMA RESOLUTION ON HUMANITARIAN AND MEDICAL AID TO UKRAINE

**Adopted by the 73rd WMA General Assembly, Berlin, Germany, October 2022**

the expansion of aid to include mental health personnel trained in war-related trauma.

### PREAMBLE

The ongoing war in Ukraine has led to millions of refugees who have experienced trauma and an unprecedented mental health crisis situation. Aid workers and some physicians who are assisting the refugees may not be well prepared to treat this war-related trauma.

Through the Ukraine Medical Help Fund, the WMA is leading a successful effort to provide material aid to Ukrainian refugees. The longevity and brutality of the war now require even more dedication to this effort and

### RECOMMENDATIONS

1. That the WMA, through the Ukraine Medical Help Fund and other appropriate means, its constituent members and the medical community, continue to send medical supplies to Ukraine and offer support to organizations providing humanitarian missions and medical care to Ukrainian refugees, resource permitting.
2. That the WMA, its constituent members and the medical community, advocate for early implementation of mental

health measures, including suicide prevention efforts, and for addressing war-related trauma and post-traumatic stress disorder when assisting Ukrainian refugees. Special attention should be paid to disadvantaged groups.

3. That the WMA, its constituent members and the medical community, advocate for educational measures to enhance the understanding of war-related trauma in war survivors and promote broad protective factors for war-affected people such as employment, housing, and food stability, especially in disadvantaged groups.



## WMA STATEMENT ON OCCUPATIONAL AND ENVIRONMENTAL HEALTH AND SAFETY

**Adopted by the 67th WMA General Assembly, Taipei, Taiwan, October 2016 and revised by the 73rd WMA General Assembly, Berlin, Germany, October 2022**

### PREAMBLE

Occupational and environmental health and safety (OEHS) is an integral part of public health, and the primary health care (PHC) system in particular, since it is often the first level of contact of individuals, the family and the community with a health system, bringing health care as close as possible to where people live and work.

Workers represent at least half of the world's population and are the backbone of many economies, but many may have inadequate access to occupational and environmental health services and do not operate in a safe working environment.

The International Labour Organization (ILO) defines decent work as opportunities for work that are productive and deliver fair income with dignity, equality, and within safe working conditions. Despite the fact that the right to decent work is recognized in the Universal Declaration of Human Rights, every 15 seconds, a worker dies from a work-related accident or disease, resulting in an annual 4% loss in global GDP.

Despite this, the proportion of work accidents and occupational diseases that are recorded and reported worldwide is incredibly small. It is estimated that less than 1% of occupational diseases are recorded.

Additionally, as many workers face greater pressures to meet the demands of working life, many of them are at risk to develop work-related stress which may occur when the demands of the job do not match or exceed the capabilities, resources or needs of the worker or when the knowledge or abilities of an individual worker or group to cope are not matched with the expectations of the organizational culture of an enterprise.

High-level of stress can result in health impairments such as burnout, depression, anxiety, cardiovascular disease or even suicide.

Recently and even more due to the COVID-19 pandemic, the world has witnessed an increased number of employees working outside the employer's premises using digital information and communication technologies either full-time or part-time. Despite some positive aspects, there are risks associated with this work arrangement as it isolates employees, particularly individuals living alone and can result in increased levels of stress and anxiety. Extended working hours and employee availability in addition to diminished boundaries between personal and professional life may impact work-life balance. A healthy digital working environment needs to be in place to ensure employee health and safety.

The United Nations Development Programme's Sustainable Development Goals 3, 5, 8 and 13 call for action in health promotion for all people of all ages, gender equality, decent work and management of the impact of climate change; OEHS is well positioned to maintain physical, mental and social well-being for all workers, that will result in poverty reduction, sustainable development and saving millions of lives every year.

Physicians have a critical role in preventing, diagnosing, monitoring, treating and reporting work accidents and occupational diseases. In addition, physicians should promote equal, decent and inclusive work environments for all regardless of age, gender, ethnic origin, nationality, religion, political affiliation, race, sexual orientation, or the presence of a disability.

Despite many governments and employers' and workers' organizations placing greater emphasis on the prevention of occupational diseases, prevention is not receiving the priority warranted by the scale and severity of the occupational disease epidemic.

Physicians and medical associations can contribute to the identification of problems, development of national reporting systems, and formulation of relevant policies in the field of OEHS.

Unsatisfactory and unsafe working conditions play a significant role in the development of occupational diseases and injuries, which are subsequently causes of mortality in the working population.

### RECOMMENDATIONS

1. Physicians should play a pivotal role in the development of a workforce that is educated in and raise workplace awareness about the social determinants of health.
2. The field of occupational and environmental health and safety (OEHS) should be accorded the necessary importance in both graduate and post-graduate medical studies
3. Physicians must cooperate with the healthcare and occupational authorities to promote health and safety in the workplace.
4. All workers should have access to risk based OEHS services from the first day of work and extending beyond the last day at work in order to account for occupational diseases with a long latency period. Service content should be standardized and the role of physicians in the planning and implementation of OEHS systems that are essentially preventive/protective must be recognized.
5. WMA Constituent members should act proactively and encourage the expansion of the scope of OEHS services, in order to prevent and reduce occupational diseases, and injuries, reproductive health issues and protect the environment. They should also promote workplace gender equality and encourage improvement

of recording and reporting systems for OEHS-related metrics. They should also focus on workforce capacity building, teaching and training, and collaborative research.

6. WMA Constituent members, together with governments, should take an active role, where appropriate, in the formulation and development of national systems that facilitate OEHS prevention, and the recording and reporting of occupational diseases and incidents in their respective countries.
7. Physicians who are evaluating workers' compensation patients should be experienced in occupational and environmental medicine. When a relationship between the diagnosis and occupational and environmental exposures is established, the physician should report it through the appropriate reporting system.
8. Occupational diseases and injuries are often addressed in the context of insurance and compensation. Where these mechanisms are not in place, WMA Constituent members should advocate for the protection of workers by means of insurance or social security.
9. When rendering services for an employer, physicians should advocate that employers fulfil the minimum requirements set in the International Labour Organization's (ILO) occupational standards, especially when such requirements are not set by national legislation.
10. Employers should provide a safe working environment, recognising and addressing the impact of adverse working conditions on individuals and society.
11. Employers should consider promoting and offering essential vaccines to employees.
12. WMA Constituent members should consider forming an internal body for addressing the problems of physicians working in OEHS and encourage them to contribute to research and related scientific studies.
13. Governments should collaborate in setting up an international system to assess occupational hazards and develop strategies to protect the health of workers.
14. Governments should establish legislative frameworks that protect the rights and health of workers, including reproductive health and health effects of work at home.
15. Governments and NMAs must promote the development of training, information and research programs in occupational health to their members.

## Interview with the WMA Past President



*Heidi Stensmyren*

For this interview, Dr. Heidi Stensmyren, the WMA Past President, shares her perspectives on current and upcoming WMA activities with Dr. Helena Chapman, the *WMJ* Editor in Chief

***Please share three quotes and describe how these quotes reflect your journey as WMA president (2021–2022).***

As our global health leaders develop timely initiatives to protect population health, we realise that health disparities still exist across our communities. The global health workforce shortage remains a significant challenge to provide optimal health services and address such health disparities. With technological advancements, we must find novel approaches to transform health care delivery and strengthen health system resiliency. I believe that “The whole world shares the same challenges: insufficient access to healthcare and an overburdened health workforce. Working faster is not the solution. We need to transform the way we provide health care and utilise new technologies.”

The value of teamwork cannot be overlooked by our medical community. As World Medical Association (WMA) members, we

must find opportunities to share our expertise and develop innovative collaborations, in order to enhance health care service delivery. The reality is that “Shared problems cannot be solved solely by a few stakeholders. I am strengthened in my conviction of the importance of collaboration – we are stronger together”.

As physicians, we recognize our unique role in patient care, where we often serve as detectives when there is no known cure. We are trained to be observant, balanced, and empathetic in our medical evaluations. My career path is a testament to being prepared to manage and solve complex clinical cases. For example, “My years as a global health leader have been filled with several challenges and situations that could not have been foreseen. This is very similar to the clinical practice: acting on unsolved problems is part of a physician’s role. We are trained to manage new situations, even when there are no established pathways, and adapt to new disease spectra. If there is no established treatment, then we will work to find an appropriate treatment. These challenges during my leadership journey – whether as president of the WMA or as chief at Karolinska University Hospital – have been very similar to those experienced in clinical practice.”

***Over the past year, what do you consider to be your most important leadership achievements as WMA president (2021–2022)?***

I hope that I have been a role model for doctors, showing that it is possible to take on a high leadership position even at a mid-career level with children at home. Although I have had limited travel opportunities

during the coronavirus disease 2019 (COVID-19) pandemic, I believe that in-person meetings – combined with virtual meetings – are essential. However, working solely with in-person meetings can exclude some individuals from their active participation and ultimately result in homogenous, not heterogenous, team dynamics. The WMA must promote diversity, as it is core for our mandate to represent all physicians across the world. After all, it is a duty for all leaders to pave the way for the next generation of individuals who follow our paths.

Over the years, I have been honoured to gain many organisational contacts across our WMA meetings and initiatives. Specifically, I have prioritised our close work with the World Veterinarian Association to engage in dialogue and explore potential collaborations around the One Health concept. After all, humans do not live in a vacuum separated from animals or our surrounding environment. Joint collaborations are key to mitigate the risk of zoonotic disease transmission (including COVID-19) and antimicrobial resistance.

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

Over the next five years, I recommend that our WMA community promote continued dialogue on three key priorities. First, we can collaborate on initiatives that expand community access to health care services. To succeed, we need to work with political priorities, invest in technological advancements, and promote innovative solutions that can scale up health care service

delivery. Second, we must address the global health workforce shortage with new solutions, which do not lie in increasing work schedules for the current workforce. We should still focus on and promote expanded training for medical, nursing, and other allied health professions across all countries. The workforce needs to be utilised in a sustainable way through new and user-friendly technologies and robust systems that provide more cost-efficient patient care services. Third, we should promote patient-provider relationships in shared decision-making, where community members can easily access health care services, and that physicians can regularly

their health status and outcomes. Physicians can empower community members to select healthy lifestyle behaviours and prioritise their personal and their family's health and well-being.

***As WMA Past President, what do you hope to accomplish over the next six months, and how can WMA leadership help support these efforts?***

Over the next six months, I hope to establish a collaboration with the United Nations and participate in the development of their Code of Conduct for Medicine. The International Code of Medical Ethics is a valuable resource that offers

a well-established framework for future initiatives focusing on medical ethics. I am also excited to be able to contribute to the upcoming revisions of the Declaration of Helsinki. And foremost, as chief at the Karolinska University Hospital, I am proud to form part of international health care and work to cure tomorrow what cannot be cured today.

***Heidi Stensmyren, MD, MBA***  
*Past President (2021-2022)*

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## Interview with the WMA President



*Osahon Enabulele*

For this interview, Dr. Osahon Enabulele, the WMA President, highlights his academic background and training as well as his perspectives on upcoming WMA activities with Dr. Helena Chapman, the *WMJ* Editor-in- Chief

***Please share a brief summary of your professional education and training in Medicine.***

I had my university education at the School of Medicine of the University of Benin, Benin City, Edo State, Nigeria, from where I received my Bachelor's degree in Medicine and Surgery (M.B.,B.S.). I completed my internship training at the University of Benin Teaching Hospital (UBTH), after which I participated in the National Youth Service Corps (NYSC) program at the Comprehensive Health Centre in Ikot Effiong-Otop Okoyong (Odukpani Local Government Area) in Cross River State, Nigeria. From 2000-2006, I pursued my postgraduate medical training in Family Medicine at the University of Benin Teaching Hospital, and I obtained a Masters' degree in Health Planning and Management (MHPM) from the University of Benin in 2001. In 2007, I obtained the Fellowship of the West African College of Physicians (WACP), following which I was

appointed as a Consultant Family Physician at the University of Benin Teaching Hospital.

Currently, I hold the position of Consultant Special Grade I at the University of Benin Teaching Hospital in Benin City, Edo State, Nigeria. In this position, which is recognized as the peak of the public service career for physicians employed in public hospitals in Nigeria, I undertake the delivery of clinical care services as a Chief Consultant Family Physician. Additionally, I teach and train Family Medicine residents in the Department of Family Medicine, as well as supervise the Part II Fellowship dissertations of resident doctors completing training in Family Medicine. I am also a Senior Lecturer at the University of Benin, where I teach Family Medicine courses to undergraduate medical students. I have special interests in primary health care, health systems development, family violence and violence in health, health legislation, professional leadership, and medical ethics.

In the West African College of Physician's (WACP) Faculty of Family Medicine, I serve as a Postgraduate Examiner and Reviewer. I also serve as a member of its Accreditation Team, which is responsible for inspecting health institutions and recommending suitable institutions for postgraduate training in Family Medicine.

***What has motivated you to pursue this WMA leadership position, and what national and international impacts do you hope to achieve over your tenure?***

My decision to serve as the World Medical Association (WMA) President is centred on a strong resolve, passion, and commitment to work with my colleagues around the world to engender better health care

across the globe. I am also dedicated to the promotion of the ideals and objectives of the WMA, particularly as it concerns Universal Health Coverage, physician well-being, physicians' rights and autonomy, patients' rights, and medical ethics. While I admit that the WMA has made remarkable strides since its formation over 75 years ago, it is evident that a lot can still be done to make the WMA derive significant dividends from the enormous potentials at its disposal. These efforts will make the WMA resonate loudly amongst its members.

Over the past 30 years, I have served as a medical leader, health activist, and civil and human rights activist in Nigeria, across Africa, and internationally. I have had an extensive history of commitment to our noble medical profession, my physician colleagues, my patients, and citizens, through advocacy efforts to strengthen health systems and promote universal access to care, promote physicians' and medical students' well-being, rights, and autonomy, and support patients' rights and citizens' health-related human rights.

When I served as President of the Nigerian Medical Association (2012-2014), I humbly recall our leadership's strategic efforts that led to the historic reversal of a state government's dismissal of 788 physicians in public service who courageously spoke out about their working conditions and ethical obligations. Our leadership's leading role in the public campaigns for a national legislative framework for health in Nigeria, largely contributed to the enactment of Nigeria's first comprehensive national legal framework for the development, management, and regulation of Nigeria's national health system (National Health Act).

Leveraging on these experiences in medical leadership and health activism, I hope to have a positive impact through active advocacy that shall help enhance the fortunes of WMA, improve physicians' well-being, protect physicians' rights and autonomy, engender better health systems and Universal Health Coverage, protect patients' rights, and improve adherence to ethical standards by practitioners.

***Aside from the ongoing COVID-19 pandemic, what are the three greatest challenges that physicians currently face in Africa, and how can the WMA address these challenges?***

First, physicians practising across the 54 countries in Africa have always faced the challenge of uncompetitive wages. This situation is exacerbated by the socio-economic challenges facing most African countries, including inflation that further undermines wages. Most times, physicians are not granted the needed incentives, amenities, and other fringe benefits that could ameliorate this economic challenge. Sadly, some African governments owe physicians several months of legitimately earned wages without repercussions for those governments.

Second, with rising societal and family expectations and the alluring working conditions and remunerative schemes available in high-income countries, physicians have migrated to practise in these high-income countries (*brain drain*), with negative impacts on African health systems and health outcomes. Other limitations include: 1) inappropriate and unsatisfactory workplace conditions; 2) limited postgraduate career development pathways; 3) lack of government's recognition of professional worth linked to underutilization of available expertise and skills; 4) general lack of standard health infrastructure, working equipment, technology, and training facilities; and 5) workplace

insecurity and with physicians having experiences of violent assaults, abuse, and kidnapping.

Third, there is increasing physician burnout which is traceable to the unmitigated brain drain of physicians and other health professionals from Africa to high-income countries. This effect has led to the African health workforce shortage, with negative impact on physicians' physical and mental well-being, increased patients' waiting time, and negative impacts on health care service delivery and health outcomes.

In my inaugural presidential address at the WMA General Assembly, which was held in Berlin, Germany, on 7 October 2022, I cited that the World Health Organization (WHO) estimated that the world will need about 18-20 million more health professionals to attain Universal Health Coverage by 2030. Africa, which is characterised with about 25% of the global disease burden and 3% of the global health workforce, is greatly affected by the health workforce shortage. This challenge is therefore one that demands urgent attention and resolution.

Moving forward, the WMA can address these challenges through strident advocacy and engagement of the various African governments and Ministries of Health, as well as strengthening the capacity of its constituent members. Also, African governments that place little value on their physicians should be encouraged to show greater political commitment to health. These steps can help bring economic prosperity to countries as well as help physicians receive appropriate recognition, competitive wages, safe working conditions, and adequate incentives in health care service delivery.

Furthermore, WMA leadership plans

to develop a comprehensive action plan as well as sensitise physicians on the physician's pledge and the Revised International Code of Medical Ethics, as next steps for global physicians.

***Which ongoing or new WMA initiatives are top priorities for this year, and how can the WMA support collaborations across national medical associations?***

For this upcoming year, we will prioritise the ongoing efforts to revise the Declaration of Helsinki and promote the Revised International Code of Medical Ethics. We will support several new initiatives that focus on expanding research, reducing violence against physicians and other health professionals, addressing challenges related to brain drain, physician burn out, and working conditions, and improving commitment to Universal Health Coverage. Specifically, we will promote the "Meet the WMA President Roundtable: Leadership and Educational Platform", which aims to build the capacity of physicians and our constituent members, as well as help to improve the knowledge, understanding, and perception of the WMA. We will also support the WMA Global Healthcare Excellence Award Scheme, which highlights rewarding excellence, sense of duty, diligence, and uncommon commitment of physicians and other health advocates. To implement these initiatives, the WMA will require the support and collaboration of National Medical Associations and use existing WMA platforms to encourage collaborative work.

***As WMA President, what do you hope to accomplish over the next few months, and how can WMA leadership help support these efforts?***

In addition to the previously described initiatives, I would like to use every opportunity of my professional engagements around the world to

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showcase these important WMA initiatives. Recently, I was happy to receive favourable responses from my engagements with the Swedish Medical Association in Stockholm and the Japan Medical Association in Fukuoka and Tokyo.

With the support of the WMA leadership and constituent members,

I am certain that we will achieve our objectives for these proposed initiatives, including the “Meet the WMA President Roundtable: Leadership and Educational Platform” and the WMA Global Healthcare Excellence Award Scheme. I am convinced that by working together, we shall succeed in our collective tasks and aspirations, to the glory of the WMA, our physicians,

our patients, and health systems across the world.

***Osabon Enabulele, M.B.B.S., MHPM,  
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## Canada's Medically Administered Death (MAD) Expansion for Mental Illness: Targeting the Most Vulnerable



*K. Sonu Gaind*



*Ramona Coelho*



*Trudo Lemmens*



*John Maher*

In the previous issue of the *World Medical Journal*, we described the evolution and expansion of Canada's assisted dying laws [1]. The Medical Assistance in Dying (MAiD) law was initially implemented in 2016, through Bill C-14, for those whose deaths were reasonably foreseeable. The law was expanded in 2021 through Bill C-7, to what is more appropriately termed Medically Assisted Death (MAD), for those living with disabilities who otherwise could have years or decades left to live. This article focuses in more detail on the pending expansion of MAD by March 2023, to those suffering solely from mental illness.

### Background

Canada's assisted dying policies have been shaped by two pieces of

legislation that arose following two different court cases. The first was a Supreme Court case, and the second was a trial level Quebec Superior Court decision. Bill C-14, which was enacted in 2016 in response to the 2015 Supreme Court *Carter v Canada AG* ruling, created a legislative exemption to the absolute prohibition of assisted suicide and euthanasia, allowing it in specific circumstances surrounding the end-of-life context [2,3]. MAiD became legal for mentally capable adults who had an irremediable disease that caused enduring and intolerable suffering that could not be alleviated under conditions the person found acceptable, with an "irreversible decline of capability", and when their natural death was "reasonably foreseeable".

Comments in the *Carter* case indicate that the Supreme Court did not have MAiD for mental illness in mind when declaring that the Canadian parliament had to carve out an exemption to the absolute prohibition of assisted suicide and euthanasia. Rejecting "evidence from Belgium" related to problematic developments in that country, which was invoked to justify the prohibition, the Court stated that "high-profile cases of assistance in dying in Belgium...would not fall within the parameters suggested in these reasons, such as euthanasia for minors or persons with psychiatric disorders or minor medical conditions" [3].

From the beginning, however, there was pressure to allow MAiD for mental illness. Advocates of expansive MAiD and some politicians invoked the Supreme Court's reference to intolerable physical or *psychological* suffering to argue MAiD for mental illness had to be permitted. They felt emboldened in their view by an Alberta Court of Appeal ruling in the case of a woman with conversion disorder, or unexplained physical symptoms, who received permission to have MAiD for this condition [4]. The Alberta court invoked the broad Supreme Court parameters and reference to psychological suffering in a case that was decided prior to the enactment of Canada's first law (the Supreme Court had given parliament one year to develop new legislation), and the Court explicitly mentioned that it was ruling in the absence of legislation. Experts later argued that it was unlikely that this woman had received proper specialized care for this highly unusual mental disorder with psychosomatic components [5]. Early on, this case revealed challenges of offering MAiD for mental illness.



Notwithstanding this case and pressure on the government to provide broad access to MAiD, including for mental illness, the first law restricted MAiD to just those who were approaching their natural death. Persons with mental illness were not excluded from accessing MAiD, but could do so only, as all others, if their death was “reasonably foreseeable” [2]. Bill C-7 was enacted in 2021 in response to the 2019 Quebec provincial superior court Truchon ruling [6,7]. This case, as the Carter case, involved plaintiffs with neurodegenerative medical conditions including ALS and spinal stenosis. Of note, neither the 2015 *Carter* case nor the 2019 Truchon case involved individuals suffering from mental illness.

Following the single Quebec judge ruling in the 2019 Truchon case that having a foreseeable natural death to qualify for MAiD was overly restrictive, the federal government chose not to appeal that lower court ruling [8]. With some academics and advocacy organizations pushing for expansion, the stage was set for MAiD (now more appropriately termed MAD once extended outside near end-of-life conditions) being provided to those living with disabilities, as well as people with any chronic health condition and concurrent life suffering, and potentially to people who had a mental illness as their sole medical condition.

The initial draft legislation of Bill C-7 introduced by the federal government in 2020, in response to the Truchon ruling, specifically excluded sole mental illness conditions from qualifying for MAD [9]. At the time, federal Justice Minister Lametti acknowledged that “*there is a greater risk of providing medical assistance in dying to people whose condition could improve*” and that “*in the case of some mental illnesses, the desire to die is itself a symptom of the illness, which makes*

*it particularly difficult to determine whether the individual’s request is truly voluntary*” [10].

For the year following the introduction of the initial draft C-7 legislation, the federal Minister of Justice maintained assurances that Bill C-7 would safeguard against MAD for sole mental illness, and it was in this context that a significant majority of the House of Commons voted in favour of the bill. However, during subsequent Senate consultations, advocates for MAD expansion pressed to allow MAD for mental illness. Despite neither *Carter* nor *Truchon* involving cases of mental illness, one legal scholar (and prominent advocate for expansive MAiD) claimed in her Senate testimony that direction to implement MAD for mental illness had already been provided by the courts in these cases. She suggested that the only question that remained was “how to implement MAiD for a mental disorder as the sole underlying medical condition rather than whether, as the whether question has already been answered by the courts in *Carter* and *Truchon*” [11]. It bears repeating that the Supreme Court explicitly stated in *Carter* that it was not providing a ruling about MAiD for mental illness, and that, furthermore, the *Truchon* decision was a Quebec lower court decision, not binding on other courts. In fact the Quebec lower court was criticized for its treatment of evidence [8].

Following its separate, limited consultation process during its discussion of the Bill, the Senate went against the Justice Minister’s prior assurance. Citing input from the Canadian Psychiatric Association (discussed further below), a psychiatrist senator formally proposed that the Senate recommend a “sunset clause” to Bill C-7’s mental illness exclusion [12]. In February 2021 the Senate accepted this proposal and recommended

that the exclusion of mental illness from MAD be subject to a time-limited “sunset clause” to ensure that MAD for sole mental illness would be provided following expiry of the clause [13]. On 23 February 2021, the federal government radically and unexpectedly changed course to ensure fast adoption of the Bill. It renounced its previous assurances that MAD would not be provided for sole mental illness, and altered Bill C-7 to add a sunset clause to make MAD for mental illness available within two years. On 17 March 2021, the sunset clause was adopted, following a single three-hour debate on the sunset clause in the House of Commons that was foreshortened by a closure motion by the governing Liberal party. The parliamentary vote occurred largely along party lines. What happened to allow for this dramatic change in trajectory?

## Expert Consultations Informing Bill C-14 and Bill C-7

With the passage of the sunset clause in 2021, the Canadian government committed to providing MAD for sole mental illness by March 2023, without further deliberation on *whether* psychiatric euthanasia *should, or could, safely be provided*. The only question remaining was *how* MAD for mental illness *would be implemented*. In such circumstances, one might expect that a thorough and deliberative process involving appropriate evidence-based, clinically oriented input from expert medical consultations and extensive consultation with patient advocacy groups focusing on mental health had already been undertaken to inform the decision to provide MAD for mental illness. Disturbingly, it had not.

In fact, the Canadian government and parliament could have studied detailed reports on the evidence which the government had itself commissioned recently. The initial law (Bill C-14)

required the government to report back to parliament within five years of its enactment, in reference to three controversial areas which were not part of the initial legislation: MAiD for sole reasons of mental illness, MAiD for mature minors, and MAiD on the basis of advanced requests.

The government commissioned three reports from the Council of Canadian Academies (CCA), an independent scientific organization mandated to provide evidence-based assessments on important policy issues. The CCA established three large expert subcommittees to study the evidence related to these issues, each of which produced substantial reports (Note: Authors KSG and TL sat on two different CCA subcommittees) [14-16]. The report of the CCA subcommittee studying mental illness documents the significant challenges, evidentiary gaps, and controversial applications of MAiD for mental illness in the few countries that have allowed this practice. Following the launch of this neutral report, a small number of members of the original CCA committee set up another panel, the Halifax Group, and issued sweeping recommendations for legalizing MAiD for mental illness [17]. In response, another group, the Expert Advisory Group on MAiD (including KSG and TL) issued a report making contrasting recommendations and pointing to the lack of evidence supporting the recommendations of the Halifax Group [18].

Normally, one would have expected an expansive and inclusive discussion of the evidence by the Canadian parliament prior to expanding the law especially regarding the evidence in the commissioned CCA reports on MAiD. However, this discussion did not happen. Why not?

## Lack of Critical Engagement of Professional Organizations

Prior to Bill C-14 in 2016, the Canadian Medical Association (CMA)'s Committee on Ethics was consistent with affirming its stance against euthanasia and assisted suicide. This was clearly stated in its CMA policy in 2007 and upheld in 2013. However, when the CMA intervened in the Supreme Court of Canada Carter case in 2015, it declared that it would change its ethical policy based on the conclusions of the justices [19]. Hence, the CMA conceded and changed its policy to support physician assisted suicide and euthanasia subject only to legal constraints. It is remarkable that an association whose duty it is to safeguard the ethical practice of medicine would afford primacy to political dictates and legal fiat. Many physicians questioned where this left our collective Hippocratic oaths in the equation.

Following the Truchon ruling in 2019, the Canadian Psychiatric Association (CPA) leadership adopted and published a position statement on assisted dying in 2020, despite not having engaged in any member, expert or stakeholder consultations since 2018, well prior to the Truchon ruling [20]. The CPA position statement failed to reference any mental illness literature or scientific evidence, it did not raise any concerns about mental illness related suicidality, and it failed to mention the importance of suicide prevention. Instead of evidence or expert clinical input, and despite it being known that the basis of MAD in Canada was intended to be for medical conditions that could be assessed as being irremediable (or could be predicted to not improve), the CPA statement presented an ideological opinion that patients with a psychiatric illness "should have

*available the same options regarding MAiD as available to all patients*" without having any consideration of whether or how irremediability of mental illness could be assessed [21].

During Bill C-7 consultations on mental illness and death, Canada's national psychiatric association, the CPA, never once mentioned suicide, mental illness related suicide risk or the importance of suicide prevention. Indeed, no variant of the word "suicide" was used in any context in any of its written or oral submissions during the consultation process prior to Bill C-7. Despite maintaining that it had no official position on MAD for mental illness, CPA leadership publicly described any proposed exclusion of MAD for sole mental illness as "discriminatory", "unconstitutional", "inaccurate", "stigmatizing", "vague", "arbitrary" and "overbroad" [22-26]. CPA's repeated claims of it being "discriminatory" not to provide MAD for mental illness, while failing to issue known evidence-based cautions regarding suicidality and mental illness, was reasonably interpreted by politicians and the public as the CPA strongly supporting MAD for mental illness [13].

## Abdication of Expert Medical and Professional Roles

Medical experts and professional medical associations are provided platforms by virtue of their medical expertise. In return, it is expected that such experts and associations contribute that expertise to policy discussions. Through Canada's rapidly expanding assisted dying expansion from MAiD to MAD, key associations have failed to provide medical evidence-based cautions about risks of expansion, and instead have ceded professional responsibility and accepted whatever political winds were shaping policy agendas. One could even argue that

they thereby renounced the rationale that underpins professional self-regulation, which is a key component of Canada's health care system; namely, that the professions play a critical role in the development and enforcement of professional standards because of their unique expertise [27].

In Canada, provincial regulatory bodies are charged with ensuring physicians adhere to accepted standards of care. Instead, many have supported and reinforced a patient's priority of access to timely MAD over patient safety and protections and emphasized "effective referral" requirements for MAD [28]. Death wishes can arise from many sources: because of undiagnosed depression, because a patient's pain has been inadequately treated, because the patient is a victim of abuse or trauma, and other factors that may take time to address but importantly, could potentially be addressed and mitigated. To ignore these factors and simply refer a patient for MAD in these cases would be viewed by many physicians as an abandonment of their duty. To demand that a physician refer a patient for MAD in such situations, even if the physician believes it is counter to the best interest and health of the patient and that the patient would likely improve with adequate treatment, is to demand that the physician act against their professional obligations to provide required care [27].

Furthermore, there are no current evidence-based or established standards of care for determining irremediability of mental illness for the purposes of MAD assessments. Despite that, provincial regulatory bodies have focused attention on forcing physicians to make an "effective referral" for any MAD request a patient makes [28].

This creates a remarkable situation of physicians being forced by regulatory bodies to engage in a fundamental

change in medical practice and provide "effective referrals" for services potentially leading to patient deaths for which there are no standards of care. In this regard, the Canadian Association for Suicide Prevention (CASP) has pointed out that forcing "effective referral" in such situations could force psychiatrists to commit professional misconduct. CASP wrote, *"With respect to psychiatrists not willing to provide MAiD being required to make a referral of a patient to a psychiatrist that will, does this not leave the referring psychiatrist open to committing professionally unethical behaviour? If the grounds for not providing MAiD is not based on morality but rather on the fact that there is insufficient evidence to support MAiD as a medical treatment, then the requirement to refer a patient forces them to commit professionally unethical behaviour"* [29].

Perhaps the most explicit abdication of providing expert input came during 2020 Senate hearings, when the association that might be expected to be the most ardent at offering evidence-based input related to suicide risks and suicide prevention declined to do so. When asked whether the CPA agreed with other experts, including the CCA, who cautioned that there was insufficient knowledge about mental disorders and that more research was needed before providing MAD for mental illness, and whether that warranted precautions, the CPA president responded, *"I guess that is a legislative decision"* [30].

We offer this flow of events as a cautionary tale for other countries where the leadership of professional associations may adopt an ideological position at odds with scientific evidence and the established ethics of their membership. In Canada, the furtherance of an ideological agenda in support of facilitated suicide has been served by professional associations that should, as a matter of principle

and duty, have been the most adamant advocates of demanding that national policy be based on relevant evidence-based clinical input rather than ideology.

Others have written how, on policy discussions of medically administered death, "neutrality by organized medicine is neither neutral nor appropriate" [31,32]. We agree and believe that in this debate, medical organizations have a moral and professional obligation to provide expert evidence-based input, rather than taking refuge behind a false neutrality. Indeed, in many ways the 1948 Declaration of Geneva, the 1949 International Code of Medical Ethics, and the very foundation of the World Medical Association were prompted by the realization that medical bodies had a moral and professional obligation to provide responsible input to societal policies, and not simply sit on the sidelines [33].

## After Bill C-7, the Road to March 2023 Implementation

Following the passage of the sunset clause in 2021 pre-ordaining MAD for mental illness by 2023, debate has continued within the mental health field regarding the appropriateness and safety of providing MAD for mental illness. There is longstanding evidence in the few European countries that allow psychiatric euthanasia that unresolved psychosocial life suffering such as poverty and loneliness fuels many requests [34]; that unlike assisted dying for terminal conditions, which follows a 50:50 male to female ratio, twice as many women as men are euthanized for mental illness [35]; and that those seeking psychiatric euthanasia could not be differentiated from suicidal individuals [14,36]. The 2:1 female to male ratio of psychiatric euthanasia is particularly concerning, since it parallels the 2:1 female to male ratio of those who attempt



suicide, most of whom do not end up dying by suicide, and most do not try again. This raises obvious concerns of whether psychiatric euthanasia risks converting transient suicidality in some to a permanent death by MAD, which is 100% lethal.

Furthermore, evidence continues to grow of individuals with physical disabilities in Canada being driven to MAD for poverty and life suffering [37]. In some cases, individuals have explicitly and publicly declared they had sought MAD due to poverty and not due to illness related suffering [38]. Research has also recently begun to reveal the very real concern about potential non-assisted suicide contagion as the result of normalization of euthanasia in the Benelux countries, especially for women [39].

Despite these developments creating reasonable grounds for caution, some groups favouring MAD expansion continued to advocate for further expansion. Dying With Dignity Canada labelled it a “myth” that *“vulnerable populations can be eligible for MAiD if they are suffering from inadequate social supports”*, and claimed *“No one can receive MAiD on the basis of inadequate housing, disability supports, or home care”* [40]. In contrast, others such as the Expert Advisory Group on MAiD pointed out that, *“This ignores common sense and established scientific evidence that one’s cumulative suffering is not just from illness but often fueled by life distress”* [41]. Furthermore, the tragic reality is that MAD has already been provided to individuals in Canada who themselves acknowledged they had been driven to seek and receive MAD because of their psychosocial suffering.

## Expert Panel Process

After the abrupt inclusion of mental illness as a basis for MAD in the new legislation, the government appointed an expert panel to design

protocols, guidelines, and safeguards to allow for the planned March 2023 implementation. The panel began its work late in 2021. It should be noted that the purpose of this panel was not to consider whether it was appropriate, safe or supported by evidence to allow provision of MAD for mental illness. It bears repeating that parliament had committed to including MAD for mental illness prior to a parliamentary study of the evidence commissioned from the CCA by the government for this very purpose.

The members of this new advisory panel were specifically selected and tasked to provide instructions on how to implement MAD for mental illness, not whether this expansion should occur. The chair of this panel (who also sat on the Halifax Group advocating for expansion) and several members of the committee were recognized as being among the most ardent public advocates for legalizing MAD for mental illness [42].

The panel’s report was delivered in May 2022 [43]. Rather than suggesting any additional safeguards the panel report opined that *“no further legislative safeguards are required”* prior to providing MAD for mental illness. In terms of protocols and guidelines, the panel report failed to deliver any specific guidance, evidence or standards, instead stating that, *“It is not possible to provide fixed rules for how many treatment attempts, how many kinds of treatments, and over what period of time”* treatment should be tried prior to providing death by MAD for mental illness. Surprisingly to many who work in the field of suicide prevention, the panel acknowledged that MAD for mental illness and suicide could be the same thing yet claimed Canadian society had already made a choice that psychiatric euthanasia should be provided anyway. The panel stated that *“society is making an ethical choice to enable certain people*

*to receive MAiD...regardless of whether MAiD and suicide are considered to be distinct or not”*.

To be clear, no public policy consultations have shown broad societal support to provide MAD to suicidal individuals. The majority of Canadians are likely unaware that the law will allow persons with mental illness to refuse treatments, or even social interventions, and still qualify for MAD, no matter the potential likelihood of routine interventions reducing their suffering or their desire for suicide. It is remarkable in this context that the federal expert panel recommended no further legislative safeguards, while concurrently acknowledging suicide and psychiatric euthanasia could be the same.

The 2017-2018 CCA Expert Panel process, which reviewed evidence for nearly a year and a half and had all 14 panelists sign off on the final report, openly identified several significant key unresolved issues related to MAD for mental illness. In contrast, the 2022 government appointed expert panel had two of the initial 12 members resign. These two panelists publicly wrote about their concerns regarding both the panel process, and its outcome and recommendations. This included the panel’s health care ethicist, who wrote in an editorial after he resigned that *“in good conscience”* he could not sign off on the report, and cited process flaws including *“the chair being a nationally-recognized, strong advocate”* for MAD for mental illness and a *“lack of reporting transparency regarding dissenting opinions or views”* [42]. The patient consumer advocate with lived experience who resigned also wrote publicly, and testified in parliamentary hearings, that she had been shamed by other panelists when she attempted to introduce cautions about MAD for mental illness and described the panel process as flawed and rushed. She stated that *“panel*



members simply did not want to put forward any serious safeguards that would require the law to change" [44], and she also raised concerns that her disability accommodation requests had not been addressed.

Others on the panel defended the panel process. Some testified in parliamentary hearings that parliamentarians should not give credence to those expressing cautions about MAD who were not also MAD providers themselves, going as far as suggesting committee members may have been given "false information" by others "who are not involved in MAiD assessment or provision" [45]. Such suggestions implied that testimony or evidence provided by conscientious objectors, or by those who expressed concerns but were not MAD providers, should be rejected or discounted because those individuals themselves were not already participating in Canada's MAD assessments. Some witnesses in the hearings raised concerns about the hearing process reflecting political theater rather than true consultation, with some parliamentarians being dismissive of testimony provided by those expressing any cautions about MAD expansion and preventing them from responding to questions [46]. In one case, presumably in an attempt to question the credibility of an international invited witness, the senator who proposed the sunset clause insisted on short answers to a series of questions, including whether that witness was trained as a MAiD assessor, and when the answer was "no", asked how many MAiD assessments that witness had done, and proceeded to ask if the witness knew of specific drug dosing protocols used to administer MAiD in Canada. This particular witness was an expert consultation-liaison psychiatrist from Ireland, where assisted suicide is not legal and there are no assisted suicide

cases, assessments or assessors [47].

## A Rare Area of Agreement

The path towards MAD expansion for mental illness in Canada has been a controversial one. There has not been any consensus in the psychiatric profession that MAD for mental illness should be provided, and many have expressed concern that Canada's policies have not been driven by, or have even actively ignored, medical evidence [48,49]. One perhaps unexpected area of agreement between those cautioning against expansion of MAD for mental illness, and some groups advocating for it has been the area of predicting irremediability of mental illness.

Those cautioning against MAD expansion for mental illness cite evidence, consistent with the CCA Expert Panel findings, that predictions of irremediability in individual cases of mental illness cannot be made [14]. As Toronto's Centre for Addiction and Mental Health concluded in its report on mental illness and assisted dying, *"At any point in time it may appear that an individual is not responding to any interventions – that their illness is currently irremediable – but it is not possible to determine with any certainty the course of this individual's illness. There is simply not enough evidence available in the mental health field at this time for clinicians to ascertain whether a particular individual has an irremediable mental illness"* [50]. Given the high degree of concurrent psychosocial suffering in those with mental illness, others have also raised concerns about what is potentially being considered irremediable: is it illness symptoms, social suffering, or other issues which could potentially be remediated, and are fueling MAD for mental illness requests [51].

Evidence continues to demonstrate the

inability to make accurate or scientific predictions of irremediability in cases of mental illness. In fact, science tells us the chance of such predictions being right amounts to chance or less. A recent review demonstrated that even when using precision modeling only 47% of "irremediability" predictions for depression ended up being correct, which is worse than flipping a coin [52].

Consistent with this evidence, even the Quebec psychiatrist association (Association des Médecins Psychiatres du Québec, AMPQ) that supported MAD for mental illness acknowledged that predictions of irremediability cannot be made in mental illness. In a 2020 report co-authored by the same 2022 federal panel chair, the AMPQ acknowledged that, *"It is possible that a person who has recourse to MAiD could have regained the desire to live at some point in the future"* [53]. The authors then go on to say that determining eligibility for MAD would be an *"ethical question each and every time"* an individual assessor evaluates a request (instead of an evidence-based or accurate medical assessment determining that nothing more can be done, or that recovery or reduced suffering is not possible).

The risks of proceeding with an absence of standards or evidence are obvious, and have already been shown in Canada. As mentioned, prior to Bill C-14 in 2016, a 58-year-old woman suffering from conversion disorder (unexplained physical symptoms) was granted access to MAD by the Court of Appeal in the province of Alberta [4]. Public court filings show that the psychiatrist, who assessed the situation as being irremediable in this case, also opined that the patient had capacity to consent. However, the psychiatrist never saw or spoke with the patient, and remarkably, the psychiatrist's opinions were based only on a chart

review [4].

It cannot be denied that we lack the evidence, protocols, and medical standards for predicting irremediability in individual cases of mental illness. Canada's assisted dying laws did not anticipate or stipulate that determining irremediability was to be each individual assessor's "ethical" decision. Such a glaring lack of standards leaves it open to the vagaries of guesswork and individual assessors' ideologies, which risks providing a sanction of death under the guise of a faulty scientific assessment for many who would have otherwise recovered.

## Conclusion and the Path Forward

The road to MAD expansion for sole mental illness in Canada has not been paved with evidence or expected expert medical association guidance. As discussed in our previous piece in this journal, providing assisted death to vulnerable and disabled individuals who are not otherwise dying represents a fundamental shift not just in medical practice, but also reflects a sea change in public policy and the social contract. As assisted dying in Canada is increasingly being provided to those outside end-of-life situations, this sea change includes what many would have previously thought unimaginable – a normalization of death as a treatment for otherwise resolvable social suffering.

The scope of this normalization is becoming increasingly apparent. When asked in the House of Commons about concerns regarding "the vulnerable falling through the cracks and serious abuses under the MAiD regime", the Prime Minister defended Canada's MAD expansion [54]. Minister of Justice Lametti, who in 2020 expressed concern about the risk of providing MAD to patients who could improve, now seems to believe we should make it easier for

those ambivalent about suicide to die. When asked about concerns raised regarding Canada's pending MAD expansion to mental illness, he defended the expansion and suggested that MAD "*provides a more humane way for [people with mental illness] to make a decision*" about dying when "*for physical reasons and possibly mental reasons, [they] can't make that choice themselves to do it themselves*" [55]. The Minister also said in the same interview that the Supreme Court had confirmed in the Carter decision a 'right to suicide' in Canada, even though no such explicit recognition can be found in the decision. These remarkable statements, coming from one of the key persons entrusted with responsibly implementing Canada's assisted dying laws, were shocking to many of us who understand the purpose and premise of suicide prevention.

Regardless of the various opinions regarding assisted dying, it is clear that neither evidence nor expert input has informed Canada's pending expansion of MAD for sole mental illness, and that Canada's MAD expansion policies are being fueled by a remarkable ignorance of the principles of suicide prevention versus suicide facilitation. This raises troubling questions for society in general but particularly for the medical community. If a psychiatry trainee failed to ask about suicidality during their clinical licensure examinations, they would likely not pass their exams. If a psychiatrist failed to ask about suicidality and a depressed patient subsequently harmed themselves, that psychiatrist could face medico-legal and professional consequences. When a national psychiatric organization fails to mention suicide risks associated with mental illness during public consultations on persons with mental illness seeking death, and national policies are shaped accordingly, what consequences ensue?

Canada is now in the remarkable position of being a few short months away from providing MAD to non-dying individuals suffering solely from mental illness, despite an ongoing absence of standards or evidence-based guidance. We cannot honestly or scientifically assess these vulnerable individuals as having irremediable conditions, we cannot predict who could and would improve, and we cannot distinguish suicidal individuals who would benefit from suicide prevention from those seeking facilitated suicide by physician. We are planning to provide this because of a "sunset clause" based on less evidence than required for introducing any sleeping pill [56], and following our federal panel's guidance that provides fewer guidelines than required to bake a cake [57].

Canada's rapid MAD expansion is understandably garnering worldwide attention. We are hopeful that outlining the process so far followed in Canada assists other jurisdictions in following more deliberative and evidence-informed processes in shaping their policies.

Within Canada, many mental health leaders and psychiatrists are understandably concerned, regardless of personal views on assisted dying in general, about the continued vacuum regarding basic standards related to our imminently pending fundamental shift of psychiatric practice. There are increasing public calls to defer the planned March 2023 MAD for mental illness expansion to allow for further deliberative review [58], including a formal "Call to Action" issued 10 November 2022 calling on mental health and policy leaders to advocate for delay of any potential implementation of MAD for mental illness pending proper evidence-based review and recommendations [59]. This Call has been endorsed by the Canadian Association for Suicide

Prevention, and on 1 December 2022, the Association of Chairs of Psychiatry in Canada joined in calling for a delay and issued a statement that more time is needed to develop standards of care before allowing MAD for mental illness [60]. However, at the time of writing, we remain uncertain which patients, as of 1 March 2023, we will engage in established suicide prevention programs, and which may be referred instead for assisted suicide.

The primary author, Dr. K. Sonu, is a former president of the Canadian Psychiatric Association, testified before Bill C-14 and Bill C-7 parliamentary committees, and acted as an expert for the former Minister of Justice/ Attorney General of Canada in the Truchon and Lamb cases. Along with co-author Dr. John Maher, he has initiated a Call to Action to defer Canada's planned March 2023 expansion of MAD for mental illness (<https://www.socpsych.org/calltoaction>).

Addendum: Following the submission of this piece on 15 December 2022, the federal government announced that it would delay the March 2023 implementation of MAD for mental illness. However, although it did not indicate the length of such delay, it emphasized that it still intends to introduce MAD for mental illness.

## References

1. Coelho R, Gaiind K, Lemmens T, Maher J. Normalizing death as "treatment" in Canada: whose suicides do we prevent, and whose do we abet? *World Medical Journal*. 2022;70(3):27-35.
2. Parliament of Canada. Bill C-14 [Internet]. 2016 [cited 2022 Nov 27]. Available from: <https://www.parl.ca/DocumentViewer/en/42-1/bill/C-14/royal-assent>
3. Supreme Court of Canada. Carter vs. Canada (Attorney General) [Internet]. 2015 [cited 2022 Oct 4]. Available from: <https://scc-csc.lexum.com/scc-csc/scc-csc/en/item/14637/index.do>
4. Alberta Court of Appeal. Canada (Attorney General) vs E.F. 155 [Internet]. 2016 [cited 2022 Nov 27]. Available from: <https://www.canlii.org/en/ab/abca/doc/2016/2016abca155/2016abca155.html>
5. Hurwitz T. Euthanasia in mental illness: a four part series – Part I: the case of EF.J Ethics in Mental Health. 2018;10:1-10.
6. Parliament of Canada. Bill C-7 [Internet]. 2021 [cited 2022 Nov 27]. Available from: <https://parl.ca/DocumentViewer/en/43-2/bill/C-7/royal-assent>
7. Cour Supérieure. Truchon c. Procureur General du Canada, 2019 QCCS 3792. 2019 [cited 2022 Nov 27]. Available from: <https://www.canlii.org/en/qc/qccs/doc/2019/2019qccs3792/2019qccs3792.html>
8. Lemmens T, Jacobs L. The latest medical assistance in dying decision needs to be appealed: here's why. *The Conversation* [Internet]. 2019 [cited 2022 Oct 5]. Available from: <https://the-conversation.com/the-latest-medical-assistance-in-dying-decision-needs-to-be-appealed-heres-why-124955>
9. Parliament of Canada. Bill C-7 First Reading [Internet]. CTV News. 2020 [cited 2022 Nov 27]. Available from: <https://parl.ca/DocumentViewer/en/43-2/bill/C-7/first-reading>
10. Open Parliament Canada. Statement by David Lametti on criminal code [Internet]. 2020 [cited 2022 Oct 30]. Available from: <https://openparliament.ca/debates/2020/2/26/david-lametti-1/only/>
11. Parliament of Canada. Senate Hearings Testimony [Internet]. 2020 [cited 2022 Nov 29]. Available from: <https://sencanada.ca/en/Content/Sen/Committee/432/LCJC/03EV-55073-E>
12. Senate of Canada. Bill to Amend Criminal Code – Third Reading – Debate [Internet]. 2021 [cited 2022 Nov 29]. Available from: <https://sencanada.ca/en/senators/kutcher-stan/interventions/553870/11>
13. Bryden J. Senators amend MAID bill to put 18-month time limit on mental illness exclusion [Internet]. 2021 [cited 2022 Oct 30]. Available from: <https://www.ctvnews.ca/politics/senators-amend-maid-bill-to-put-18-month-time-limit-on-mental-illness-exclusion-1.5302151>
14. Council of Canadian Academies. The state of knowledge on medical assistance in dying where a mental disorder is the sole underlying medical condition. Ottawa (ON): The Expert Panel Working Group on MAID where a Mental Disorder is the Sole Underlying Medical Condition [Internet]. 2018 [cited 2022 Nov 27]. Available from: <https://cca-reports.ca/reports/medical-assistance-in-dying/>
15. Council of Canadian Academies. The state of knowledge on advance requests for medical assistance in dying. 2018 [cited 2022 Nov 27]. Available from:



- <https://cca-reports.ca/reports/medical-assistance-in-dying/>
16. Council of Canadian Academies. The state of knowledge on medical assistance in dying for mature minors. 2018 [cited 2022 Nov 27]. Available from: <https://cca-reports.ca/reports/medical-assistance-in-dying/>
  17. The Halifax Group; Andrew MK, Chandler JA, Downie J, Flood CMM, Frank A, Gupta M, et al. MAiD Legislation at a Crossroads: Persons with Mental Disorders as their Sole Underlying Medical Condition. IRPP Report. 2020. Available from: <https://digitalcommons.schulichlaw.dal.ca/reports/14/>
  18. Expert Advisory Group on MAiD. Canada at a Crossroads: Recommendations on Medical Assistance in Dying and Persons with a Mental Disorder – An Evidence-based Critique of the Halifax Group IRPP Report. [Internet]. 2020 [cited 2022 Oct 30]. Available from: <https://www.eagmaid.org/report>
  19. Murphy S. Canadian Medical Association and euthanasia and assisted suicide in Canada: Critical review of CMA approach to changes in policy and law [Internet]. 2018 [cited 2021 Apr 11]. Available from: <https://www.consciencelaws.org/background/procedures/assist029-01.aspx>
  20. Chaimowitz G, Freeland A, Neilson G, Mathew N, Rasasingham R, Snelgrove N, et al. Medical Assistance in Dying Position Statement. Canadian Psychiatric Association. 2020;65(9):664-7.
  21. Gaiind KS. What does “irremediability” in mental illness mean? Can J Psychiatry. 2020;65(9):604-6.
  22. Gaiind S. Professional medical associations failing to provide evidence in MAiD debate [Internet]. The Hamilton Spectator. 2021 [cited 2022 Oct 4]. Available from: <https://www.thespec.com/opinion/contributors/2021/03/09/professional-medical-associations-failing-to-provide-evidence-in-maid-debate.html>
  23. Canadian Psychiatric Association. Brief to the Standing Committee on Justice and Human Rights Bill C-7 [Internet]. 2020 [cited 2022 Oct 4]. Available from: <https://www.cpa-apc.org/wp-content/uploads/Brief-JUST-12-Nov-2020-FIN.pdf>
  24. Canadian Psychiatric Association. Brief to the Senate of Canada Standing Committee on Legal and Constitutional Affairs Bill C-7 [Internet]. 2020 [cited 2022 Oct 4]. Available from: <https://www.cpa-apc.org/wp-content/uploads/Brief-LCJC-23-Nov-2020-FIN.pdf>
  25. Canadian Psychiatric Association. Letter from CPA, to the Hon Mobina Jaffer, Chair, Standing Committee on Legal and Constitutional Affairs [Internet]. 2021 [cited 2022 Oct 4]. Available from: [https://sencanada.ca/Content/Sen/Committee/432/LCJC/briefs/CanadianPsychiatricAssociation\\_e.pdf](https://sencanada.ca/Content/Sen/Committee/432/LCJC/briefs/CanadianPsychiatricAssociation_e.pdf)
  26. Senate of Canada. 43rd Parliament, 2nd Session testimony [Internet]. 2020 [cited 2022 Oct 4]. Available from: <https://sencanada.ca/en/Content/Sen/Committee/432/LCJC/02ev-55071-e>
  27. Lemmens T, Shariff M, Herx L. How Bill C-7 will sacrifice the medical profession's standard of care [Internet]. Policy Options. 2021 [cited 2022 Oct 4]. Available from: <https://policyoptions.irpp.org/magazines/february-2021/how-bill-c7-will-sacrifice-the-medical-professions-standard-of-care/>
  28. College of Physicians and Surgeons of Ontario. CPSO's effective referral requirement affirmed by Superior Court [Internet]. 2018 [cited 2022 Nov 27]. Available from: <https://www.cpso.on.ca/News/News-Articles/CPSOs-Effective-Referral-Requirement-Affirmed-by>
  29. Krausert S. Letter re:CPA's Discussion Paper on Medical Assistance in Dying (“MAiD”) [Internet]. 2021 [cited 2022 Nov 30]. Available from: <https://static1.squarespace.com/static/5ec97e1c4215f502-6a674116/t/619bc64ac4828-15740760931/16375987950-70/Letter+to+CPA+re++Discussion+Paper+on+MAiD+%282021+11+20%29.pdf>
  30. Senate of Canada. 43rd Parliament, 2nd Session Testimony [Internet]. 2020 [cited 2022 Oct 4]. Available from: <https://sencanada.ca/en/Content/Sen/Committee/432/LCJC/02ev-55071-e>
  31. Sulmasey D, Finlay I, Fitzgerald F, Foley K, Payne R, Siegler M. Physician-assisted suicide: why neutrality by organized medicine is neither neutral nor appropriate. J Gen Intern Med. 2018;33(8):1394-9.
  32. Kheriaty A. First, take no stand: on assisted suicide, the medical profession ducks behind



- "neutrality" [Internet]. The New Atlantis. 2019. [cited 2022 Nov 27]. Available from: <https://www.thenewatlantis.com/publications/first-take-no-stand>
33. Murphy S, Coelho R, Violette PD, Goligher EC, Lau T, Rutledge Harding S. The WMA and the Foundations of Medical Practice: Declaration of Geneva (1948), International Code of Medical Ethics. World Medical Journal. 2020;66(3):2-8.
  34. Verhofstadt M, Thienpont L, Peters G. When unbearable suffering incites psychiatric patients to request euthanasia: qualitative study. British Journal of Psychiatry. 2017;211(4):238-45.
  35. Kim SYH, De Vries RG, Petee JR. Euthanasia and assisted suicide of patients with psychiatric disorders in the Netherlands 2011 to 2014. JAMA Psychiatry. 2016;73(4):362-8.
  36. Nicolini M, Gastmans C, Kim SYH. Psychiatric euthanasia, suicide, and the role of gender. British Journal of Psychiatry. 2022;220(1):10-3.
  37. Cribb R, Buckley C, Gribilas T. Michael's Choice [Internet]. Toronto Star. 2022 [cited 2022 Nov 10] Available from: <https://www.thestar.com/2022/assisted-death.html>
  38. Hoyer B. Winnipeg woman who chose to die with medical assistance said struggle for home care help led to decision [Internet]. CBC News. 2022 [cited 2022 Nov 27]. Available from: <https://www.cbc.ca/news/canada/manitoba/sathya-dharma-kovac-als-medical-assistance-in-death-1.6605754>
  39. Jones DA. Euthanasia, assisted suicide, and suicide rates in Europe. J Ethics in Mental Health. 2022;11:1-35.
  40. Dying with Dignity Canada. Myth: Vulnerable populations can be eligible for MAiD if they are suffering from inadequate social supports, including housing [Internet]. 2022. [cited 2022 Nov 27]. Available from: <https://www.dyingwithdignity.ca/advocacy/myths-and-facts-medical-assistance-in-dying-maid-in-canada/>
  41. Expert Advisory Group on MAiD. EAG Brief to Parliamentary Committee on MAiD [Internet]. 2022 [cited 2022 Nov 27]. Available from: <https://www.eagmaid.org/brief>
  42. Kirby, J. MAiD expert panel recommendations are inadequate, contends panel member who resigned [Internet]. Hill Times. 2022 [cited 2022 Nov 27]. Available from: <https://www.hilltimes.com/story/2022/06/16/maid-expert-panel-recommendations-are-inadequate-contends-panel-member-who-resigned/270807/>
  43. Health Canada. Final Report of the Expert Panel on MAiD and Mental Illness [Internet]. 2022 [cited 2022 Nov 27]. Available from: <https://www.canada.ca/en/health-canada/news/2022/05/final-report-of-the-expert-panel-on-maid-and-mental-illness.html>
  44. Cohen, E. Why I resigned from the federal expert panel on medical assistance in dying [Internet]. Globe and Mail. 2022. [cited 2022 Nov 27]. Available from: <https://www.theglobeandmail.com/opinion/article-expert-panel-maid-mental-illness/>
  45. Parliament of Canada. AMAD Parliamentary Committee Meeting Testimony [Internet]. 2022 [cited 2022 Nov 27]. Available from: <https://parl.ca/DocumentViewer/en/44-1/AMAD/meeting-16/evidence>
  46. Campbell I. Committee treating MAiD as 'beneficial solution to all forms of suffering' despite 'deeply problematic reports of its use', warn disability advocates [Internet]. Hill Times. 2022 [cited 2022 Nov 23] Available from: <https://www.hilltimes.com/story/2022/11/23/committee-treating-maid-as-beneficial-solution-to-all-forms-of-suffering-despite-deeply-problematic-reports-of-its-use-warn-disability-advocates/356442/>
  47. Parliament of Canada. AMAD Parliamentary Committee Meeting Testimony [Internet]. 2022 [cited 2022 Nov 27]. Available from: <https://parl.ca/DocumentViewer/en/44-1/AMAD/meeting-18/evidence>
  48. Gaiand KS. Medical assistance in dying for mental illness ignores safeguards for vulnerable people [Internet]. The Conversation. 2020 [cited 2022 Nov 27]. Available from: <https://bit.ly/3OJwUTv>
  49. Sinyor M. Lack of evidence-based medicine in debate around new MAiD law should concern Canadians [Internet]. CBC News Opinion. 2021 [cited 2022 Nov 27]. Available from: <https://www.cbc.ca/news/opinion/opinion-medical-assistance-in-dying-maid-1.5934977>
  50. Centre for Addiction and Mental Health. Policy Advice on Medical Assistance in Dying and Mental Illness [Internet]. 2017

- [cited 2022 Oct 4]. Available from: <https://www.camh.ca/-/media/files/pdfs---public-policy-submissions/camh-position-on-mi-maid-oct2017-pdf.pdf>
51. Gaiind KS. The next national apology: future Canadians might regret expansion of medically assisted dying laws [Internet]. The Conversation. 2021 [cited 2022 Nov 27]. Available from: <https://bit.ly/3F4cotz>
  52. Nicolini ME, Jardas E, Zarate CA, Gastmans C, Kim SYH. Irremediability in psychiatric euthanasia: examining the objective standard. *Psychological Medicine*. 2022;1-19.
  53. Association des Médecins Psychiatres du Québec. AMPQ Discussion Paper on Access to Medical Assistance in Dying for People with Mental Disorders [Internet]. AMPQ. 2020. [cited 2022 Nov 27]. Available from: <https://ampq.org/wp-content/uploads/2020/12/mpqdcreflexion-ammennfinal.pdf>
  54. MSN News. Trudeau defends MAID legislation after Conservative MP points to 'serious abuses' [Internet]. 2022 [cited 2022 Nov 27]. Available from: <https://www.msn.com/en-ca/news/world/trudeau-defends-maid-legislation-after-conservative-mp-points-to-serious-abuses/vi-AAxAtLt?category=foryou>
  55. Raj A. Is Canada extending Medical Assistance in Dying too quickly [Internet]? Toronto Star. 2022 [cited 2022 Nov 18]. Available from: <https://www.thestar.com/podcasts/its-political/2022/11/18/is-canada-expanding-medical-assistance-in-dying-too-quickly.html>
  56. Health Canada. How drugs are reviewed in Canada [Internet]. 2015 [cited 2022 Nov 27]. Available from: <https://www.canada.ca/en/health-canada/services/drugs-health-products/drug-products/fact-sheets/drugs-reviewed-canada.html>
  57. Food Network. How to bake a cake: a step-by-step guide [Internet]. 2015 [cited 2022 Nov 27]. Available from: <https://www.foodnetwork.com/how-to/articles/how-to-bake-a-cake-a-step-by-step-guide>
  58. Star Editorial Board. We need to put the brakes on expanding access to MAiD [Internet]. Toronto Star. 2022 [cited 2022 Nov 25]. Available from: <https://www.thestar.com/opinion/editorials/2022/11/25/medically-assisted-deaths.html?rf>
  59. Society for Canadian Psychiatry. Call to Action [Internet]. 2022 [cited 2022 Nov 27]. Available from: <https://www.socpsych.org/calltoaction>
  60. Anderssen E. Medical experts call on government to delay expansion of MAID for mental illness [Internet]. Globe and Mail. 2022 [cited 2022 Dec 1]. Available from: <https://www.theglobeandmail.com/canada/article-maid-delay-mental-illness-medical-experts/>

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## 2022 Monkeypox Outbreak - Teachings from Concurrent Public Health Emergencies



*Priscilla Cruz*



*Caline Mattar*

As we approach the end of 2022, we find ourselves combatting two large-scale viral outbreaks simultaneously in the global health landscape. While the monkeypox outbreak has not yet reached a scale comparable to the coronavirus disease 2019 (COVID-19), close attention must be paid to its current paradigms of spread, if we are to avoid the development of another pandemic.

Monkeypox is a viral zoonosis that is very closely related to other poxes, such as the variola (smallpox), cowpox, and vaccinia viruses [1,2]. This virus was first isolated in 1958 from a colony of captive monkeys at a research institute in Copenhagen [3]. However, monkeypox was not isolated from a human case until 1970, when an infant fell ill with a pox-like disease in an area of the Democratic Republic

of the Congo (DRC) that had already eradicated smallpox [4]. Since then, two clades of the monkeypox virus have become endemic in tropical forest regions in Africa, with Clade I dominating in Central Africa and Clade II dominating in West Africa [2]. Human-to-human transmission can occur through close physical contact with an infected person or recently contaminated object, as well as less commonly through contact with respiratory droplets. Prior to 2022, outbreaks of monkeypox outside of its two endemic regions have largely been small and self-contained, primarily caused by tourist or medical travel from one of these two regions [5].

### Current State of Monkeypox

Since the beginning of this outbreak in May 2022, the burden of reported monkeypox cases has shifted from Europe and Africa towards the Americas. As the focus of reporting and resource allocation shifts similarly, it is important to recognize potential flaws in the metrics associated with this outbreak. Monkeypox cases in Africa are likely to be severely underreported due to a combination of limited testing resources, access to health care, and ongoing fear of acquiring COVID-19 in health facilities in some regions [6].

On 23 July 2022, Dr. Tedros Adhanom Ghebreyesus, the Director-General of the World Health Organization (WHO), formally declared this year's monkeypox outbreak to be a public health emergency of international concern (PHEIC) [7]. This decision came after over 16,000 cases had been reported across 75 countries globally, on the grounds of rapid and novel spread as well as a determined risk to human health. Perhaps more notably,

this decision came despite the WHO Emergency Committee not reaching a consensus on the subject – a notable digression from the protocol of previously declared PHEICs [8].

Regardless, after this declaration, reported case rates peaked and have since begun to decline globally [9]. As of 9 December 2022, 82,474 cases have been confirmed, with over 82,474 of those coming from regions that historically had not reported cases of monkeypox [10]. Though case rates are currently declining, it is important to consider the socioeconomic factors that have played into the demographics of this outbreak as we seek to prevent future spikes.

### Disparities in Diagnostics and Treatment

In the Global North, the declining monkeypox case rates may be attributed in part to increased public health campaigning around vaccination in at-risk communities [11]. In these regions, communities of men who have sex with men (MSM) have been the most affected by this outbreak, with social stigma around sexual transmission contributing to miseducation and underdiagnosis [12,13]. Members of this community who are also human immunodeficiency virus (HIV)-positive find themselves at greater risk of infection and complications, particularly within otherwise marginalised communities due to racial or ethnic backgrounds [12,14].

African countries involved in this outbreak, such as the DRC and Nigeria, also find themselves at a similar disadvantage in reporting and resource acquisition. Testing has been extremely limited in these areas,



with the Africa Centres for Disease Control and Prevention recognizing that their statistics are underreporting the extent of the outbreak on the continent [6]. Combined with similarly limited preventative and treatment options, this has led to over 100 reported monkeypox deaths in the DRC this year [15]. As of October 2022, no monkeypox vaccines are widely available in these affected regions, with the majority of currently available vaccine doses remaining in the United States and Europe [6,16].

## Management Options

For most mild-to-moderate cases of monkeypox, symptoms will resolve merely with supportive care. Additionally, there are several therapeutic options for management of more severe cases. Smallpox antiviral therapies such as tecovirimat and brincidofovir may be used with some success, although these treatments have not undergone extensive studies for monkeypox usage yet [17,18]. Where available, these options are particularly indicated in patients who may have a higher risk for developing severe complications, such as children and the immunocompromised.

In resource-rich areas, the primary management strategy used to control this outbreak has been vaccination [16]. Information from existing literature on the efficacy and effectiveness of existing pox vaccine formulations against monkeypox infection is currently minimal and at times contradictory [17,19]. However, historical smallpox vaccines have been shown to produce monkeypox-neutralising antibodies, and third-generation modified vaccinia Ankara (MVA) vaccines have become more widely available for use in the Americas and Europe during this outbreak [16].

## Conclusion

The monkeypox outbreak is not the first time that stigma and inequities have caused an infectious epidemic to go out of control, and it will likely not be the last. High-income countries are well resourced to combat a potential pox outbreak, whereas the areas that are hardest hit continue to struggle without any access to vaccines or treatments. As a global medical community, we must advocate for a more equitable distribution of resources, surveillance, and workforce. If we have learned anything from the COVID-19 pandemic, it should be that early prevention and management is crucial in preventing disease spread – and that the consequences of not doing so can be catastrophic.

## References

1. Kaler J, Hussain A, Flores G, Kheiri S, Desrosiers D. Monkeypox: a comprehensive review of transmission, pathogenesis, and manifestation. *Cureus*. 2022;14(7):e26531.
2. Kumar N, Acharya A, Gendelman HE, Byrareddy SN. The 2022 outbreak and the pathobiology of the monkeypox virus. *J Autoimmun*. 2022;131:102855.
3. Magnus P von, Andersen EK, Petersen KB, Birch-Andersen A. A pox-like disease in cynomolgus monkeys. *Acta Pathol Microbiol Scand*. 1959;46(2):156-76.
4. Ladnyj ID, Ziegler P, Kima E. A human infection caused by monkeypox virus in Basankusu Territory, Democratic Republic of the Congo. *Bull World Health Organ*. 1972;46(5):593-7.
5. World Health Organization. Monkeypox [Internet]. 2022 [cited 2022 Nov 15]. Available from: <https://www.who.int/news-room/fact-sheets/detail/monkeypox>
6. Al Katanty D, Mcallister E. In Africa's monkeypox outbreak, sickness and death go undetected [Internet]. Reuters. 2022 [cited 2022 Nov 15]. Available from: <https://www.reuters.com/business/healthcare-pharmaceuticals/africas-monkeypox-outbreak-sickness-death-go-undetected-2022-10-31/>
7. World Health Organization. WHO Director-General's statement at the press conference following IHR Emergency Committee regarding the multi-country outbreak of monkeypox - 23 July 2022 [Internet]. 2022 [cited 2022 Nov 15]. Available from: <https://www.who.int/director-general/speeches/detail/who-director-general-s-statement-on-the-press-conference-following-IHR-emergency-committee-regarding-the-multi-country-outbreak-of-monkeypox--23-july-2022>
8. Wenham C, Eccleston-Turner M. Monkeypox as a PHEIC: implications for global health governance. *Lancet*. 2023;400(10369):2169-71.
9. World Health Organization. 2022 Monkeypox outbreak: global trends [Internet]. 2022 [cited 2022 Nov 15]. Available from: [https://worldhealthorg.shinyapps.io/mpx\\_global/](https://worldhealthorg.shinyapps.io/mpx_global/)
10. U.S. Centers for Disease Control and Prevention. 2022 Monkeypox outbreak global map [Internet]. 2022 [cited 2022 Dec 12]. Available from: <https://www.cdc.gov/poxvirus/monkeypox/>



[response/2022/world-map.html](https://www.who.int/emergencies/diseases/nipw/monkeypox/response/2022/world-map.html)

11. Reardon S. What does the future look like for monkeypox? *Nature*. 2022;610(7931):250-2.
12. Morland S. Monkeypox apathy will "condemn people to suffer," Latin American activists say [Internet]. Reuters. 2022 [cited 2022 Nov 15]. Available from: <https://www.reuters.com/world/americas/monkeypox-apaty-will-condemn-people-suffer-latin-american-activists-say-2022-09-01/>
13. World Health Organization. Perceptions of monkeypox from those most at risk: men who have sex with men having multiple sexual partners [Internet]. 2022 [cited 2022 Nov 15]. Available from: <https://www.who.int/europe/news/item/26-08-2022-perceptions-of-monkeypox-from-those-most-at-risk--men-who-have-sex-with-men-having-multiple-sexual-partners>
14. Miller MJ, Cash-Goldwasser S, Marx GE, Schrodtt CA, Kimball A, Padgett K, et al. Severe monkeypox in hospitalized patients — United States, August 10–October 10, 2022. *MMWR Morb Mortal Wkly Rep*. 2022;71(44):1412-7.
15. Africa Centres for Disease Control and Prevention. Outbreak Brief 11: Monkeypox in Africa Union Member States [Internet]. 2022 [cited 2022 Nov 15]. Available from: <https://africacdc.org/disease-outbreak/outbreak-brief-11-monkeypox-in-africa-union-member-states/>
16. Rigby J, Grover N. Analysis: Experts question reliance on monkeypox vaccine with little data, short supply [Internet]. Reuters. 2022 [cited 2022 Nov 15]. Available from: <https://www.reuters.com/business/healthcare-pharmaceuticals/experts-question-reliance-monkeypox-vaccine-with-little-data-short-supply-2022-08-23/>
17. Rizk JG, Lippi G, Henry BM, Forthal DN, Rizk Y. Prevention and treatment of monkeypox. *Drugs*. 2022;82(9):957-63.
18. Adler H, Gould S, Hine P, Snell LB, Wong W, Houlihan CF, et al. Clinical features and management of human monkeypox: a retrospective observational study in the UK. *Lancet Infect Dis*. 2022;22(8):1153-62.
19. Zaack LM, Lamers MM, Verstrepen BE, Bestebroer TM, van Royen ME, Götz H, et al. Low levels of monkeypox virus neutralizing antibodies after MVA-BN vaccination in healthy individuals. *Nat Med*. 2022.

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## Towards the Ocean-Blue Nautical Medicine



Fang Xudong

The ocean is the cradle where life on the Earth occurs. The total area of the ocean is about 361 million square kilometres, which is 1.4 times larger than the land area [1]. The total volume of seawater is about 1.37 billion cubic kilometres, accounting for more than 97% of the total water volume of the Earth [2]. The ocean, which plays an enormous role in regulating the environment for human survival and global climate change, is a fundamental part of the global life-support system. So far, only 5% of the ocean floor has been explored by humans, and the rest remains unknown. It is far more difficult for human beings to “catch the giant turtles in the sea” than to “bring down the moon from the ninth heaven”, so the study of nautical medicine has a long way to go.

### Importance of the Ocean to Human Beings

The importance of the ocean to human beings is mainly reflected in the following aspects: 1) It is the cradle of life in our planet, and evidence shows that life began in the ocean; 2) It receives and absorbs most of the solar energy reaching the surface of the Earth; 3) It indirectly affects the climate through material and energy exchanges with the atmosphere; 4) It

regulates temperature; 5) Its chemical, mineral, power, and biological resources have brought great influence on human production and life; 6) The surface of seawater evaporates and absorbs heat, where seawater flows and spreads heat throughout the whole water body through waves, tides, and currents; 7) It is a source of water vapour over land; and 8) As the ocean continues to absorb carbon dioxide and acidifies the ocean water, the influx of fresh water from melting glaciers could change climate-driven ocean currents. This article describes nautical medicine and marine scientific research, which further stresses the importance of oceans to human beings.

### Role of Nautical Medicine in Chinese History

Nautical medicine, which has been conducted in China for over 600 years, is a comprehensive subject which includes medical research on issues under seafaring conditions. Between 1405 and 1433, the Chinese navigator Zheng He led a large fleet on seven explorations of vast regions, known as the “West Oceans”. These explorations opened the world-renowned Maritime Silk Road, which depended on the advanced nautical medicine in China. These efforts were demonstrated through three specific observations.

*Value of simple nautical preventive medicine.* Zheng He’s fleet was equipped with a strong team of doctors, with an average of one skilled doctor for every 150 crew members. They had sufficient food, fresh water, and traditional Chinese medicine, which formed an effective system of preventive medicine. During these voyages, cabin hygiene, personal and diet hygiene, and living habits all

helped prevent the spread of scurvy, “ship fever”, enteric diseases, and other infectious diseases.

*Complete logistical support system for navigation.* Zheng He’s fleet had additional support ships, such as grain vessels, water supply vessels, overseas “support bases”, and procurement of supplies along the route. On the ships, nutritional resources aimed to meet crew members’ needs over several months. Fresh vegetables (e.g. cabbage, turnips, bamboo shoots), fruit (e.g. limes, lemons, oranges, grapefruit, coconuts), grains (e.g. flour, millet, rice), and legumes (e.g. soybeans) were bought on each route. They also raised bean sprouts on the ships for additional vitamins.

*Geographical research conducted by medical experts.* The medical experts of Zheng He’s fleet completed the earliest nautical medical and geographical research by applying their profound knowledge with sea travel. For example, the *Records of Countries in the Western Oceans*, by authors Yingya Shenglan and Xingcha Shenglan, offered a detailed travel account to countries, regions, and seaports. It also provided information reported along the voyage about mountains and rivers, weather and climate, geography and surrounding environments, local customs and diets, hygiene practices and clothing, and epidemic diseases.

### Major Research and Development of Nautical Medicine

#### (1) Marine Biological Research

Research of marine ecosystems is an important field of nautical medicine. The ocean is the largest “treasure trove of resources” on the Earth, accounting for more than 65%

natural resources and 200,000 marine species on our planet [3]. The wide variety of marine microorganisms has an inestimable influence on the future development of medicine. For example, cephalosporin antibiotics, which are derived from the marine fungus *Cephalosporium acremonium*, have become the main drugs for the prevention and treatment of infectious diseases across the world. As the research and development of marine drugs is flourishing worldwide, the total annual market demand is expected to exceed US \$100 billion. Great progress has been made from the basic research of marine natural products and bioactive substances to the biotechnology of marine medicine and traditional Chinese medicine. These advancements also include the research and development of crustacean resources and the large-scale cultivation of genetically modified marine species and medicinal microalgae.

Marine drugs have shown unique efficacy and research prospects in the drug development of major harmful diseases such as tumours, viral infections, and cardiovascular and cerebrovascular diseases. For example, omega-3 fatty acids in fish oil have the effects of preventing and managing cardiovascular disease, as well as anti-inflammatory, anti-cancer, and immunity enhancement. Research has shown that active substances from shark cartilage can block tumour angiogenesis. Additional studies demonstrate marine biotoxins, with high bioactivity and unique pharmacological effects, can serve as resources for biological medicines, such as antibiotics, anticancer agents, hemolysis agents, anticoagulants, sedatives, anti-radiation, and anti-aging medicines.

## (2) Diving and Hyperbaric Oxygenation Medicine

The high-pressure underwater environment is key for future ocean development, especially as we better understand the physiology of diving and hyperbaric oxygenation medicine. In recent years, the capabilities of diving operations across various countries have developed steadily. For example, the maximum effective depth of conventional air diving is around 60m, and the depth of helium-oxygen saturation diving operation can reach 150-200m or 300-350m. The depth of laboratory simulation reaches 675m, and the depth of deep-sea training is about 450m.

In recent years, Chinese researchers have contributed to scientific advancements on high pressure physiology, helium-oxygen diving physiology, and submarine rescue and physiology. Also, in-depth studies have been conducted on neurological, circulatory, respiratory, endocrine, and other physiological functions, including blood biochemical indices and histopathological changes, laying a foundation for future research toward kilometre depth dives.

## (3) Nautical Diseases

Ongoing research on nautical diseases includes the protection against low-dose, long-term nuclear radiation, ergonomics of ships, man-machine environment sciences, food and housing resources of crew members, impacts of electromagnetism on humans, and physical, chemical, and biological impacts of ship cabins and air on humans. For example, motion sickness refers to car, air, sea, space motion or simulator sickness. Females may be more susceptible to motion sickness than males, and the incidence rate varies greatly with different motion environments. Chinese researchers have contributed

to advancing the scientific knowledge base within this field, including the development of several effective anti-motion sickness drugs and training systems.

## (4) Nautical Psychology

Nautical psychology incorporates the study of the psychological phenomena of seafarers who participate in all types of navigation activities. It is essential to closely examine the health and well-being of crew members by conducting psychological assessments, identifying the psychological values for completing challenging navigation tasks, and supporting clinical management for diagnosed mental health problems. The special environmental conditions of marine operations – recognized as a relatively closed environment, high temperature, high humidity, and high-intensity operation – requires continuous improvement in the technical elements and psychological health of crew members. Also, such workplace stressors can increase their risk of experiencing psychological imbalance and other mental health challenges.

To explore the relationship between seafarers' illness and mental fatigue during voyages, Chinese researchers analysed blood hormone levels to estimate the incidence of their illness during the voyages by examining their psychological state before, during, and after these voyages. Results showed that the adverse mental factors of seafarers affected their immunity, as an important observation linked with the rising incidence of nautical diseases.

## Conclusion

China represents a country with a vast maritime territory, with access to long coastlines and seas. Clinicians and researchers in nautical

medicine can promote the value of scientific research on the blue ocean and national priorities to maintain human and marine ecosystem health. As colleagues, we can work and make progress together as we better understand, care for, and protect the ocean in efforts to live in harmony with nature.

## References

1. NOAA Ocean Exploration. How much of the ocean has been explored? [Internet]. n.d. [cited 2022 Oct 1]. Available from: <https://oceanexplorer.noaa.gov/facts/explored.html>
2. World Bank Blogs. 7 things you may not know about water [Internet]. 2013 [cited 2022 Oct 1]. Available from: [https://blogs.worldbank.org/opendata/7-things-you-may-not-know-](https://blogs.worldbank.org/opendata/7-things-you-may-not-know-about-water)
3. National Geographic. Sustainable Earth: Oceans [Internet]. n.d. [cited 2022 Oct 1]. Available from: <https://www.national-geographic.com/environment/article/oceans>

[about-water](#)

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## WMA Members Share Reflections about One Health Day 2022



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The One Health concept highlights the intricate links between the health of humans, animals, and the environment and showcases the need for transdisciplinary collaborations to address complex global health challenges [1]. These emerging risks affect the delicate balance within the ecosystem, including the harmful effects of air pollution, extreme temperatures, vector-borne disease transmission, and potential zoonotic transmission on health. One Health Day (<https://onehealthday.com/onehealthday>) is commemorated on November 3, and individuals and groups across the world organize various campaigns to increase awareness of the One Health concept through events, media releases, and social media campaigns. This international health day was established in 2016, with support from the One Health Initiative, One Health Commission, and the One Health Platform, to highlight

the One Health concept, promote the need to leverage expertise across disciplines to solve emerging health risks, and share a list of community activities on a global map.

The World Health Organization (WHO) reported 13 urgent health needs – including climate action, infectious disease preparedness, improving scientific communication, and increasing access to health care services and medications – that should be prioritized as we approach the deadlines of the 2030 Agenda for Sustainable Development [2]. According to the WHO, 12.6 million premature deaths each year due to living or residing in unhealthy environments, and thus the intricate links of humans, animals, and the environment cannot be overlooked [3]. The operational definition of One Health includes 4Cs – collaboration, communication, cooperation, and capacity building – as well as

important links to diverse rural, urban, and mobile communities among society and ensured inclusivity, equity, and access to health care services [1].

Upon reflection of the One Health concept, our global community can better understand that all 17 Sustainable Development Goals (SDGs) – not just SDG 3 as good health and wellbeing – are related to links between human, animal, and environmental health. *The One Health Joint Plan of Action (2022–2026)*, which was launched in October 2022, provides a global framework that facilitates collective prevention and response efforts to address emerging health threats [4]. Global leaders can incorporate the One Health concept in their decision-making activities, which can guide the development of innovative educational programs and policies that ensure sustainable action for a healthy planet. In this article, physicians from 12 countries – Brazil,

Dominican Republic, Germany, Italy, Japan, Myanmar, Nigeria, Philippines, Republic of Korea, Spain, Trinidad and Tobago, and United Kingdom – highlighted insightful reflections about One Health Day activities across their countries.



## Brazil

Brazil, the largest country in South America with an estimated 209 million residents, has experienced unique health challenges, including socioeconomic inequalities that influence access to health care services, deforestation impacting wildlife preservation and biodiversity, wildfires and air pollution, and vector-borne disease transmission. In 2007, the Wildlife Conservation Society held the “One World, One Health” Symposium in Brasilia, marking the inaugural discussion about direct links between environmental destruction as well as wild animals as reservoirs for disease spread [5]. With increased global interactions and observed effects of climate change, health professionals should understand and apply the One Health concept in their daily clinical and public health responsibilities.

Over the past decade, the Brazilian health system has recognized these challenges and has helped lead several national initiatives that promote the One Health concept. First, leaders within the Brazilian health system have developed scientific conferences and workshops, prepared textbooks and publications, supported collaborations with professional associations, and provided funding of international research collaborations [5,6]. These efforts have successfully leveraged national and regional expertise and strengthened epidemiological surveillance programs. Second, the Health Surveillance System (HSS) is comprised of the Human and Animal Health Surveillance (Epidemiological

Surveillance System, ESS; Training program in Applied Epidemiology to the Services of the Unified Health System, EpiSUS; Occupational Health Surveillance, OHS) and the Environmental Health Surveillance (Agropecuary Surveillance, VIGIAGUA; Health Surveillance of Populations Exposed to Chemical Contaminants, VIGISOLO; Environmental Health Surveillance related to Natural Disasters, VIGIDESASTRES; Air Quality Monitoring Program, VIGIAR; and Sanitary Surveillance System, ANVISA) [6].

Third, the One Health Brazilian Resistance (OneBR), funded by the Bill & Melinda Gates Foundation and the Brazilian Ministry of Health, represents the first genomic database for surveillance of antimicrobial resistance across Brazilian states [7]. Finally, the development of the One Health Brasil website has provided a One Health platform – and during the coronavirus disease 2019 (COVID-19) pandemic – has fostered partnerships with three major One Health knowledge hubs – One Health Commission, One Health Initiative, and One Health Platform [8].

Furthermore, forests cover almost 50% of Brazilian landscape, which includes the Atlantic rainforest along coastal regions as well as two-thirds of the Amazon rainforest. Over the past decade, significant levels of deforestation have been observed, as a result of road construction and land clearing for livestock. Hence, two key federal regulations were developed to support environmental conservation, as an essential element to protect biodiversity, maintain the ecosystem balance, and combat the effects of climate change. First, the Brazilian Forest Code (Law No. 12.651), which was developed in 1934 and modified in 1965 and 2012, sets a framework

to protect native landscapes across the country, including requirements for some landowners to maintain forests on their properties [9]. Second, at the G20 summit, which was held in Bali in November 2022, leaders from Brazil, Democratic Republic of Congo, and Indonesia – countries that represent half of the world’s rainforests – signed the Rainforest Protection Pact to support funding for forest conservation. This robust legislation holds promise for substantial national and regional advancements to combat the climate crisis and protect the planet.



## Dominican Republic

Climate change, which is recognized as the leading health threat to our global society, will significantly affect how low-income countries develop preparedness and response measures to mitigate harmful effects on public health. Over the next two decades, health leaders estimate that climate change will be linked to 250,000 annual premature deaths from infectious (e.g. vector-borne diseases, enteric pathogens) and chronic (e.g. malnutrition, heat-related) conditions or complications [10]. By considering the One Health framework in our global health initiatives, we can identify emerging health risks and affected populations and develop novel solutions to protect population health from the effects of climate change.

The Dominican Republic (DR), an island nation with an estimated 11 million residents, has witnessed the effects of climate change due to natural and man-made phenomena. To combat these risks, national administrators and health leaders have stressed efforts to reform the health system and strengthen ongoing programs that prioritize population health and well-being. In April



2021, the Abinader Administration adopted the Decree 284-21 (Decreto 284-21), which confirmed the political commitment to reform the DR health system that supports 278 municipalities [11]. In March 2022, Ministry of Health leaders launched the *National Health Plan 2022-2032* (*Plan Nacional Decenal de Salud, PLANDES, 2022-2032*), which proposed steps to strengthen the social security program and reinforce a holistic vision of primary health care [6]. This national plan aims to expand the elements of the General Health Law 42-01 (Ley General de Salud 42-01), which was adopted by the Mejía Administration in March 2001 [11].

According to the Global Risks Report 2022, the DR is most at risk of extreme weather events, employment crises, debt crises in large economies, and digital inequality coupled with inefficient cybersecurity measures [12]. In the Americas region, an estimated 67% of health centers are in disaster-prone areas, and 24 million people have had limited access to medical care due to weak or damaged health center infrastructure over the past decade [13]. These challenges were observed in September 2022, when Hurricane Fiona directly hit the eastern region of the country, affecting the physical infrastructure (e.g. damaged bridges), leaving flooded areas, and causing electricity outages. In October 2022, a recent cholera case diagnosed in Haiti and an imported case diagnosed in the DR led to an immediate response by the DR Ministry of Health to increase public health surveillance at the border control and national health centers [14].

Since an estimated 75% of emerging human pathogens have a zoonotic origin, focus on animal health will be fundamental to reduce zoonotic disease transmission and maintain

food security and safety. For example, African swine fever appeared in the Americas after 40 years, which was officially reported in Montecristi and Sánchez Ramírez provinces in the north and central regions of the country in July 2021, and in Haiti in September 2021 [15]. This disease spread from Europe and Asia to the Americas was a significant concern for the health, agricultural, and tourism sectors.

To address these global health challenges, building sustainable policies with political commitment will be essential to strengthen disease surveillance programs, connect stakeholders in human, animal, and environmental health sectors, and prioritize health system resiliency. Academic administration and faculty should consider incorporating such global health challenges in health curricula, in order to prepare the next generation to manage emerging risks and promote population health. For example, the Universidad Católica del Cibao (UCATECI) is the first known DR institution to develop a One Health course, as part of the Master in Public Health program. In a constantly changing world, the One Health framework will offer a holistic vision to develop innovative approaches to address future risks to human, animal, and environmental health.



## Germany

Climate change – with heat waves, extreme weather events, and the spread of infectious diseases to previously unaffected regions – represents a medical emergency. For decades, scientists have observed an increase in greenhouse gas emissions and the overshooting of the so-called planetary carrying capacity limits. In 2021, the 125th German Medical Assembly, the annual conference of the German medical profession,

included a discussion about the link between climate protection and health protection, and delegates concluded that climate change was an urgent environmental challenge with significant societal and health impacts. The health and well-being of present and future generations depend on a sustainable lifestyle that protects natural resources and halts ongoing environmental degradation.

The medical profession represented by the German Medical Assembly pledged to make the health sector climate-neutral by 2030, including the operations of the German Medical Association. The health care sector, which serves a population of 82 million residents, should also prepare for the increased health care utilization of conditions caused or exacerbated by climate change. Climate protection should be integrated into the day-to-day activities of medical organisations as well as physicians' education and training. As the medical community, we recognise that it is the physician's duty to educate patients about the health effects of climate change and actively promote best practices to protect physical and mental health and well-being.



## Italy

Over the past few years, the Italian health system has adopted the One Health concept within a planetary vision to serve as a framework for its national health initiatives [16]. Italian health leaders have led three specific efforts to continue to pave the way toward effective and sustainable action that promotes population health. First, the National Health System (Sistema Sanitario Nazionale, SSN) and the National Environmental Protection System (Sistema Nazionale di Protezione Ambientale, SNPA) have prioritized the areas of informatics, chain-of-command

communication, preparedness and response training, and research. Second, recognizing the emerging risk of antimicrobial resistance due to the intersection of ecological, climatic, and anthropogenic factors, the Italian health system launched the National Action Plan on Antimicrobial Resistance (PNCAR) 2017-2020, which aligned with the WHO guidance [17]. Third, since family doctors are primarily responsible for patient care related to communicable and non-communicable diseases, they have led community initiatives that help inform local and national decisions to address climate change [18,19].

In 2022, three substantial laws that focus on health promotion and disease prevention have been implemented in Italy, including the Italian National Recovery and Resilience Plan (Piano Nazionale di Ripresa e Resilienza, NRRP) (<https://www.mef.gov.it/en/focus/The-National-Recovery-and-Resilience-Plan-NRRP/>) (Missione Salute, M-6), the National System of Health Prevention (Sistema Nazionale di Prevenzione Sanitaria, SNPS) (Law 79/22) (<https://www.inail.it/cs/internet/istituto/sistema-nazionale-per-la-prevenzione.html>), and the Re-arrangement of the Primary Health Care (Ministerial Decree 77/2022). Many educational and communication activities have promoted the use of the One Health approach among diverse disciplines to address complex environmental health topics. For example, the Local Colleges of Physicians (Ordine dei Medici e degli Odontoiatri, OMCeO), University of Modena and Reggio Emilia, and International Society of Doctors for the Environment (ISDE) promoted the One Health Bibliographic Service in Modena in October 2022, and the OMCeO of Pavia organized the OMCeO International Conference in Pavia in November 2022. Also, the

next Code of Ethics for all Italian physicians, which should be adopted in 2024, will promote the One Health approach in all professional activities.

The coronavirus disease 2019 (COVID-19) pandemic has challenged health systems worldwide – including our Italian health system – raising the need to implement and incorporate the Planetary Health and One Health paradigms to support future action [20]. Together with other WMA members, Italian physicians can collaborate to develop relevant health policies based on environmental health principles that support the primary health care [21].



## Japan

Japan is an archipelagic nation in East Asia with 126 million residents, characterized by four main islands of Hokkaido, Honshu, Shikoku and Kyushu. Since Japan is surrounded by oceans, the island is a popular tourist destination for its culture, history, and landmarks. Notably, Japanese cuisine incorporates seafood and vegetables, recognized globally for its high nutritional value that influences life expectancy.

In Japan, the history of One Health began in the small city of Fukuoka, where two influential Japanese leaders grew up together in the same neighbourhood. Dr. Yoshitake Yokokura, the past president as well as president emeritus of the Japanese Medical Association (JMA), and Dr. Isao Kurauchi, the president of the Japanese Veterinary Association (JVA), fostered a close relationship over the years. Together, they encouraged collaborations between human and veterinary medicine and promoted the One Health concept through their professional activities. Notably, in 2013, they developed an academic agreement entitled, *Agreement on the Promotion*

*of Academic Cooperation based on One Health*, which was subsequently adopted nationwide.

As these continued efforts have strengthened collaborations between physicians and veterinarians, the JMA and JVA hosted the global conference on One Health in Fukuoka in 2016. At this event, the World Veterinary Association (WVA), WMA, JMA, and JVA adopted the Fukuoka Memorandum, which ensured the four elements that: 1) promote cooperative relationships and the exchange of information aimed at preventing zoonotic disease transmission; 2) ensure the responsible use of antimicrobials in human and animal healthcare; 3) strengthen human and veterinary medical education, including understanding the One Health concept; and 4) foster national and international dialogue in order to develop innovative solutions to resolve health challenges and achieve a healthy and safe society.

The Fukuoka Prefecture and the Federation of Asian Veterinary Association (FAVA) organized the One Health International Forum 2022 (<https://one-health-fukuoka2022plusfava.com/en/index.html>) in Fukuoka from 12-13 November 2022. Using the theme, “Now and Future of One Health Practice: From Fukuoka to Asia, and the World”, this event highlighted the essential role of the One Health concept in our global health initiatives. The agenda included a lecture from Dr. Osahon Enabulele, the president of the WMA, and Dr. Rafael Laguens, the president of the WVA. During the conference, leaders opened the One Health Park (<https://www.onehealth-park.jp>) and agreed to create the FAVA office in Fukuoka. We hope that these One Health events encourage all physicians, Japanese citizens, and global citizens to learn more about the One Health



concept and appreciate the intricate links between human, animal, and environmental health.



## Myanmar

The One Health concept offers a unified strategy to enhance disease prevention and control efforts across nations. It is critical to foster equal and inclusive collaboration among doctors, veterinarians, dentists, nurses, and other allied health and environmental experts in order to promote and safeguard human, animal, and environmental health and welfare. In Myanmar, however, the military takeover has hindered disease surveillance efforts, and security forces have arrested, assaulted, and killed health professionals, branding them as enemies of the state [22].

The Myanmar health system is experiencing extreme challenges to maintain a delicate balance between human, animal, and ecosystem health. First, with limited food and unsanitary conditions, malnutrition and diarrhoea are afflicting children and the elderly. Military and security forces have stolen and destroyed medical equipment and drugs from hospitals during raids, and aid organizations were forced to stop visiting refugee camps [22]. Second, military-related fires, explosions, and landmines release smoke, ash, and gases that can affect acute and chronic respiratory health. Although landmine deployment is prohibited globally, numerous landmines were placed by Myanmar military forces in villages and farms, and bombs from Myanmar military airplanes have killed and gravely maimed individuals and animals [23].

Third, natural ecosystems as well as livestock and wildlife are affected by this military conflict, which may ultimately affect farmers' economic livelihood for animal and crop

production. Heavy metals and other harmful compounds released by the military's missiles, military equipment, and ammunition are contaminating groundwater and soil. Fourth, injuries to humans and animals remain a significant cause of death and consequence of war and conflict. These wounds frequently need surgery, and pre- and post-operative antibiotic administration is crucial to minimize infection and other complications. However, Myanmar military and security forces have interfered with clinical health services by destroying essential antibiotics and targeting health professionals who supply and transport these antimicrobial agents. These actions can hinder treatment regimens and hence increase the risk of infection, complications, and antimicrobial resistance in human and animals [22].

A global humanitarian response is crucial to address rising food shortages and provide resources for human and animal health professionals as well as other key community leaders [24]. By prioritizing the One Health concept, Myanmar citizens can advocate for strengthening health system resiliency, protecting natural environmental resources, and restoring economic independence [23].



## Nigeria

Nigeria, a country of an estimated 218 million residents, is recognized to have the largest populace in Africa and one of the top ten most populated countries in the world [25]. Noting these demographics, global health systems should promote the One Health concept, which focuses on direct interactions between humans, animals, and the environment, and channel resources towards effective disease prevention and management strategies. Over the past decade, Nigerian physicians have widely accepted One Health as a framework

for health promotion and disease prevention that can enhance society's health and well-being.

Some medical professional associations, such as the Nigerian Medical Association (NMA), Nigerian Association of Resident Doctors (NARD), and Medical Women's Association of Nigeria (MWAN), are actively involved in health promotion activities that use media platforms (e.g. billboards, newspapers, radio, television, social media) to spread health messages to the Nigerian populace. They have also conducted public fora on community streets, town halls, places of worship, open markets, playgrounds, and motor parks. To enhance health literacy, regional campaigns have disseminated educational materials in Pidgin English (creole form of English combined with words from the local language) as well as local dialects (e.g. Ibo in eastern Nigeria, Yoruba in western Nigeria, Ibani in Grand Bonny Kingdom which is in southern Nigeria).

Over the past few years, Nigerian leaders have led local and national efforts to control zoonotic disease outbreaks, such as Lassa fever, monkey pox, yellow fever, and the coronavirus disease 2019 (COVID-19). The Nigerian health system has discouraged the populace from consuming unpasteurized cow milk and eating bush meat, such as giant rats (including the cane rat or "grass cutter" in Nigeria), squirrels, antelopes, deer, and porcupine. Various Nigerian states and local governments have also enacted specific days for environmental clean-up days, where there is restricted movement (except for essential workers) to encourage residents to collect trash and beautify their surrounding environment. For example, in Rivers State (southern Nigeria), the state environmental clean-up day is the last Saturday

morning (7:00-10:00AM) of each month.

In 2019, the *National Action Plan for Health Security* (NAPHS) 2018-2023 was launched to promote the One Health concept and health security across Nigeria [26]. This is comprehensive, multi-sectoral collaboration integrates blueprints from various sources: 1) national organizations including the Regional Disease Surveillance Systems Enhancement Project (REDISSE), Nigeria Centre for Disease Control (NCDC), Federal Ministries of Health, Agriculture and Rural Development (FMARD); 2) national antimicrobial and immunization action plans; and 3) report findings (2017) from the *International Health Regulations* (IHR) and *Performance of Veterinary Services* (PVS) [26,27]. Notably, Nigeria is a leading African nation to inaugurate this robust strategic plan, recognizing that significant efforts are required to combat environmental challenges (e.g. disease outbreaks, flooding and droughts, food shortages) as a result of climate change.



## Philippines

In the Philippines, education is highly valued and prioritized in every household, and it is viewed as an indispensable legacy passed down to generations. National leaders have focused on showcasing a holistic view to health and well-being through three key initiatives, including launching the Department of Education (DepEd)'s Healthy Lifestyle Initiative, uniting public schools to promote healthy lifestyles, and strengthening the adoption of the Healthy Lifestyle Initiative across all public schools.

First, the DepEd established the DepEd Order No. 28 entitled, "*Healthy Lifestyle Initiative of DepEd*"

["Oplan Kalusugan sa DepEd (OK sa DepEd)"] in 2018, which was a nationwide initiative to strengthen health and nutrition programs at public schools. The campaign highlighted six programs: 1) School-Based Feeding Program (SBFP); 2) Medical, Dental and Nursing Services, including School Dental Health Care Program (SDHCP); 3) Water, Sanitation, and Hygiene (WASH) in Schools (WinS) Program; 4) Adolescent Reproductive Health; 5) National Drug Education Program, supported by comprehensive tobacco control; and 5) School Mental Health Program. Each school year, the One Health Week celebration showcases the DepEd programs, which aim to ensure the safety, health, and well-being of students [28,29].

Second, the DepEd's Bureau of Learner Support Services – School Health Division (BLSS-SHD) celebrated One Health Week from 6-11 September 2021. Using the theme, of "Unity for Health: Healthy Lifestyle Initiative for DepEd, Institutions, and Community" ["Bayanihan para sa Kalusugan: OK sa DepEd, sa Paaralan, at sa Tahanan"], the event aimed to emphasize how school partnerships are essential to support student health and well-being, especially adapting to changes in the educational system in a post-COVID-19 world. Each day, coordinated activities targeted these six flagship programs and created virtual activities with 1,869 elementary schools. As a result, the SBFP reached 3.5 million student learners enrolled in grades 1-6, and the WinS Program's Seal of Excellence Award 2021 recognized schools that had attained and maintained global standards for a minimum of three consecutive years [30,31].

Finally, the Departments of Education and Health commemorated One Health Week 2022 from 31 October

to 4 November 2022. Using the theme, "Strengthening of Healthy Lifestyle Initiative of DepEd in all Learning Institutions" ["Pinalakas na Oplan Kalusugan sa DepEd, Pinatatag na Healthy Learning Institutions"], the event highlighted the importance of a holistic approach of government and society in strengthening school health programs. These efforts aim to improve access to health care, provide a conducive learning environment, strengthen intersectoral linkages, and reinforce health skills and education [32].



## Republic of Korea

The Republic of Korea, a country of 51 million people, has developed its robust national health system through the central government's rapid and mandatory implementation of health policies [33]. National policymakers, who recognize the direct links between human, animal, and environmental health, have promoted the One Health concept as a new health paradigm across all sectors. However, the medical community has overlooked the One Health concept, which has impacted how physicians and other health professionals are trained in their diverse specialties.

Over the past four years, the national leaders prioritized three significant milestones that promote population health. First, for World Health Day 2018, the MoHW announced that the One Health concept would represent the overarching theme, offering the opportunity for citizens to reflect on the development of the robust national health system. Second, in 2018, the government published a *National Plan for the Management of Zoonotic Diseases, 2019-2022*, as a joint proposal of the Ministry of Health and Welfare (MoHW), Ministry of Agriculture, Food and Rural Affairs, Ministry of Environment, and many One

Health experts [34]. Finally, from 2019 to 2022, the Korean Disease Control and Prevention Agency (KDCA) and Korean Society for Zoonoses organized biannual One Health Fora, as part of a proactive response to strengthen diagnosis and management of zoonotic diseases [35].

The development of One Health policies in the Republic of Korea has been challenging, where policies are strictly focused on antimicrobial resistance and zoonotic disease transmission with limited support from the scientific literature. In order to identify One Health risks, Korean physicians should actively conduct academic research, collaborate to develop reasonable One Health policies, and advocate for the delivery of prompt health interventions that reach all citizens. Alongside medical educators, they should also help strengthen medical education by developing innovative classroom lectures, clinical courses, and conferences, where young doctors can learn about the One Health concept and collaborate on multidisciplinary teams to address emerging health risks [36].



## Spain

The coronavirus disease 2019 (COVID-19) pandemic has marked a global turning point. The high cost of human lives and economic and social repercussions, rapid geographic spread favoured by increased human mobility between countries, scientific debate on transmission (e.g. potential zoonotic transmission), and vaccine development are evidence that our society was not prepared for the possibility of a pandemic in the 21st century.

As a global community, we should promote the formation of multidisciplinary collaborations to raise

awareness of emerging health risks, design short- and long-term strategies to mitigate such risk, and implement programmes, policies, legislation, and research that can help health systems achieve better population health outcomes. This integrated approach to health – known as the One Health concept – recognizes that human, animal, and environmental health are interdependent. It would strengthen preventive actions to enhance the early detection of harmful risks, achieve the objectives of the Sustainable Development Goals, and ultimately restore the ecological balance of our planet.

As such, the Spanish General Medical Council (Consejo General de Colegios Oficiales de Médicos, CGCOM) has led four specific actions to raise community awareness of the One Health concept. First, the CGCOM and the Scientific Medical Societies (Sociedades Científicas Médicas, SCM) have supported the Medical Alliance against Climate Change, which has developed courses and conferences for health professionals on the health effects of climate change and the need for collective action to reduce the carbon footprint generated by the health sector [37]. Second, by forming part of the One Health Platform's Executive Committee, they have fostered dialogue with key decision-making institutions to develop policies aligned with the One Health concept, prepare consensus documents on strategic health issues, promote opportunities for interdisciplinary and intersectoral collaborations, and educate the public on the One Health concept. Third, the CGCOM has coordinated seminars for doctors and the general public that encourage the application of the One Health concept as a holistic vision of physical and mental health and well-being. Finally, they have stressed that sustainable actions to support ecosystem health of the planet is an ethical duty of our

medical professional practice.

Moving forward, we cannot combat the health challenges of the 21<sup>st</sup> century with the vision and tools of the 20th century. As we learned this valuable lesson throughout the COVID-19 pandemic, we recognize that humans caused this ecological imbalance and that we must collaborate across disciplines to promote global health security.



## Trinidad and Tobago

In Trinidad and Tobago, One Health means improving the quality of human health through gaining a better understanding of how disease processes are influenced by changing environmental conditions and animal habitats. As a result of urbanization, deforestation has resulted in animal species being displaced from their natural habitats and forced into spaces occupied by humans. Flooding events may increase the risk of exposure to rodents and contaminated water, which can lead to zoonotic outbreaks of leptospirosis. The effects of climate change have been noted with increased rainfall and periods of drought that have facilitated the mosquito-breeding sites for *Aedes aegypti* mosquitoes, the vector for dengue virus (DENV), chikungunya virus (CHIKV), and Zika virus (ZIKV).

Biodiversity disruptions attributable to climate change and other environmental factors, like the use of pesticides, have noteworthy impacts on human and animal health. First, there has been a reported loss of pollinators that are central to fruit and vegetable production. In fact, the honey industry has been significantly affected as the bee population is threatened by extinction. Second, the proliferation of the arthropod hibiscus mealybug destroyed agricultural and horticultural systems in Trinidad and



Tobago in 1995. It almost completely devastated the sorrel industry, a popular tangy drink made from a flower of the Hibiscus family and served during the Christmas season. Third, reported dwindling fish stocks and recent fish kills on shorelines have no clear answers. To address these animal health challenges, the National Animal Disease Centre (NADC) has the mission to promote public health through rabies control, poultry surveillance, imported animal and animal products, and horse and livestock health.

Trinidad and Tobago is a member state of the One Health Caribbean Initiative, with a mission to find sustainable solutions for problems that threaten healthy planetary systems, through partnerships and collaborative approaches [38]. From 2014 to 2016, Trinidad and Tobago's One Health Project aimed to identify heavy metal contamination in edible commercial fish species that constitute an important national economic resource [39,40]. A total of 11 other national teams presented their research findings to implement One Health solutions related to reducing risk of iron deficiency anaemia in Dominica communities and the use of pesticides in agricultural practices across Haiti. The ongoing work of the One Health Project includes capacity building of individuals and organizations through the Climate Change and Health Leaders Fellowship Training Program.

In 2012, the Trinidad and Tobago Partners' Forum Action for Chronic Non-communicable Diseases was initiated to provide strategic direction for policy initiatives that empower communities to take ownership of their health through improved diets, physical activity, and environmental awareness [41]. As physicians, our national and international call to action is to close knowledge gaps

through education, research, and communication as well as initiate sustainable programs and policies that support One Health. After all, policy changes are envisioned as game-changers.



## United Kingdom

In the United Kingdom (UK), doctors have expressed significant concern about the threat of a "post-antimicrobial age", where current antimicrobials will be ineffective due to increasing levels of resistance. This has the potential to severely limit doctors' ability to conduct routine and complex medical treatments, where antimicrobials are necessary to prevent infection, including surgery and chemotherapy.

We are ever aware of the global threat to human health posed by antimicrobial resistance (AMR) and the firm linkage to inappropriate usage both in human health and agricultural practices. The British Medical Association (BMA) therefore supports a One Health approach to tackling AMR, which recognises that action is required across human medicine, veterinary practice, and agriculture, to minimise unnecessary or inappropriate use of antimicrobials as well as ensure that they continue to be effective in treating infections.

The UK Government's five-year action plan, *Tackling Antimicrobial Resistance 2019-2024*, advocates for an approach to tackling AMR that focuses on reducing the need for and exposure to antimicrobials, optimising their use, and investing in innovation [42]. The plan sets targets to reduce UK antimicrobial use in humans by 15% by 2024 and in food-producing animals by 25% between 2016 and 2020. While the BMA welcomed the government's plan, it is essential that more specific commitments should be made, supported by investments

that meet the scale of the threat. For example, the BMA has called for tighter regulations at the country level to significantly reduce the inappropriate use of antimicrobials in farming practices, through banning the routine preventive use of antimicrobials for healthy groups of animals and restricting the use of critically important antimicrobials in agriculture.

Since AMR is a borderless and multi-sectoral threat, the regulatory response required to reduce the use of antimicrobials requires global efforts and co-ordination. Consumption of non-prescribed antimicrobials is commonplace in many low- and middle-income countries, and there is heavy misuse of antimicrobials in farming practices globally. We firmly believe that the UK should lead efforts to establish an international legally binding AMR treaty, which can enhance global knowledge sharing and surveillance. A treaty would coordinate country efforts, pool funding to support low- to middle-income countries, incentivise action, and hold countries accountable. Since the global challenge of AMR is analogous to that of climate change, international agreements on climate change should be implemented and serve as a model for a future AMR treaty.

## Conclusion

As we recognize One Health Day, we learn about an array of comprehensive health policies and community initiatives that have been successfully implemented across 10 countries. These timely initiatives are key examples of how multi-disciplinary collaborations coupled with political commitment can drive local and national action toward achieving established health priorities. As WMA members with diverse training, we must leverage our clinical expertise



to empower scientific discourse on addressing emerging health risks such as reducing air pollution, improving antimicrobial prescribing practices, educating community members about communicable and non-communicable disease risks. We can share our valuable insight through a myriad of venues, including participating in legislative or advocacy events, contributing to formal conference and roundtables, preparing peer- and non-peer reviewed publications, and leading community seminars or townhall meetings.

As we collaborate with local and national decision-makers and stakeholders, we can apply key elements of evidence-based guidelines by the WHO, UN, and professional medical associations – like the *One Health Joint Plan of Action (2022–2026)* – and strengthen our ongoing activities that raise awareness of urgent health challenges that influence population health outcomes. Our collective actions can truly pave the way to identify disease burden, develop timely approaches, and ultimately achieve the milestones of the 2030 Agenda for Sustainable Development.

## References

1. One Health High-Level Expert Panel (OHHLEP), Adisasmito WB, Almuhairei S, Behraves CB, Bilivogui P, Bukachi SA, et al. One Health: A new definition for a sustainable and healthy future. *PLoS Pathog.* 2022;18(6):e1010537.
2. World Health Organization. Urgent health challenges for the next decade. 2020 [cited 2022 Nov 20]. Available from: <https://www.who.int/news-room/photo-story/photo-story-detail/urgent-health-challenges-for-the-next-decade>
3. World Health Organization. Preventing disease through healthy environments: a global assessment of the burden of disease from environmental risks. Geneva: WHO; 2018. World Health Organization.
4. World Health Organization. One health joint plan of action (2022–2026): working together for the health of humans, animals, plants and the environment. Available from: <https://www.who.int/publications/i/item/9789240059139>
5. Espeschit IF, Santana CM, Moreira MAS. Public Policies and One Health in Brazil: the challenge of the disarticulation. *Front Public Health.* 2021;9:644748.
6. Pettan-Brewer C, Martins AF, de Abreu DPB, Brandão APD, Barbosa DS, Figueroa DP, et al. From the approach to the concept: One Health in Latin America-experiences and perspectives in Brazil, Chile, and Colombia. *Front Public Health.* 2021;9:687110.
7. Laboratory of Resistome, Virulome, and Therapeutic Alternatives, Brazil. One Health Brazilian Resistance integrated genomic database [Internet]. 2022 [cited 2022 Dec 1]. Available from: <http://www.onehealthbr.com/>
8. One Health Brasil. One Health Brasil [Internet]. 2018 [cited 2022 Dec 1]. Available from: <https://onehealthbrasil.com/>
9. Presidência da República, Brasil. Lei Nº 12.651, de 25 de maio de 2012. 2012 [cited 2022 Dec 5]. Portuguese. Available from: [https://www.planalto.gov.br/ccivil\\_03/ato2011-2014/2012/lei/l12651.htm](https://www.planalto.gov.br/ccivil_03/ato2011-2014/2012/lei/l12651.htm)
10. World Health Organization. Climate change and health [Internet]. 2021 [cited 2022 Nov 13]. Available from: <https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>
11. Ministry of Health, Dominican Republic. [Ministerio de Salud Pública presenta el Plan Nacional de Salud 2022-2032] [Internet]. [cited 2022 Nov 13]. Spanish. Available from: <https://presidencia.gob.do/noticias/ministerio-de-salud-publica-presenta-el-plan-nacional-de-salud-2022-2032>
12. World Economic Forum. The Global Risks Report 2022, 17th ed. Cologny: WEF; 2022. Available from: <https://www.weforum.org/reports/global-risks-report-2022>
13. Pan American Health Organization. Climate change and health [Internet]. n.d. [cited 2022 Nov 18]. Available from: <https://www.paho.org/en/topics/climate-change-and-health>
14. Ministry of Health, Dominican Republic. [Ministro de Salud supervisa y refuerza la vigilancia en los cuatro puntos fronterizos, en prevención del cólera] [Internet]. 2022 [cited 12 Nov 2022]. Spanish. Available from: <https://www.msp.gob.do/web/?p=15912>
15. Gonzales W, Moreno C, Duran U, Henao N, Bencosme M, Lora P, et al. African swine fever in the

- Dominican Republic. *Transbound Emerg Dis*. 2021;68(6):3018-9.
16. Rabinowitz PM, Pappaioanou M, Bardosh KL, Conti L. A planetary vision for one health. *BMJ Glob Health*. 2018;3(5):e001137.
  17. World Health Organization. One Health and the fight against antimicrobial resistance in Italy [Internet]. 2021 [cited 2022 Nov 12]. Available from: <https://www.who.int/europe/news/item/17-11-2021-one-health-and-the-fight-against-antimicrobial-resistance-in-italy>
  18. Steele SG, Toribio JA, Booy R, Mor SM. What makes an effective One Health clinical practitioner? Opinions of Australian One Health experts. *One Health*. 2019;8:100108.
  19. Lauriola P, Pegoraro S, Serafini A, Murgia V, Di Ciaula A, De Tommasi F, et al. The role of general practices for monitoring and protecting the environment and health. Results and proposals of the Italian project aimed at creating an "Italian Network of Sentinel Physicians for the Environment" (Rimsa) within an international perspective. *J Family Med Community Health*. 2018;5(5):1160.
  20. Lauriola P, Serafini A, Santamaria M, Guicciardi S, Kurotschka PK, Leonardi GS, et al. Family doctors to connect global concerns due to climate change with local actions: State-of-the-art and some proposals. *World Medical & Health Policy*. 2021;13(2):199-223.
  21. Lauriola P, Martín-Olmedo P, Leonardi GS, Bouland C, Verheij R, Duckers MLA, et al. On the importance of primary and community healthcare in relation to global health and environmental threats: lessons from the COVID-19 crisis. *BMJ Glob Health*. 2021;6(3):e004111.
  22. Gelineau K, Milko V. In Myanmar, the military declares war on medical workers [Internet]. *The Los Angeles Times*. 2021 [cited 2022 Nov 21]. Available from: <https://www.latimes.com/world-nation/story/2021-07-07/in-myanmar-the-military-declares-war-on-medical-workers>
  23. Amnesty International. Myanmar: Military's use of banned landmines in Kayah State amounts to war crimes [Internet]. Amnesty International. 2022 [cited 2022 Nov 21]. Available from: <https://www.amnesty.org/en/latest/news/2022/07/myanmar-militarys-use-of-banned-landmines-in-kayah-state-amounts-to-war-crimes/>
  24. Chan OSK, Naing T, Tun HM. Upholding veterinary services as a pillar of one health in Myanmar. *One Health*. 2021;13:100329.
  25. United Nations Department of Economic and Social Affairs, Population Division. (2022). *World Population Prospects 2022: Summary of Results*. UN DESA/POP/2022/TR/NO. 3. New York: United Nations; 2022. Available from: <https://www.un.org/development/desa/pd/content/World-Population-Prospects-2022>
  26. Nigeria Centre for Disease Control. Press Release – Nigeria launches One Health Strategic Plan. 2019 [cited 2022 Nov 15]. Available from: <https://ncdc.gov.ng/news/207/press-release--nigeria-launches-one-health-strategic-plan>
  27. World Health Organization. Joint external evaluation of IHR core capacities of the Federal Republic of Nigeria. WHO/WHE/CPI/REP/2017.46. Geneva: WHO; 2017. Available from: <https://www.who.int/publications/i/item/WHO-WHE-CPI-REP-2017.46>
  28. Department of Education, Republic of Philippines. Oplan Kalusugan sa DepEd ensures safe school operations, well-being of learners [Internet]. 2022 [cited 2022 Oct 30]. Available from: <https://www.deped.gov.ph/2022/04/13/oplan-kalusugan-sa-deped-ensures-safe-school-operations-well-being-of-learners/>
  29. Barbara EP. DepEd to conduct One Health Week Celebration every SY. *News BEaST Ph - Your Digital News Portal*. 2021 [cited 2022 Oct 30]. Available from: <https://newsbeastph.com/2021/09/dep-ed-to-conduct-one-health-week-celebration-every-sy/>
  30. Department of Education, Republic of the Philippines. One Health Week highlights OK sa DepEd milestones, initiatives to support learners' welfare [Internet]. 2021 [cited 2022 Oct 30]. Available from: <https://www.deped.gov.ph/2021/09/29/one-health-week-highlights-ok-sa-deped-milestones-initiatives-to-support-learners-welfare/>
  31. Republic of the Philippines - Department of Education. Scheduled/Suggested activities during the One Health Week celebration on 6-11 September 2021. Division Memorandum No. 205, s. 2021. 2021 [cited 2022 Oct 30]. Available from <https://www.depedkabankalancity.com/>

- [uploads/7/4/2/6/74269293/dm\\_no\\_205\\_s\\_2021.pdf](https://www.wma-journal.org/uploads/7/4/2/6/74269293/dm_no_205_s_2021.pdf)
32. Department of Education, Republic of the Philippines. DOH, DEPED launch healthy learning institutions to strengthen school health programs [Internet]. 2022 [cited 2022 Oct 30]. Available from: <https://www.deped.gov.ph/2022/10/12/doh-deped-launch-healthy-learning-institutions-to-strengthen-school-health-programs/>
  33. Organisation for Economic Cooperation and Development. OECD Reviews of Public Health: Korea: A Healthier Tomorrow. Paris: OECD Publishing, Paris; 2020. Available from: <https://doi.org/10.1787/be2b7063-en>
  34. Lee K. Strategies for promoting Korean One-Health to secure public health. The Korean Society for Zoonoses. 2019;1:13-24.
  35. Ministry of Culture, Sports and Tourism, Republic of Korea. Korean Policy Briefing: "One Health Policy Forum" for the joint response to zoonotic diseases [Internet]. 2022 [cited 2022 Nov 15]. Korean. Available from: <https://www.korea.kr/news/pressReleaseView.do?newsId=156498747#sitemap-layer>
  36. Rabinowitz PM, Natterson-Horowitz BJ, Kahn LH, Kock R, Pappaioanou M. Incorporating one health into medical education. BMC Med Educ. 2017;17(1):45.
  37. Consejo General de Colegios Oficiales de Médicos. Grupo de Trabajo Salud y Cambio Climático [Internet]. 2022 [cited 2022 Nov 15]. Spanish. Available from: <https://www.cgcom.es/grupo-de-trabajos/salud-y-cambio-climatico>
  38. University of the West Indies St Augustine Campus; Oura C, Mahase-Gibson A, Stephen C (eds). Caribbean Resilience and Prosperity through One Health. Trinidad & Tobago: University of the West Indies; 2017 [cited 2022 Nov 11]. Available from [http://www.cwhc-rscsf.ca/docs/technical\\_reports/Caribbean\\_Resilience.pdf](http://www.cwhc-rscsf.ca/docs/technical_reports/Caribbean_Resilience.pdf)
  39. Inter-American Institute for Cooperation on Agriculture. One Health Leadership in the Caribbean [Internet]. 2020 [cited 2022 Nov 11]. Available from: <https://www.iica.int/en/press/news/one-health-leadership-caribbean>
  40. Institute of Marine Affairs (Trinidad). Preliminary investigation on heavy metals in fish and the mobile bioavailable phase of sediment from Trinidad and Tobago [Internet]. 2018 [cited 2022 Nov 8]. Available from: <https://www.ima.gov.tt/portfolio-item/preliminary-investigation-on-heavy-metals-in-fish-and-the-mobile-bioavailable-phase-of-sediments-from-trinidad-and-tobago/>
  41. Lewis Y. The Trinidad and Tobago Partners' Forum for Action on NCDs: Proceedings of the Healthy Caribbean Coalition Meeting, May 2012 [Internet]. 2012 [cited 2022 Nov 11]. Available from: <https://www.healthycaribbean.org/wp-content/uploads/2017/05/Dr-Yvonne-Lewis-PARTNERS-FORUM-PRESENTATION.pdf>
  42. Department of Health and Social Care, United Kingdom Government. UK 5-year action plan for antimicrobial resistance 2019 to 2024 [Internet]. 2019 [cited 2022 Nov 15]. Available from: <https://www.gov.uk/government/publications/uk-5-year-action-plan-for-antimicrobial-resistance-2019-to-2024>

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## World Diabetes Day 2022: A Global Call to Action to Improve Diabetes Care



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World Diabetes Day (<https://www.who.int/campaigns/world-diabetes-day/2022>) is recognized annually on November 14, to increase awareness of the global diabetes burden – 536 million cases and 6.7 million deaths reported in 2021 – and the need for prompt diagnosis and treatment [1]. This international day was founded

by the World Health Organization (WHO) and the International Diabetes Federation (IDF) in 1991, and later confirmed as an official United Nations (UN) day by the UN Resolution 61/225 in 2006 [2,3]. Notably, November 14 recognizes Sir Frederick Banting's birthday, who together with Charles Best, discovered insulin in 1922 [2]. Supporting the World Diabetes Day 2021-2023 theme of "Access to Diabetes Care", this campaign promotes a holistic view of population health and well-being and encourages citizens to engage in healthy lifestyle behaviours to reduce risk of developing diabetes.

Over the past four decades, the global prevalence of diabetes in adults has increased significantly, with a steeper rise in low- and middle-income countries [4]. According to IDF data, 1 in 10 adults (between ages 20-79) are living with diabetes, and almost half of adults with diabetes are undiagnosed [1]. The number of adults living with diabetes (between ages 20-79) was reported as 151 million in 2000, 366 million in 2011, and 536 million in 2021 [1]. These prevalence rates are expected to increase to 642 million by 2030 and 783 million by 2045 [1]. Similarly, the total annual health expenditure for diabetes-related conditions was reported as US \$465 million in 2011 and US \$966 million in 2021 – a 300% increase over the past two decades – and projected to be over US \$1 million in 2030 and 2045 [1].

As a part of the global multi-year theme, the World Diabetes Day 2022 theme of "Access to Diabetes Education" stresses the importance of knowing our risk factors for developing non-communicable diseases (like diabetes) and accessing regular primary care consultations. These

global efforts are essential to advance progress to achieving the Sustainable Development Goal (SDG) target 3.4 (Reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being) by 2030 [5]. With an estimated 239 million undiagnosed cases of diabetes – and an increasing prevalence of diabetes across the globe – early diagnosis and targeted pharmacological and behavioural interventions will promote optimal health outcomes and quality of life as well as reduce the risk of diabetes-related complications.

### Priorities and Recommendations to Improve Diabetes Care

Over the past 100 years, significant clinical advancements – namely, the discoveries of insulin, biguanides and sulfonylureas for type 2 diabetes management, rapid-acting and long-acting insulin analogues for type 1 diabetes management, and biomedical technologies – have decreased risk of complications and death [7]. Clinical management guidelines highlight the need for robust educational programs for diabetic patients and families as well as the fundamental role of patient-centred approaches led by multidisciplinary health teams. In this section, we describe three main priorities in diabetes care and management and describe evidence-based recommendations that can mitigate risk of morbidity and mortality.

### Early Diagnosis and Prompt Diabetes Care and Management

With the increasing global prevalence of diabetes in low- and middle-income countries and persons under age 40, the rapid identification

of individuals who are at-risk of developing diabetes type 2 will be important for taking immediate preventive action to maintain glycemic levels [8]. Since universal screening practices are not recommended as cost-effective secondary-level prevention, individuals with family medical history or poor lifestyle factors (e.g. unhealthy meals, sedentary behaviors, overweight or obese) should be closely evaluated and monitored [8]. However, social and structural determinants of health, coupled with limited access to and availability of health care services, can hinder optimal diabetes care and management and negatively influence population health outcomes.

To address these challenges, physicians can develop and lead key community interventions – considering the cultural, demographic, and socioeconomic factors of each community – that encourage adopting healthy lifestyles and understanding the risk factors of non-communicable diseases like diabetes. For youth initiatives, the Ministries of Health and Education can collaborate to strengthen academic curricula at primary and secondary schools and universities with strict health courses. Students can acquire valuable knowledge and approaches to maintain appropriate nutrition at school and home, participate in regular physical activity, and seek annual preventive medical evaluations [9]. For adult initiatives, the Ministry of Health can promote the implementation of preventive health seminars at workplaces, which can educate staff about the risk factors of diabetes, encourage diets with low sodium and sugar levels and adoption of regular exercise routines, and highlight the importance of knowing family history and personal health values. Employees can learn about their risk factors and available screening laboratory tests, to take

action and reduce their risk of developing early-onset diabetes type 2, diabetes-related complications or other non-communicable diseases [10].

Third, technological advancements, including interactive websites (e.g. American Diabetes Association, ADA: <https://diabetes.org/tools-support/tools-know-your-risk>) and smartphone apps, can improve health literacy about the risk factors of non-communicable diseases like diabetes and encourage the adoption of healthy lifestyles. These resources can provide additional information on healthy and balanced meals and water intake, proper sleep hygiene, and exercise routines. These platforms can also offer novel data-driven tools to support individualised treatment for patients with diabetes type 2 [11].

### Monitoring of Co-morbidities

Since diabetes management is complex and costly for patients and health systems, patient-centred care can promote individualised management to meet diabetes target goals [12]. Professional associations, like the ADA, European Association for the Study of Diabetes (EASD), and Endocrine Society, disseminate evidence-based reports, offer continued education opportunities, and support scientific conferences. These resources highlight the importance of a holistic and person-centred approach to help patients reach glycemic level goals, including weight loss and reducing risk factors for cardiovascular and renal disease [8].

The ADA recommends that the six elements of the Chronic Care Model – 1) proactive care delivery system; 2) self-management support; 3) evidence-based decision support; 4) clinical registries; 5) community resources; and 6) cultural awareness

– help guide diabetes care for individual patients, with research evidence documenting the reduction of complications and mortality rates [12]. This approach can help health professionals monitor physical and mental health and well-being and use tertiary-level prevention for microvascular or macrovascular complications, including cardiovascular disease, diabetic foot, nephropathies, neuropathies, and retinopathies.

To minimise the risk of co-morbidities, oral pharmacological therapies have traditionally served as a cost-effective option that has demonstrated efficacy in glycemic control. However, side effects include hypoglycemia, gastrointestinal manifestations, fluid retention, weight gain, heart failure, and decreased bone mineral density [8]. Over the past few years, two new medication families – SGLT2 inhibitors and GLP-1 receptor agonists – have been recognized by the WHO as essential medicines, due to their benefits for cardiovascular, neurological, and renal health, weight loss, and less hypoglycemia [13]. Primary care physicians can lead educational campaigns to discuss the benefits of these medications as well as ensure their availability and insurance coverage for at-risk populations.

### National Guidance and Political Support for Diabetes Care and Management

The global management of diabetes and other non-communicable diseases requires political commitment to support collaborative, multi-sectoral efforts that expand research, clinical care, policy development, and community outreach [14]. Local action plans should integrate the participation of public and private sector stakeholders to identify community needs and gaps, develop quantitative and qualitative research

studies that explore novel inquiries, evaluate the progress and challenges of current health programs, and implement timely health interventions toward the advancement of established national health objectives. Successful interventions can serve as key examples for other communities and countries, especially for learning techniques about modifying practices when faced with limited resources and encouraging community participation and adoption of healthy behaviours.

National action plans should support the preparation of relevant public policies that address important challenges, robust surveillance programs that identify health priorities, and public activities that promote social participation and inclusion [15]. Health leaders can use evidence-based guidance documents from professional medical societies as well as national and international organisations to support preventive health evaluations that focus on modifiable risk factors (primary prevention), screening (secondary prevention), and reducing risk of complications (tertiary prevention) in their clinical and community settings. In order to promote lifestyle changes among the populace, they can also organise virtual or in-person community health seminars, develop continuing education programs in collaboration with community leaders, serve as advisors for diabetes support groups, and participate in strengthening surveillance programs (e.g. exploring the benefits of a pre-diabetic registry) [16].

By recognizing these challenges in diabetes care and management, health leaders understand that national and global action must be applied collectively to achieve established national and global health objectives. Changing the course of diabetes is no longer limited to glycemic control. Diabetes management must

incorporate protective measures for cardiovascular, renal, and vascular health for all patients, including at-risk populations. By focusing on patient-centred care, clinicians can also identify novel therapeutic interventions that have the potential to minimise side effects and enhance health outcomes and quality of life.

## Global Initiatives

Recent global resolutions, action plans, and technical guidance have helped health professionals identify health risks, apply evidence-based recommendations to clinical and community practice, and empower community members to select healthy lifestyles to reduce risk of non-communicable disease [17]. Over the past decade, key WHO publications were published – such as the *WHO Global Action Plan for the Prevention and Control of Non-communicable Diseases 2013–2020* (2013), *WHO Global Report on Diabetes* (2016), and *WHO HEARTS D: Diagnosis and Management of Type 2 Diabetes* (2020) [18–20]. Ongoing consultations, discussions, and feedback, especially on best practices for non-communicable disease prevention and control, are being provided by the global community on the draft versions of the *WHO Global Action Plan for the Prevention and Control of NCDs 2023–2030*.

Furthermore, recent global summits and assemblies have offered an open platform for health leaders to leverage expertise, debate scientific discourse, and determine the next course of action [21]. In April 2021, the WHO Global Diabetes Compact initiative was announced at the Global Diabetes Summit 2021, which aims to enhance collaborations with public and private sector stakeholders and develop novel solutions for diabetes prevention and control [22]. Then, in May 2021, the Resolution on strengthening

diabetes prevention and control was approved at the 74th WHO World Health Assembly [21]. Three months later, the WHO Technical Advisory Group of Experts on Diabetes was appointed to share technical expertise on strengthening global efforts for diabetes [22]. Later, in May 2022, five new diabetes targets to achieve by 2030 were confirmed at the 75th World Health Assembly: 1) 80% of persons living with diabetes are diagnosed; 2) 80% of diabetics have appropriate glycaemic control; 3) 80% of diabetics have optimal blood pressure control; 4) 60% of diabetes (>40 years) receive statins; and 5) 100% of type 1 diabetics can access inexpensive insulin and self-monitor glucose levels [6].

## Conclusion

As the global community commemorates World Diabetes Day 2022 – and the multi-year theme “Access to Diabetes Care” – global leaders can support the WHO guidelines and UN SDGs (like SDG 3.4). Robust WHO and World Health Assembly (WHA) efforts – ranging from the WHO Global Diabetes Compact initiative in April 2021 to the WHA plan and new diabetes targets in May 2022 – will surely propel global change in strengthening surveillance programs, developing innovative interventions, and expanding access to health services to promote population health and reduce health expenditure. Notably, the WMA Statement on the Global Burden of Chronic Non-communicable Disease presented clear evidence of the global burden and cited recommendations to national governments, WMA members, medical schools, and individual physicians [23]. In fact, the IDF School of Diabetes offers free continuing education courses (<https://www.idfdiabeteschool.org/>) for health professionals on diabetes



care and management, including health counselling techniques, best nutrition practices, living with co-morbidities, and encouraging regular physical activity.

As we approach the established deadlines for the 2030 Agenda for Sustainable Development, especially SDG 3 (target 3.4), nations will need to examine ongoing efforts and pledge funding, resources, and support for the health workforce. Local and global action will be imperative to combat the rising global prevalence of diabetes and other non-communicable diseases by promoting patient-centred care and shared physician-patient decision-making.

## References

1. International Diabetes Federation. Global Diabetes Data Report 2000-2045. IDF Diabetes Atlas, 10th ed [Internet]. 2021 [cited Dec 1]. Available from: <https://diabetesatlas.org/data/en/world/>
2. World Diabetes Federation. World Diabetes Day [Internet]. 2022 [cited 2022 Nov 20]. Available from: <http://worlddiabetesday.org/about/>
3. United Nations. Resolution adopted by the General Assembly on 20 December 2006. 61/225: World Diabetes Day [Internet]. 2007 [cited 2022 Nov 20]. Available from: <https://daccess-ods.un.org/tmp/3544268.01204681.html>
4. World Health Organization. Diabetes [Internet]. 2022 [cited 2022 Nov 20]. Available from: <https://www.who.int/news-room/fact-sheets/detail/diabetes>
5. World Health Organization. Global Health Observatory: SDG Target 3.4 non-communicable diseases and mental health. 2022 [cited 2022 Nov 25]. Available from: [https://www.who.int/data/gho/data/themes/topics/sdg-target-3\\_4-noncommunicable-diseases-and-mental-health](https://www.who.int/data/gho/data/themes/topics/sdg-target-3_4-noncommunicable-diseases-and-mental-health)
6. World Health Organization. First-ever global coverage targets for diabetes adopted at the 75th World Health Assembly [Internet]. 2022 [cited 2022 Nov 25]. Available from: <https://www.who.int/news-room/feature-stories/detail/first-ever-global-coverage-targets-for-diabetes-adopted-at-the-75th-world-health-assembly>
7. Chatterjee S, Davies MJ. Current management of diabetes mellitus and future directions in care. Postgrad Med J. 2015;91(1081):612-21.
8. Ahmad E, Lim S, Lamptey R, Webb DR, Davies MJ. Type 2 diabetes. Lancet. 2022;400(10365):1803-20.
9. Pansier B, Schulz PJ. School-based diabetes interventions and their outcomes: a systematic literature review. J Public Health Res. 2015;4(1):467.
10. Brown SA, García AA, Zuñiga JA, Lewis KA. Effectiveness of workplace diabetes prevention programs: A systematic review of the evidence. Patient Educ Couns. 2018;101(6):1036-50.
11. Buse JB, Holst I, Knop FK, Kvist K, Thielke D, Pratley R. Prototype of an evidence-based tool to aid individualized treatment for type 2 diabetes. Diabetes Obes Metab. 2021;23(7):1666-71.
12. American Diabetes Association Professional Practice Committee. 1. Improving Care and Promoting Health in Populations: Standards of Medical Care in Diabetes-2022. Diabetes Care. 2022;45(Suppl 1):S8-16.
13. Brown E, Heerspink HJL, Cuthbertson DJ, Wilding JPH. SGLT2 inhibitors and GLP-1 receptor agonists: established and emerging indications. Lancet. 2021;398(10296):262-276.
14. Bergman M, Buysschaert M, Schwarz PE, Albright A, Narayan KV, Yach D. Diabetes prevention: global health policy and perspectives from the ground. Diabetes Manag (Lond). 2012;2(4):309-21.
15. Afshari M, Ahmadi Teymourlouy A, Asadi-Lari M, Maleki M. Global Health diplomacy for noncommunicable diseases prevention and control: a systematic review. Global Health. 2020 May 6;16(1):41.
16. Chapman HJ, Veras-Estévez BA. Strengthening national health priorities for diabetes prevention and management. MEDICC Rev. 2018;20(4):5.
17. World Health Organization. Diabetes [Internet]. 2022 [cited 2022 Dec 1]. Available from: <https://www.who.int/news-room/fact-sheets/detail/diabetes>
18. World Health Organization. Implementation roadmap 2023-2030 for the global action plan for the prevention and control of NCDs 2013-2030 [Internet]. 2021 [cited 2022 Dec 1]. Available from: <https://www.who.int/teams/noncommunicable-diseases/governance/roadmap>



19. World Health Organization. Global Report on Diabetes. Geneva: WHO [Internet]. 2016 [cited Dec 1]. Available from: <https://www.who.int/publications-detail-redirect/9789241565257>
20. World Health Organization. HEARTS D: Diagnosis and Management of Type 2 Diabetes. Geneva: WHO [Internet]. 2020 [cited 2022 Dec 1]. Available from: <https://www.who.int/publications-detail-redirect/who-ucn-ncd-20.1>
21. World Health Organization. New WHO Global Compact to speed up action to tackle diabetes [Internet]. 2021 [cited 2022 Dec 1]. Available from: <https://www.who.int/news/item/14-04-2021-new-who-global-compact-to-speed-up-action-to-tackle-diabetes>
22. World Health Organization. WHO Technical Advisory Group of Experts on Diabetes [Internet]. 2021 [cited 2022 Dec 1]. Available from: [https://www.who.int/groups/who-technical-advisory-group-of-experts-on-diabetes-\(tag-d\)/](https://www.who.int/groups/who-technical-advisory-group-of-experts-on-diabetes-(tag-d)/)
23. World Medical Association. WMA Statement on the Global Burden of Chronic Non-communicable Disease [Internet]. 2022 [cited 2022 Nov 30]. Available from: <https://www.wma.net/policies-post/wma-statement-on-the-global-burden-of-chronic-disease/>

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