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- **Reconstruction of the Radiation Emergency Medical System in Japan**
- **On the Road to Tobacco-Free Finland**

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A Japanese Painting (hemp paper, Iwaenogu)
50F (116.7 x 90.9cm) by Dr. Takakazu Kato.
The most renowned Japanese flower is the cherry
blossom, which first blooms in the beginning of
March until the end of May. Cherry blossoms in
full bloom are magnificent, but they are just as
exquisite before they fall. In autumn, they turn a
beautiful deep red and to the Japanese, the cherry
trees are an endearing source of delight throughout
the four seasons. When the leaves turn color and
fall, they symbolize the pathos of a passing year.

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

New Year Message from the President, World Medical Association

Let me begin by congratulating you all on your achievements and successes this year. My special thanks to the Secretariat for all the ways they continue to support the WMA.

As we move into the New Year, as physicians, we must continue to play our role in

advocating for the right to health for the communities we serve and especially the most disadvantaged. Regardless where we live, there are those among us who do not have access to quality health and health care. We have a responsibility to play the advocacy roles required to ensure that our health systems are strengthened enough to achieve universal health coverage. An important area for advocacy is the conditions under which people are born, grow up, live and work also known as the Social Determinants of Health.

The basic principles underlying medical ethics continue to be compassion, competence and professional autonomy. Every physician therefore must become involved in advocating for quality medical education, the highest possible ethical standards and evidence based care. As we end the New Year, our hearts go out to those physicians working in countries like Syria, Somalia, Israel, Palestine, Turkey and others who struggle to ensure access to healthcare in such difficult circumstances, at times risking their lives and those of their families.



Margaret Mungherera

In this regard, the WMA is partnering with others in the Health Care in Danger Project of the International Committee of the Red Cross (ICRC)'s to advocate for protection of health facilities and health workers in areas of armed conflict and other emergencies.

As physicians and NMAs, we must become part of this community of concern. We must ensure we adhere to our ethical principles, document and report incidents, support our colleagues whose lives are threatened and to work with others in ensuring that health facilities, ambulances and health workers are protected in cases of armed conflict and other emergencies.

The WMA will continue to play its role of advocating for the right of physicians to exercise their professional autonomy and the right to provide the quality of health care that their patients and communities require.

Finally, as we end the year, I wish you and your families an enjoyable holiday season and a new year 2014 full of good health and success.

*Dr. Margaret Mungherera
President, World Medical Association*

Reconstruction of the Radiation Emergency Medical System from the Acute to the Sub-acute Phases After the Fukushima Nuclear Power Plant Crisis



Mayo Ojino

The radiation emergency medical system in Japan ceased to function as a result of the accident at the Fukushima Daiichi Nuclear Power Plant, which has commonly become known as the “Fukushima Accident.” In this paper, we review the reconstruction processes of the radiation emergency medical system in order of events and examine the ongoing challenges to overcoming deficiencies and reinforcing the system by reviewing relevant literature, including the official documents of the investigation committees of the National Diet of Japan, the Japanese government, and the Tokyo Electric Power Company, as well as technical papers written by the doctors involved in radiation emergency medical activities in Fukushima. Our review has revealed that the reconstruction was achieved in 6 stages from March 11 to July 1, 2011: [1] Re-establishment of an off-site center (March 13), [2] Re-establishment of a secondary radiation emergency hospital (March 14), [3] Reconstruction of the initial response system for radiation emergency care (April 2), [4]



Masami Ishii

Reinforcement of the off-site center and stationing of disaster medical advisors at the off-site center (April 4), [5] Reinforcement of the medical care system and an increase in the number of hospitals for non-contaminated patients (From April 2 to June 23), and [6] Enhancement of the medical care system in the Fukushima Nuclear Power Plant and the construction of a new medical care system, involving both industrial medicine and emergency medicine (July 1). Medical resources such as voluntary efforts, academic societies, a local community medical system and university hospitals involved in medical care activities on 6 stages originally had not planned. In the future, radiation emergency medical systems should be evaluated with these 6 stages as a basis, in order to reinforce and enrich both the existing and backup systems so that minimal harm will come to nuclear power plant workers or evacuees and that they will receive proper care. This will involve creating a network of medical resources becoming involved across the country.

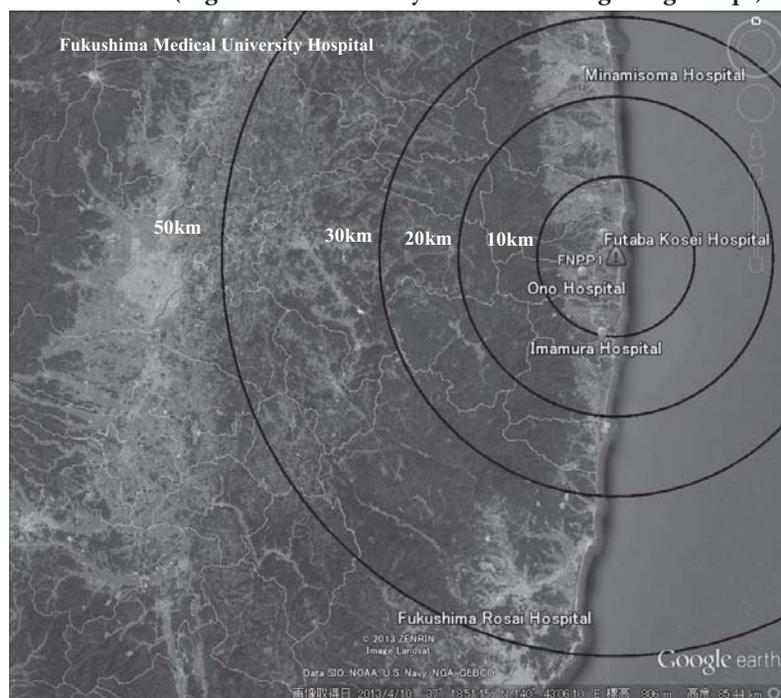
Introduction

The nuclear disaster measures in Japan have been developed by the prefectures with nuclear power plants, based on lessons learnt from nuclear power plant accidents in the past, including Three Mile Island (1979), Chernobyl (1984), and the JCO Co., Ltd. accident (Ibaraki, Japan: 1999) [1]. In those prefectures, the government funded the construction of an off-site center for decision-making and coordination relating to radiation emergency medical responses to be built around nuclear power plants. The radiation emergency medical system established by the prefectures consisted of 3 levels of hospital care: initial, secondary, and tertiary radiation emergency hospitals. The prefectures designated the initial and secondary radiation emergency hospitals, while the government designated the National Institute of Radiological Sciences (NIRS) and Hiroshima University as the tertiary radiation emergency hospitals.

In Fukushima Prefecture, the off-site center was located about 5 km from the Fukushima Daiichi Nuclear Power Plant (hereafter referred to as FNPP1). Five initial radiation emergency hospitals (Fukushima Prefectural Ono Hospital, Futaba Kosei Hospital, Imamura Hospital, Fukushima Rosai Hospital, and Minamisoma City General Hospital) and 1 secondary radiation emergency hospital (Fukushima Medical University Hospital) had also been designated (Figure 1).

After the nuclear accident at FNPP1, which occurred as a result of the Great East Japan Earthquake on March 11, 2011, the off-site center and the radiation emergency hospitals in Fukushima became non-functional.

Figure 1. Location of nuclear power plants and Radiation Emergency Hospitals in Fukushima (Figure 1 was created by the authors using Google maps)



The earthquake caused an emergency shut-down of the reactors and a loss of the external power supply, the tsunami caused several of the reactors to lose all AC power, and the water injection system for emergency core cooling failed. Hydrogen explosions occurred at Unit 1 on March 12 and at Unit 3 on March 14, and radioactive materials were subsequently released into the environment. This accident later became known as the “Fukushima Accident.”

Residents who lived within a 20 km radius of the power plant had to be evacuated, and residents within a 20–30 km radius had to stay indoors on March 15. Due to the earthquake damage, limited satellite connection was the only means of communication left for FNPP1’s off-site center, and information such as the plant’s situation or radiation levels (e.g., SPEEDI), could not be obtained. Disappointingly, there was very little scope for assembling relevant organizations such as

national and local governments and plant operators, meaning that it was extremely difficult to examine the radiation protection that was available for residents or the transportation system that was in place for radiation-contaminated patients [2]. At 5:44 on March 12, the off-site center had to be evacuated because everything within a 10 km radius from FNPP1 was designated an evacuation zone by government order. The facility that was previously designated as an alternate location was unsuitable because the radiation level in the area was increasing. Moreover, there was insufficient space available, as the facility was already used for disaster management for earthquakes and tsunamis [13]. At 18:25 on the same day, 3 out of 5 of the initial hospitals also had to be evacuated when the evacuation zone expanded to a 20 km radius from the plant, again by government order. The inpatient ward of the Minamisoma City General Hospital was also closed because the hospital

was located within the designated indoor-sheltering zone [3]. The Fukushima Accident Hospital and the Fukushima Medical University Hospital are located outside the 30 km zone, but the earthquake damaged their essential utilities, leading to a marked functional decline [3]. The malfunctioned medical systems were reconstructed in order to respond to the much-needed medical care for the plant workers who were attempting to contain the accident, as well as about 78,000 residents and 850 inpatients.

In this paper, we have systematically classified the reconstruction of the radiation emergency medical system in Fukushima in order of events and examined the problems and the future challenges.

Results

We have classified the reconstruction of the radiation emergency medical system in Fukushima into the following 6 stages.

- Stage 1: Re-establishment of an off-site center (March 13).
- Stage 2: Re-establishment of a secondary radiation emergency hospital (March 14).
- Stage 3: Reconstruction of the initial response system for radiation emergency care (April 2).
- Stage 4: Reinforcement of the off-site center, and stationing of disaster medical advisors at the off-site center (April 4).
- Stage 5: Reinforcement of the medical care system, and an increase in the number of hospitals for non-contaminated patients (from April 2 to June 23).
- Stage 6: Enhancement of medical care system at the Fukushima Nuclear Power Plant, and the construction of a new medical care system, involving both industrial medicine and emergency medicine (July 1).



Stage 1: Re-establishment of an off-site center (March 13)

On March 13, the Fukushima Prefecture Radiation Emergency Medical Coordination Council was established in the Fukushima Prefectural Government Building [3]. This council was voluntarily organized by members of NIRS team, physicians from the Fukushima Medical University Hospital, and prefectural government officers to substitute the radiation emergency medical system, as the off-site center's function had failed. The members of the council had knowledge and skills relating to radiation emergency medicine, as well as personal networks through the radiation emergency medical training that had previously been conducted by the government. This council served in the decision-making regarding the radiation emergency medical system, such as transportation of contaminated patients, the screening of contamination, and decontamination work, and coordinated these tasks.

Stage 2: Re-Establishment of a secondary radiation emergency hospital (March 14)

On March 14, the Fukushima Medical University Hospital (FMUH), a designated secondary radiation emergency hospital located 57 km from FNPP1 (Figure 2) started accepting radiation emergency patients. It takes 2.5 hours by car or 15 minutes by helicopter to travel from FNPP1 to FMUH. Although there were other hospitals nearer to FNPP1, they were not equipped to provide radiation emergency care.

At 11:00 on the same day, a hydrogen explosion occurred in Unit 3 of FNPP1, injuring 11 people [4], and FMUH accepted 4 of them. While 1 out of these 4 patients was transported directly to FMUH, the remaining 3 patients were brought into the FMUH about 20 hours after the explosion [3] because their injuries were initially thought only to be minor trauma. On March 16, a worker suspected of having

trauma to the right of his chest was transported to FMUH by a Japan Self-Defense Force (SDF) helicopter [3]. He had more than 10,000 cpm of contamination on his head [3]. On March 24, 3 workers who were laying cables on the first floor and the first basement level of the turbine building of Unit 3 submerged their feet in the contaminated water, resulting in external exposure of over 170 mSv [2]. They also were accepted at FMUH. At this point, the initial radiation emergency care system near FNPP1, which was supposed to provide unsophisticated decontamination and first aid, was extremely weak. Medical treatment for radiation for the evacuated residents was supposed to be provided mainly by the local hospitals and clinics; however, many medical teams from various organizations across the country were providing the care. Disaster Medical Assistance Team (DMAT) members, dispatched by the national government, essentially provides medical assistance for natural disasters, and specializes in providing emergency care in affected areas [15]; it was not intended to address a nuclear disaster. The available information on the status of FNPP1 and radiation were sketchy, and experts disagreed in their opinions. The evacuees who had been forced to flee from their homes with nothing but the clothes they wore were concerned about their lives at shelters, and the impact of radiation exposure on their health [16]. The Japan Medical Association also dispatched medical assistance teams (called JMAT) to the disaster area and supported community health with the help of local medical associations [5; 6].

Stage 3: Reconstruction of the initial radiation emergency care system (April 2)

On April 2, a facility for initial radiation emergency medicine was established in J-Village [7]. J-Village is a sports training center in Naraha Town, located 20 km from FNPP1 (about 40 minutes by car) (Figure 3). It was used by workers from

Tokyo Electric Power Co. (TEPCO; the company that owns and operates FNPP1) and other companies engaged in controlling the accident as a place to assemble, put on protective clothing, and for monitoring radiation levels. The SDF and fire departments also used J-Village as a front-line base. Emergency physicians were also available here: they would accompany the emergency firefighting support team to the accident site to provide health management, medical care, and radiation protection, including the administration of stable iodine tablets [8].

On March 24, at J-Village, an emergency physician dispatched from a fire department examined the aforementioned 3 workers who had their feet submerged in the contaminated water during the cable-laying work [2], and ordered them to be transported to FMUH [8]. This incident served as the turning point in the rebuilding of the area's radiation emergency medical system. The local headquarters of the Government Nuclear Emergency Response asked the Japanese Association for Acute Medicine (JAAM) to dispatch emergency physicians, and the reconstruction of the radiation emergency medicinal system for Fukushima, including J-Village, became fully operational [8]. This is when the initial and secondary levels of radiation emergency care system regained their function (Figure 2).

Stage 4: Reinforcement of the off-site center, and the stationing of disaster medical advisors at the off-site center (April 4)

The Government Nuclear Emergency Response's local headquarters also requested that JAAM dispatch disaster medical advisors to the medical team at the FNPP1's off-site center in order to supplement its insufficient manpower: this dispatch began on April 4 [8]. Disaster medical advisors selected by JAAM were specialists in emergency and disaster medicine with excellent coordination capabilities, the ability to co-

Figure 2. The Radiation Emergency Medical System in Japan rebuilt after the Fukushima Accident

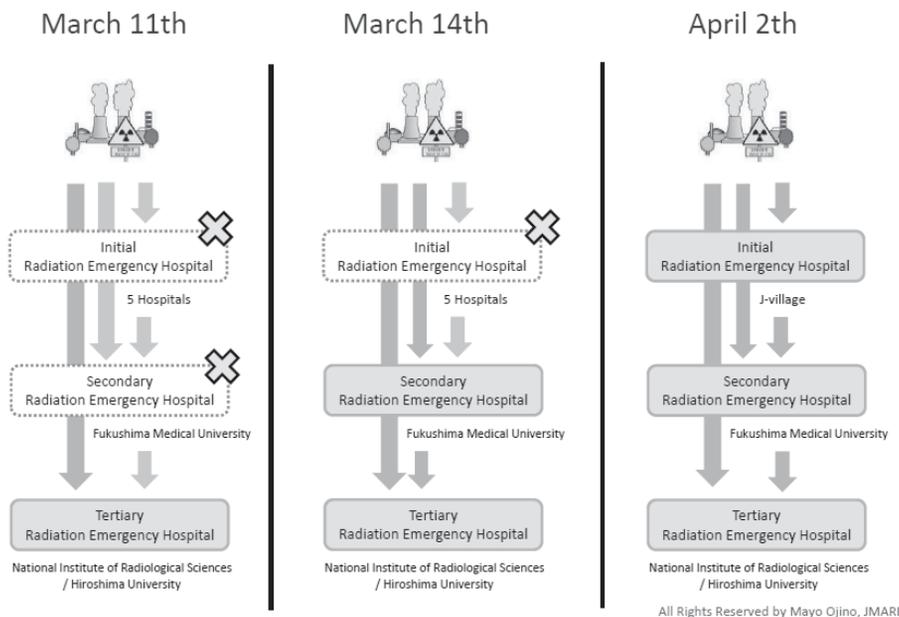
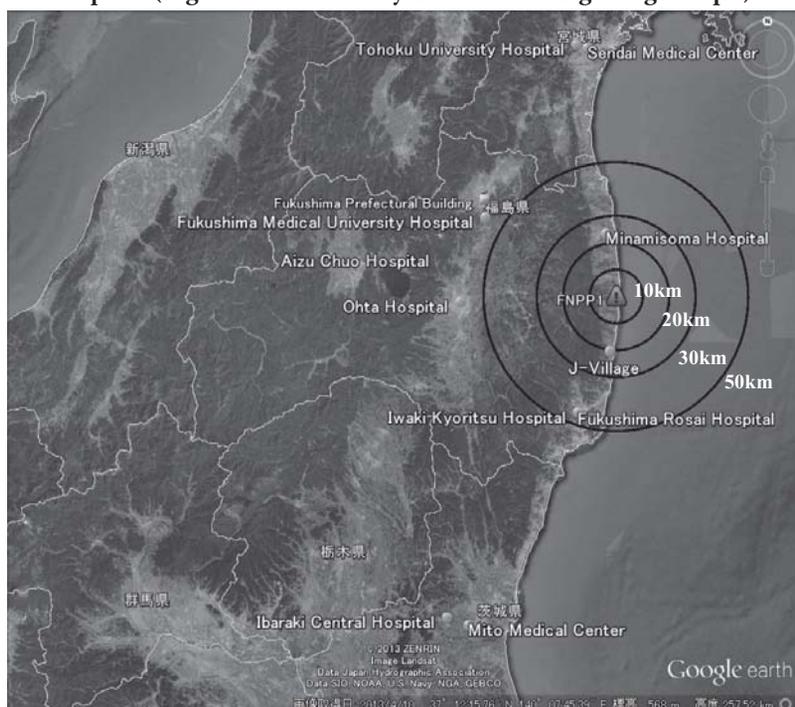


Figure 3. Locations of the Fukushima Daiichi Nuclear Power Plant, J-Village and hospitals (Figure 3 was created by the authors using Google maps.)



operate, and leadership skills [8]. Their role included giving proper advice to the head of the medical team regarding emergency and overall disaster medicine, formulating response plans for cases where there were multiple patients with injuries and/or high-dose radiation exposure, and ensuring effectiveness in the patient response, including the status of medical facilities and patient transport [8].

Stage 5: Reinforcement of the medical care system, and an increase in the number of hospitals for non-contaminated patients (from April 2 to June 23)

Emergency hospitals in Fukushima prefecture could not accept trauma patients from FNPP1, because of these patients might have contamination [3]. From April 2 to June 23, a total of 8 hospitals were prepared to provide general medical care for non-contaminated patients. Specifically, on April 2 [7], Ohta General Hospital and Aizu Chuo Hospital were added to the list of hospitals able to accept patients. Fukushima Rosai Hospital, Iwaki Kyoritsu General Hospital, Mito Medical Center, and Ibaraki Prefectural Central Hospital (secondary radiation emergency hospitals in Ibaraki Prefecture) were also added to this list on April 22 [9], and Tohoku University Hospital and Sendai Medical Center (secondary radiation emergency hospitals in Miyagi Prefecture) were added on June 23 [10] (Figure 3).

At this point in the reconstruction process, patients with high-dose exposure or heavy contamination were transported to the designated radiation emergency hospital (FMUH, NIRS, or Hiroshima University), whereas patients in a severe condition with moderate, minor, or no exposure were transported to other hospitals [11].

* External full-body exposure of at least 1 Gy (with prodromal symptoms such as vomiting) is considered high-dose exposure; heavy contamination is 100,000 cpm or higher.



Stage 6: Enhancement of the medical care system within the Fukushima Nuclear Power Plant, and the construction of a new medical care system, involving both industrial medicine and emergency medicine (July 1)

From May 29 onward, physicians who had been dispatched from Fukushima Rosai Hospital and the University of Occupational and Environmental Health were permanently stationed 24 hours a day at the Critical Based Isolated Building within the plant to provide initial care and health consultations for injured workers [12]. In addition, the medical facility “5/6ER” was established in the service building, located between Units 5 and 6 [12], and physicians with a good knowledge of radiation medicine were stationed around the clock in order to strengthen the emergency medical care. On July 1, TEPCO organized an in-plant emergency medical system network for FNPP1 to enhance preventive medicine, industrial medicine, and emergency medicine within the plant facility.

Discussion

The world has experienced nuclear disasters several times, including the Three Mile Island (1979), Chernobyl (1984), and JCO (1999). Japan has learned lessons from these past nuclear crises and developed plans that incorporated international trends [1]. Nonetheless, a drastic review of the Emergency Preparedness Guide has not been carried out, because of the belief that a Chernobyl type nuclear accident could not occur in Japan [2]. Furthermore, the general disaster management training for nuclear disasters, which is annually conducted by the national government, did not take into account severe accidents or compound disaster, and in a sense existed merely as titular training [2]. In other words, the national preparation for a nuclear disaster never went beyond the “formulation of plans” or the “execution of plans.”

We believe that the biggest problem with the radiation emergency medical system in Japan lies in the vulnerability of the backup system when the system that had been planned proved dysfunctional. On this occasion, it took 3 weeks to compensate for the failed radiation emergency medical system (Stage 1 to 3) and almost 4 months to reinforce the system (Stage 4 to 6). None of these stages was planned ahead; they were created in accordance with the needs of the accident sites. This suggests that the 6 stages revealed here can serve as a practical and effective backup system, as they were obtained from real experience. The Fukushima Accident, as a compound disaster involving a natural disaster, a nuclear disaster, and a mass evacuation, surpassed the level of disaster that any previous plans had anticipated.

Immediately after the accident (March 13 and 14: Stage 1 and 2), the voluntary efforts of willing doctors contributed the most to the reconstruction of the radiation emergency medical system in the area. For example, the doctors who voluntarily gathered launched an organization at the Fukushima Prefecture Jichi Kaikan building to serve as a substitute off-site center with regard to medical provision in the affected areas. These doctors had knowledge of and skills in emergency radiation care and personal networks of colleagues: this allowed smooth communication and prompt responses in the decision-making process at sites [3]. Various medical teams across the country also gathered to assist with the care and health management of the evacuees. JMA dispatched JMAT teams to shelters and other places to provide medical care and health management with the help of local medical associations [17]. JMA also created a map of radiation levels in the air and posted it on the website [18; 19]. Fulfilling this social mission required not only collaboration within JMA and its affiliated medical associations, but also collaboration with

various medical organizations and different professions [6]. By nature, doctors are guaranteed their right to freely exercise own professional judgment [20]. We would suggest that the ability of doctors in the field to think for themselves created resilience in overcoming many difficulties that they faced.

In the aftermath of the Fukushima Accident, many suffered injuries as well as radiation contamination, and required emergency care. From March 11 through December 16, 2011, there were 118 cases of injuries, 44 cases of heat illnesses, 5 cases of acute coronary syndrome or arrhythmia, and 2 cases of cerebral strokes among the plant workers alone [11].

Japanese Association for Acute Medicine (JAAM) dispatched doctors to the facility for initial radiation medicine (J-Village) and the off-site center (April 2 and 4: Stage 3 and 4). In particular, disaster medical advisors enhanced the quality of medical care that was provided by making full use of the limited transportation means and selecting appropriate care facilities based on the urgency and severity of a patient’s needs [11]. Neither the basic disaster management plan nor the nuclear emergency guidelines established by the nation stipulated the involvement of academic societies [23; 24]. In the future, it will be essential to clearly establish the position of disaster medical advisors in response plans in advance. The involvement of academic societies will also be indispensable in establishing dispatch systems and in fostering and training advisors.

From April 2 to June 23 (Stage 5), the radiation emergency system cooperated with local community medical system. In this accident, emergency care, including decontamination management and simple decontamination, were much needed, while professional medical treatment for severe exposure that requires tertiary care



radiation emergency hospitals was in less demand. The designated initial and secondary radiation emergency hospitals were unable to respond to patients who required emergency radiation care. The link between initial, secondary, and tertiary care was severed, leaving only 2 tertiary hospitals a long distance away: the National Institute of Radiological Sciences in Chiba Prefecture (approx. 215 km by air) and Hiroshima University Hospital in Hiroshima Prefecture (approx. 840 km by air). Tertiary radiation emergency hospitals were supposed to treat the patients in need of emergency radiation care if the initial or secondary radiation emergency hospitals were incapable of treating them [21]. The means of transporting patients to a tertiary radiation emergency hospital, the last safety net, were very limited. Seeking and securing means of transport took time, and so did the actual transport. Therefore, prompt treatment was not easily available for patients in need of emergency care. We submit that tertiary radiation emergency hospitals alone were insufficient as a backup for initial and secondary radiation emergency hospitals. We propose moving beyond the conventional continuity concept of initial, secondary, and tertiary care, and encourage the establishment of a national network that involves local clinics and hospitals for emergency care, as well as the Disaster Base Hospitals.

On July 1 (Stage 6), the in-plant medical system was enriched from both the “preventative” viewpoint of industrial medicine and the “treatment” viewpoint of emergency medicine. According to the medical records of the FNPP1’s workers from March 2011 to June 2012 [22], the number of cases was highest in the month of the accident (March 2011), with 67 patients. The number decreased from June 2011 (45 patients). This underlines the importance of stationing both industrial physicians and emergency physicians through an organized dispatch of manpower in collaboration with university hospitals.

Various medical resources such as voluntary efforts, academic societies, a local community medical system and university hospitals provided as much support as possible under extremely limited circumstances. They originally had not planned to involving in radiation emergency medicine. The radiation emergency medical system should be reevaluated and further enriched for the future by incorporating the perspectives of these 6 stages, so that nuclear power plant workers and evacuees who require emergency radiation care may suffer minimal harm and receive proper care. In the future, radiation emergency medical systems should be evaluated with these 6 stages as a basis, in order to reinforce and enrich both the existing and backup systems so that minimal harm will come to nuclear power plant workers or evacuees and that they will receive proper care. This will involve creating a network of medical resources becoming involved across the country.

Conclusions

The conventional radiation emergency medical system of Japan was proved insufficient after the Fukushima Accident, and the vulnerability of the backup system in the plan that existed previously became evident at a time of major disaster. In this paper, we have systematically classified the actual reconstruction process into 6 stages. These 6 stages were not the result of established procedures by planning ahead; they were born from the actual experience and have substantial significance. We conclude that the radiation emergency medical system should be reevaluated for the future, and further enriched by incorporating the perspectives of these 6 stages, in order to minimize radiation damage and enable proper care for nuclear power plant workers and evacuees. It’s important to create a network emergency medical resources and organizations across the country.

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History of AMA Ethics

In 1847 the American Medical Association (AMA) revolutionized medicine in the United States. Members of the newly formed organization, meeting in Philadelphia as the first national professional medical organization in the world, dedicated themselves to establishing uniform standards for professional education, training and conduct. They unanimously adopted the world's first national code of professional ethics in medicine. For the more than 165 years since then, the AMA's *Code of Medical Ethics* (www.ama-assn.org/ama/pub/physician-resources/medical-ethics/code-medical-ethics.page) has been the authoritative ethics guide for practicing physicians.

The Code articulates the enduring values of medicine as a profession. As a statement of the values to which physicians commit themselves individually and collectively, the Code is a touchstone for medicine as a professional community. It defines medicine's

integrity and the source of the profession's authority to self-regulate.

At the same time, *the Code of Medical Ethics* is a living document, evolving as changes in medicine and the delivery of health care raise new questions about how the profession's core values apply in physicians' day-to-day practice. The Code links theory and practice, ethical principles and real-world dilemmas in the care of patients.

At the end of 2008, the AMA Council on Ethical and Judicial Affairs launched a multi-year project to critically review and update *the Code of Medical Ethics*. This project represents the most thoroughgoing effort to update the Code since 1957. The council hopes to complete a draft of this work for deliberation by the AMA House of Delegates in 2014.

By promoting physician professionalism and accountability, the AMA's work around



Ardis Dee Hoven

the Code of Medical Ethics strengthens trust in the medical profession. This core commitment to ethics is critical to the foundation on which physicians are trained and empowered to uphold the highest standards in promoting health and in delivering quality patient care.



AMA Ethics Timeline: 1952 to 2012

1952

The AMA House of Delegates adopted a council report condemning fee splitting in health care.

1954

AMA establishes the Committee on Geriatrics to outline basic problems of aging.

1957

After two years of debate, the Principles of Medical Ethics is revised, eliminating regulations on specific conduct with broad, fundamental ethical principles. This change gives the Judicial Council broad rule-making authority, allowing them to issue ethical pronouncements without securing House of Delegates approval.

1971

AMA adopts report to the Board of Trustees that states a need exists for more women physicians and reviews specific changes necessary to increase the number of women physicians.

1974

AMA presents recommendations to ensure adequate protection of individuals used in human experimentation.

1975

AMA adopts resolution opposing sex discrimination in medical institutions.

1976

AMA encourages handicapped access to public facilities.
AMA adopts resolution seeking an increase in participation of women physicians in organized medicine.

1978

AMA develops national policy endorsing hospice care to enable the terminally ill to die in a more homelike environment.

1980

James S. Todd, MD, eloquently defends his *ad hoc* committee's new Principles of Medical Ethics at the Annual Meeting of the House of Delegates. This new version of the Principles addressed changing ethical issues in the field of medicine.

1982

AMA adopts a resolution calling for increased representation among women and minority physicians.

1985

AMA's Judicial Council becomes the Council on Ethical and Judicial Affairs.

1986

AMA passes resolution opposing acts of discrimination against AIDS patients and any legislation that would lead to such categorical discrimination or that would involve patient-physician confidentiality.

AMA adopts policy prohibiting investment of AMA funds in tobacco stocks and urging medical schools and parent universities to eliminate investments in corporations that produce or promote use of tobacco.

1987

In *School Board of Nassau County v. Gene H. Arline*, the U.S. Supreme Court rules that individuals with infectious diseases are considered "handicapped" under anti-discrimination laws, and decisions as to whether they are "otherwise qualified" for employment should be based on "reasonable medical judgments" made on a case by case basis, as outlined in a friend-of-the-court brief provided by the AMA.

1989

AMA develops National HIV Policy reiterating physicians' ethical responsibilities to treat HIV patients whose condition is within the physicians' realm of competence.

AMA files brief on behalf of Cruzan family in U.S. Supreme Court case *Cruzan v. Missouri Department of Health*. AMA

holds that the guardian has a right to refuse medical treatment for a patient in a persistent vegetative state. Court later rules that states have the right to regulate food withdrawal.

1990

AMA adopts guidelines governing gifts to physicians from industry.

1993

AMA passes resolution declaring physician-assisted suicide is fundamentally inconsistent with the physician's professional role.

1994

AMA drafts the Patient Protection Act. Elements of the act were included in every health system reform bill reported out of committee in both the House and Senate.

1995

The *Journal of the American Medical Association (JAMA)* publishes an issue examining the tobacco industry through corporate documents of Brown and Williamson Tobacco Company.

1996

AMA drafts the Patient Protection Act II bill with two goals: protection for patients through increased disclosure requirement and managed care fairness; and physicians need to have defined rights and protections from arbitrary separation from managed care plans.

1997

In conjunction with the AMA's sesquicentennial observance, "Ethics and Modern Medicine," the AMA's first ethics conference, is held in Philadelphia, the city of the AMA's founding.

AMA renews its emphasis on medical ethics by establishing the Institute for Ethics. The Institute's mission is to provide a forum for the timely exploration and discussion of the tough decisions now affecting

World Medical Journal



physicians and their patients. The Institute provides practical physician outreach and guidance as well as scholarly research for end-of-life issues, genetics, professionalism and managed care.

1998

The AMA's Task Force on Association/Corporate Relations develops definitive standards that guide the conduct of corporate relationships involving the AMA and produces a report on such principles, standards and guidelines.

Named after the co-writers of the original *Code of Medical Ethics*, the AMA selects its first recipient of the Isaac Hays, MD, and John Bell, MD, Leadership in Medical Ethics Award.

1999

Through an educational grant from the Robert Wood Johnson Foundation, the AMA Institute for Ethics' *Educating Physicians on End-of-Life Care* project provides training to practicing physicians on the core skills needed to provide quality end-of-life care.

The AMA founds the *Virtual Mentor*, an online ethics journal. The journal is open-access and advertisement-free, and explores the ethical issues and challenges that students, residents and other physicians are likely to confront in their training and daily practice. For this reason, the journal is a valuable teaching resource for medical educators at all levels as well as for doctors and doctors-to-be.

2001

AMA revises its Principles of Medical Ethics to emphasize a physician's responsibility to the patient as paramount during the care of that patient, and a physician's responsibility to support access to medical care for all people.

The AMA Council on Ethical and Judicial Affairs drafted the Declaration of Professional Responsibility: Medicine's Social Contract with Humanity. The declaration, adopted by the House of Delegates at the

2001 Interim Meeting, serves as a reaffirmation of professional standards by the world community of physicians.

The AMA launches a new national initiative "The Communication of Ethical Guidelines for Gifts to Physicians from Industry" as a means to urge physicians and industry representatives to adhere to AMA ethical guidelines regarding gifts.

2003

The AMA House of Delegates approves recommendations from the Council on Ethical and Judicial Affairs, which state that cloning for biomedical research is consistent with medical ethics. The recommendations also include the critical importance of appropriate oversight and safeguards for subjects involved in such research.

The AMA's Ethics Resource Center selects 10 U.S. and Canadian medical school partners for its Strategies for Teaching and Evaluating Professionalism (STEP) program, which encourages the design of innovative methods for teaching professional competencies and for evaluating the success of those methods.

2004

The Ethical Force Program® releases "Ensuring Fairness in Health Care Coverage Decisions: A Consensus Report on the Ethical Design and Administration of Health Care Benefits." The report indicates five general criteria to be used in health care coverage decisions in addition to providing more than 70 recommendations to enable organizations to fulfill these criteria.

The AMA House of Delegates set new ethical guidelines for physicians providing retainer services, sometimes known as "boutique care." The guidelines ensure that physicians who provide additional care or special services in return for retainer fees deliver the same standard of care to all patients.

2005

The AMA issues new ethical guidelines addressing quarantine and isolation treatment

to help physicians adequately balance public health goals with the interests of individual patients during epidemics.

2006

The Ethical Force Program, led by the AMA's Ethics Resource Center, releases a consensus report, "Improving Communication—Improving Care: How health care organizations can ensure effective, patient-centered communication with people from diverse populations."

2008

A group convened by the AMA's Institute for Ethics publishes "African American Physicians and Organized Medicine, 1846-1968." Appearing in the July 16 edition of *JAMA*, the piece investigates the association's relationship to and positions on race. Following publication of the article, AMA issues an apology for its historical role in discrimination against African Americans in organized medicine.

2009

At its 2009 Interim Meeting, the AMA's House of Delegates reaffirms policy that unequivocally states that physicians "must oppose and must not participate in torture for any reason."

2011

AMA updates ethical guidelines on physician relationships with industry.

2012

AMA issues new ethical guidelines on physicians' responsibilities to be prudent stewards of health care resources.

*Dr. Ardis Dee Hoven,
President of American
Medical Association*

Medical Profession in Latvia Today



Pēteris Apinis

Summary

The Congress of Latvian Physicians and the 25th anniversary of the Latvian Medical Association was the right moment to analyze what has been done, define the current status and make conclusions regarding physicians work in Latvia on the whole, as well as the role of governmental and non-governmental institutions, the achievements and setting tasks and goals for the future.

To find out how doctors feel in Latvia at the current moment, their own assessment of their profession and the public opinion regarding doctors, the Latvian Medical Association commissioned the survey *Medical Profession in Latvia Today* to the public opinion research centre SKDS.

This survey was organized by carrying out two questionnaires – one for doctors and the other for the population of Latvia. Both were carried out in August 2013. Invitations to participate were sent to those physicians whose addresses were available in the data



Arnis Kaktiņš

base of the Latvian Medical Association (LMA). Responsiveness was high and the questionnaire was filled out by 2274 doctors representing various fields. Not all respondents were members of LMA. Consequently, it may be assumed that the results represent not only the opinion of the Association members, but they might be referred to the physicians of Latvia on the whole.

The questionnaire addressed to the people of Latvia embraced in total 1,005 permanent residents of Latvia aged 18 to 74 according to quota sampling. The questionnaire was carried out in the Internet while the respondents were selected to make a national representation as well.

To formulate the goals, research themes and questions to be asked, the LMA formed a working group. Later the issues were discussed and supplemented by the LMA Board members. After the discussions six themes were chosen to be included:

- prestige of medical profession, satisfaction with professional choices;
- motivation;

- professional burnout;
- habits of doctors and their attitude to personal health;
- the system of health care in Latvia;
- assessment of the activities of the LMA, governmental and non-governmental institutions concerning health care.

The survey results had been reported during 7th Congress of Latvian Physicians by the sociologist Arnis Kaktiņš. All graphs and tables were published in the journal *Latvijas Ārsts* (Physician of Latvia). Now here we are going to highlight the most important data and outcomes. Mostly the research confirmed what was already known and suspected. The results could have been more optimistic, but bitter truth is better than sweet lies.

The doctors assessment of the organizations makes interpreting of the data possible. The survey covers more than one fourth of doctors working in Latvia, so their opinion is fairly comprehensive. The assessment was done using the scale from 1 to 10. The activities of the LMA were evaluated as very good (9 or 10, according to the scale) by 20% of the respondents, while 37% admitted it was good (7 or 8), which altogether makes 57%. It is also essential that 12% of the doctors have no opinion about the LMA activities. To compare – 51% of the doctors have no opinion about the Latvian Hospital Association. Another comparison – the Ministry of Health was evaluated as very good by 2%, or good – by 8% of the doctors.

At any rate the data give evidence that the Trade Union of Health and Social Care Employees, the Hospital Society and governmental health structures have more room for improvement than the Medical Association.

Undoubtedly, the questionnaire for our colleagues contained a question on what they consider to be good points of the Latvian Medical Association. And particularly posi-



tive is the fact that 83% of the respondents evaluated the journal *Latvijas Ārsts* as very good (36%) or good (47%). This is a really positive evaluation which decisively makes the Latvian Medical Association to improve even more! Interdisciplinary conferences organized by the LMA were evaluated as very good or good by 73% of the respondents, thematic conferences – by 68% and likewise the process of certification – by 53% of the respondents. In many opinions the thematic conference *What do Latvian Children Eat?* was the year's best.

Moreover, the survey revealed that doctors are not informed well enough about everyday work of the LMA, e.g. the concerns of the activities of Ethics Committee or Professional Court

The colleagues had evaluated the work of the LMA and LMA, in our turn, could evaluate doctors work. The survey revealed that a doctor works average in 1.93 work places. More work places are common for male doctors, younger people as well as radiologists, surgeons, neurologists. Latvian doctor's income usually is from medical activities in 1.73 work places average. The remaining 0.2 work places usually are connected with pedagogical or organizational work while a number of colleagues get income from business, scientific research or dividends.

More than 34% of the doctors work directly with patients more than 40 hours a week (which means more than 8 hours in a working day). More than 50 hours are worked by 15%, while more than 60 hours – by 7% of the doctors. Please, note that these hours are spent in direct contact with patients, not including the time spent on settling bureaucratic formalities. In general, more than the official hours for direct contact with patients are worked by doctors in in-patient clinics as well as anaesthetists, re-animatologists, specialists in obstetrics and gynaecology. Bureaucratic formalities take more than 5 hours a week for 67% of the

doctors, but 13% of the doctors spend on it 20 hours a week.

91% of the doctors believe that the health care system should be better financed, 88% think that the care giving system and management should be improved, 85% consider that the population awareness about health issues should be raised. Regarding the question whether health care provided by government should be tied to taxes paid by a respective patient, 49% answered positively while 29% opposed it. We can add here that 35% of the doctors admitted that their income decreased during the last year, while only 15% reported increase of income. Only 12% of the colleagues consider that their work is sufficiently rewarded financially. Only 33% of respondents think that non-financial rewards like appreciation from patients and colleagues, prestige of the profession etc. are sufficient. 80% of the colleagues are of the opinion that financial reward is not sufficient while 45% also think that non-financial rewards are scarce.

These conditions cause the burnout syndrome that is felt by 88% of the colleagues (moreover, 31% of them suffer from it often, only 8% have never felt it). Burnout can be caused by many different reasons, however, the answers provided by the doctors reveal that mostly burnout is connected with the never-ending reforms of the health care system, permanent uncertainty about the future, excessive bureaucracy, low salaries and too much time spent at work leaving too little for self-improvement.

59% of the doctors feel positive and optimistic about their own health while only 55% of them feel well mentally and emotionally. To be a good doctor while feeling emotional discomfort is a difficult task. Still in our survey we mostly focused on physical health and habits that support healthy lifestyle. So we recommend everyone to look closer into the graphs that show the doctors smoking habits and what they recom-

mend to their patients concerning giving up smoking; the doctors sports activities, overweight, vaccinations, following one's cholesterol level and blood pressure, PSA estimation, mammography or blood in faeces in connection with their recommendations for patients.

Despite all the above mentioned, most of the doctors still love their profession. 75% of the respondents are sure that they would choose to become a doctor again if they could turn the time back, 59% would choose the same speciality they are working in at the moment, 58% would prefer the work place they have now.

Description of the survey

The survey was carried out by the public opinion research centre SKDS.

The working group: Arnis Kaktiņš, Margita Otto, Andrejs Solopenko, Laila Bīriņa, Ilze Grase, Saiva Brežinska and Ieva Strode.

Doctors questionnaire

Time period: 25 July, 2013 – 15 August, 2013.

Respondents: Latvian doctors according to the data base supplied by the client. Valid and unique e-mail addresses in the data base: 4804. Reached sampling: 2274 respondents. Method of the questionnaire: Internet questionnaire (CAWI).

Population questionnaire

Time period: 2 August, 2013 – 7 August, 2013.

Respondents: permanent residents of Latvia aged 18 to 74. Reached sampling: 1005 respondents.

Method of sampling: quota sample. The data were weighed in accordance with the Population Register of the Office of



Citizenship and Migration Affairs of the Ministry of the Interior as of 21 January, 2013. Geographical coverage: the whole territory of Latvia. Method of the questionnaire: Internet questionnaire (CAWI).

The following graphs reveal the data obtained according to *Net Promoter* assessment index that is often used by companies to estimate the customer loyalty level.

Net Promoter system is based on the principle that customers can be divided into 3 categories:

- promoters (the possibility to recommend the company is 9 or 10) – loyal and enthusiastic customers who will continue to use the company services and will recommend them to other people;

- passive ones (the possibility to recommend the company is 7 or 8) – satisfied customers who could be tempted away by rival companies;
- detractors (the possibility to recommend the company is 1 to 6) – dissatisfied customers who could damage the brand with their negative references.

To calculate *Net Promoter* index, the percentage of detractors should be subtracted from the percentage of promoters. Theoretically *Net Promoter* index could range from -100 (everyone is a detractor) to +100 (everyone is a promoter).

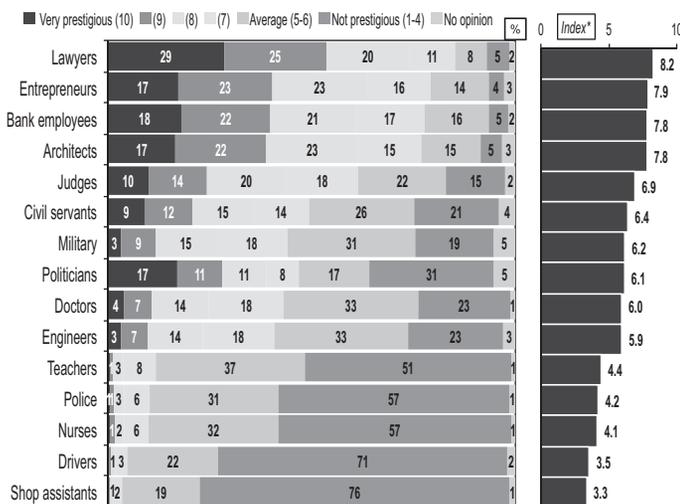
Source: Fred Reichheld, Rob Markey. *The Ultimate Question 2.0: How Net Promoter Companies Thrive in a Customer-Driven World*,

To estimate the statistical measurement error it is necessary to know the number of respondents in the corresponding group and the outcome in per cent. Based on these characteristics, the table shows limits of statistical measurement error in +/- per cent with 95% probability.

For example, if the survey data show that 55% of all respondents (the number of respondents n=1005), taking into account the information available about doctors and their salaries, believe that doctors work in Latvia is not sufficiently rewarded financially, then we can assume with 95% probability that the statistical measurement error is within +/- 3.1%. It means that 51.9 to 58.1% from the target group believe that doctors work in Latvia is not sufficiently rewarded financially.

1. Occupational prestige, satisfaction with the chosen profession

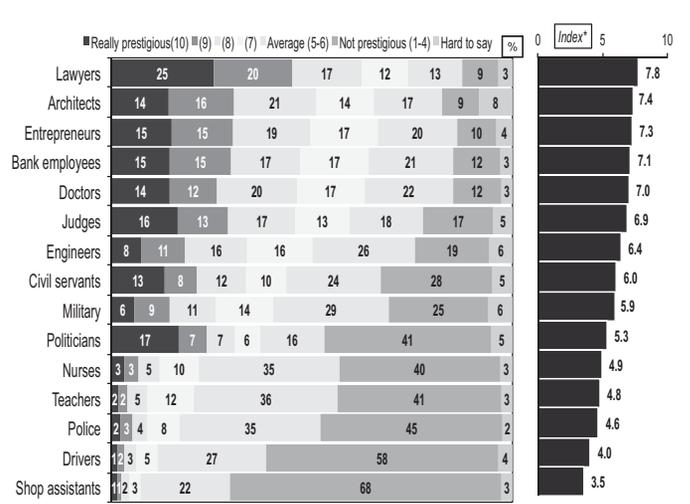
Figure 1. Prestige of the doctor's profession (Doctors' view)
Please, estimate the prestige of the following professions in Latvia today



Basis: all respondents, n=2274

* Index – average estimation from 1 (not prestigious at all) to 10 (very prestigious)

Figure 2. Prestige of the doctor's profession (People's view)
Please, estimate the prestige of the following professions in Latvia today according to public opinion



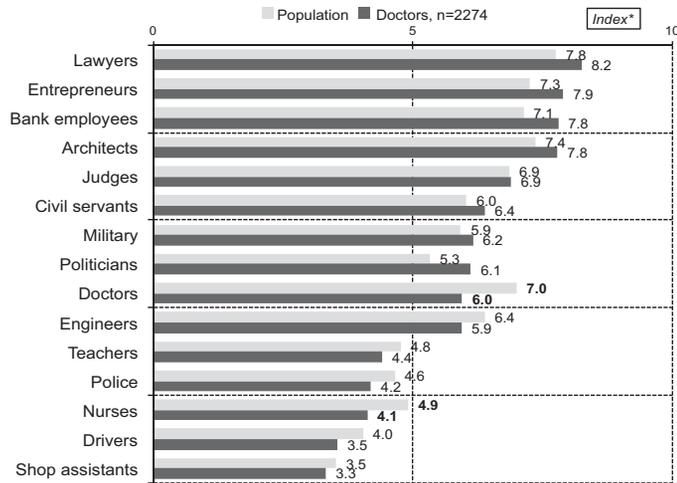
Basis: all respondents, n=1005

* Index – average estimation from 1 (not prestigious at all) to 10 (very prestigious)



Figure 3. Prestige of the doctor's profession

Please, estimate the prestige of the following professions in Latvia today

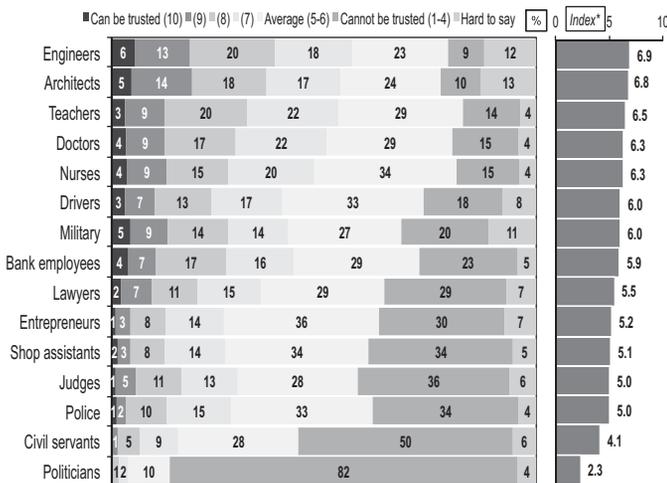


Basis: respondents in respective groups (see "n =" in the graph)

* Index – average estimation from 1 (not prestigious at all) to 10 (very prestigious). Data ranked according to characteristics in doctors' group

Figure 4. Whom to trust? (People's view)

In your opinion, can representatives of the following professions be trusted?

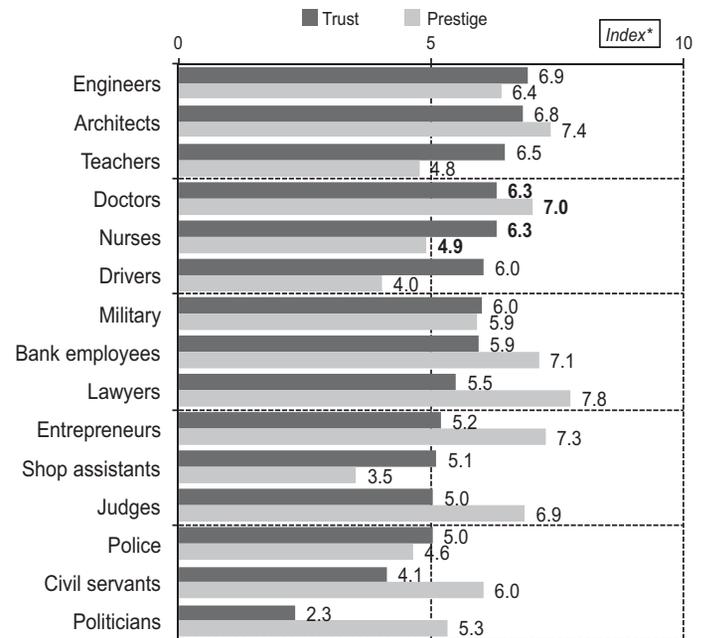


Basis: all respondents, n = 1005

* Index – average estimation according to scale from 1 (cannot be trusted) to 10 (can be trusted)

Figure 5. Whom to trust? (People's view)

Please, estimate the prestige of the following professions in the eyes of Latvian society. In your opinion, what might be the trust level in the following professions on the whole?

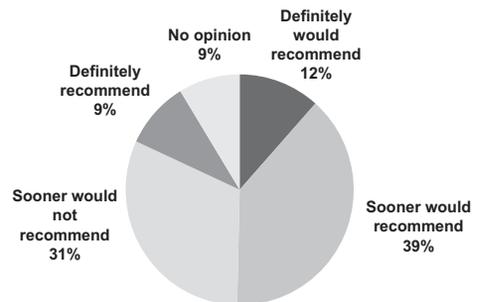


Basis: respondents who have given the responding estimation
Data ranked according to trust data.

* Index – average estimation according to scale from 1 (cannot be trusted/not prestigious at all) to 10 (can be trusted/really prestigious)

Figure 6. Would you advise your child to choose your own profession?

Taking into account everything you know about your profession and your practical experience, would you recommend your child to become a doctor?

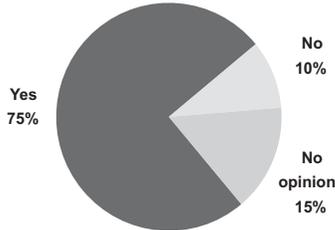


Basis: all respondents, n=2274



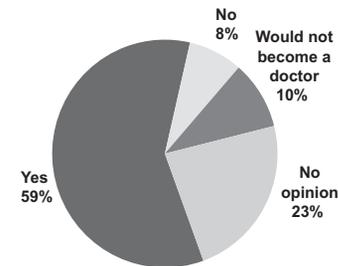
Figure 7. Satisfaction with your own choice

Are you sure that you would choose to become a doctor again if you could turn the time back?



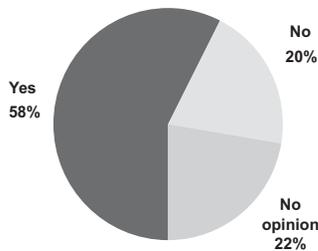
Basis: all respondents, n=2274

Are you sure that you would choose the same doctor's speciality again if you could turn the time back?



Basis: all respondents, n=2274

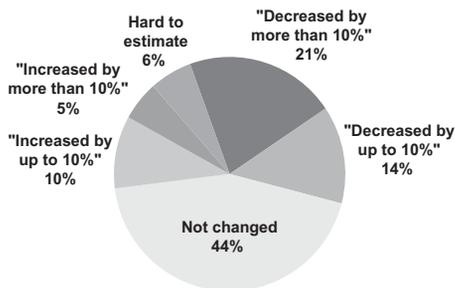
Are you sure that you would choose the same work place you are working in now again if you could turn the time back?



Basis: all respondents, n=2274

Figure 8. Income changes over the last year

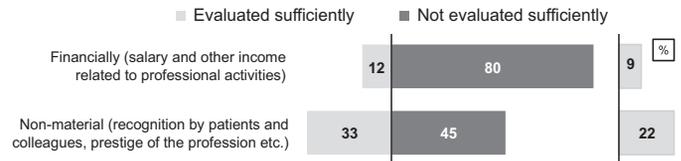
Taking into account all the income you get from your medical activities, can you estimate the changes during the last year?



Basis: all respondents, n=2274

Figure 9. Satisfaction in doctor's work

In your opinion, is your work in medical area evaluated sufficiently?



Basis: all respondents, n=2274

Figure 10. Satisfaction in doctor's work

Please, identify the most rewarding moment in your doctor's job.

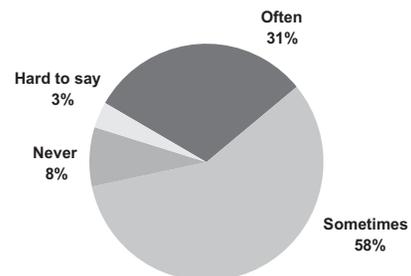


Basis: all respondents, n=2274

2. Professional burnout

Figure 11. Burnout in work

Sometimes doctors' professional activities are associated with the burn-out syndrome, which means emotional and physical problems, loss of interest concerning one's work, cynical attitude, and feeling of no personal achievements. Do you ever feel like that?

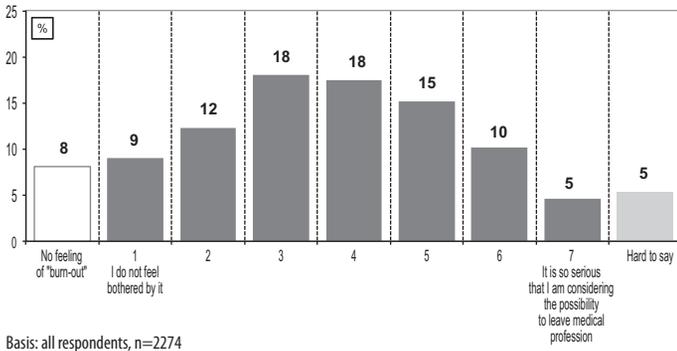


Basis: all respondents, n=2274



Figure 12. Burnout intensity

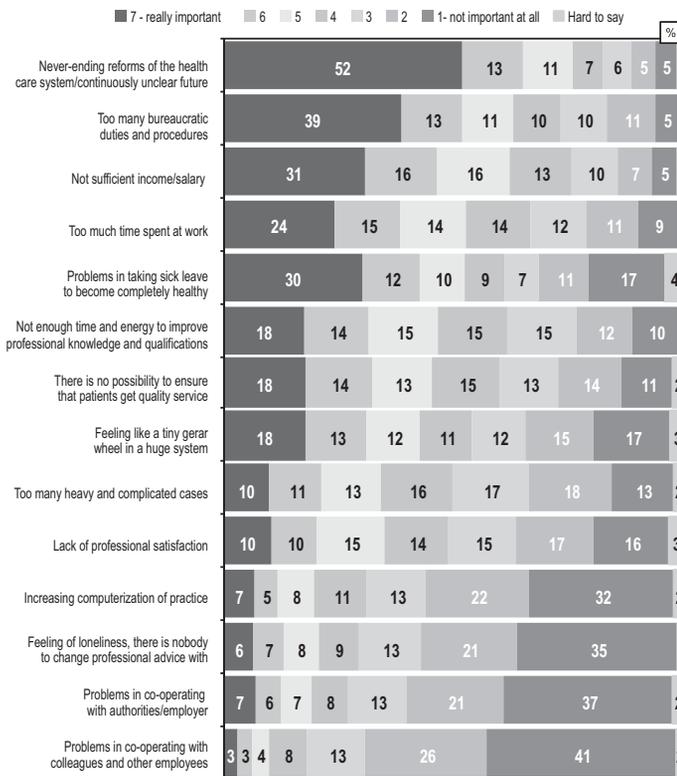
Please, using the 7 point scale, estimate the level of your professional burnout



Basis: all respondents, n=2274

Figure 13. Burnout causes

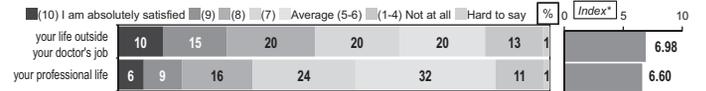
Please, evaluate the importance of the following factors that might enhance your feeling of burnout, according to the 7 point scale.



Basis: respondents that feel "burn-out", n=2009

Figure 14. Satisfaction with different aspects of life

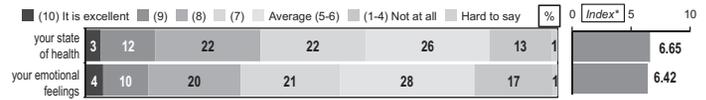
How satisfied are you in general with ...



Basis: all respondents, n=2274

Index* – average value according to scale from 1 (I am not satisfied at all) to 10 (I am absolutely satisfied)

How would you evaluate in general ...



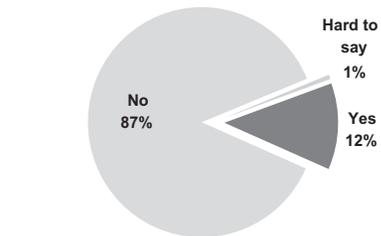
Basis: all respondents, n=2274

Index* – average value according to scale from 1 (it is really bad) to 10 (it is excellent)

3. Doctors' habits and caring for their health

Figure 15. Smoking

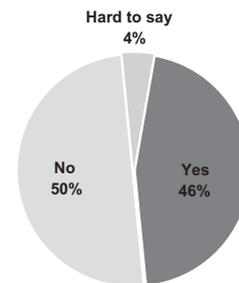
Do you smoke?



Basis: all respondents, n=2274

Figure 16. Overweight

Are you overweight?



Basis: all respondents, n=2274



Figure 17. Going in for sports

How many hours a week do you spend on physical activities/sports, intensive enough to make you sweat?

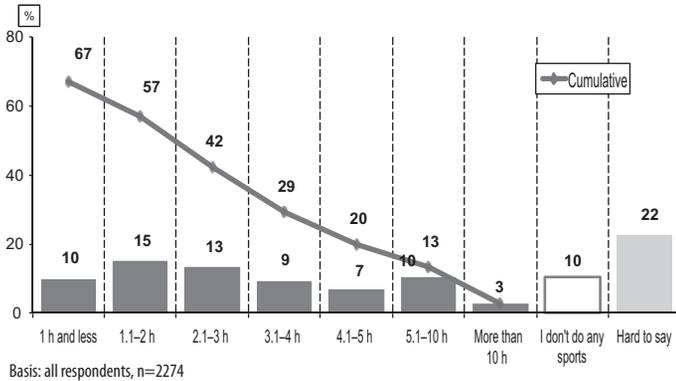


Figure 18. Cholesterol index

Do you know what your cholesterol index is/do you follow your level of cholesterol?

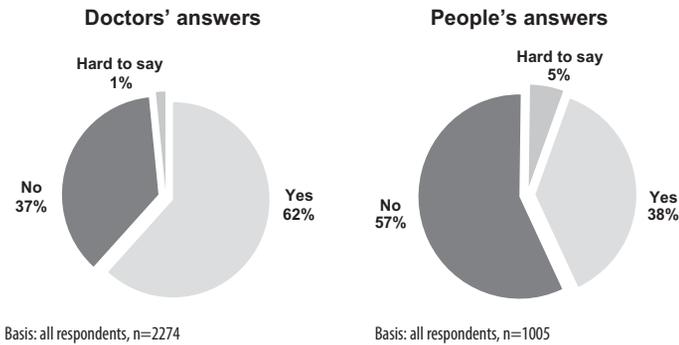


Figure 19. Blood pressure

Do you know what your blood pressure is/do you follow your blood pressure?

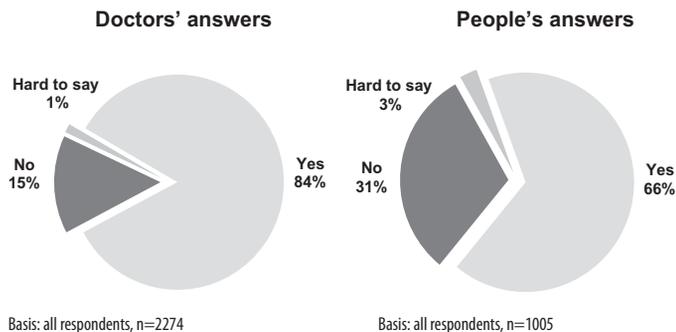
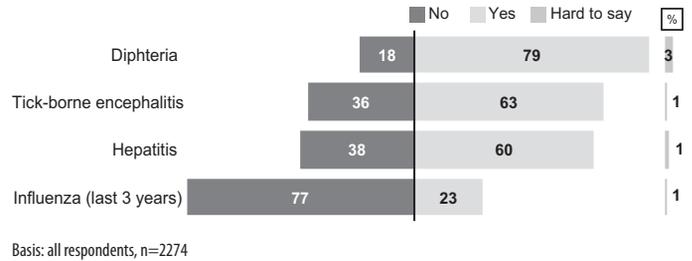
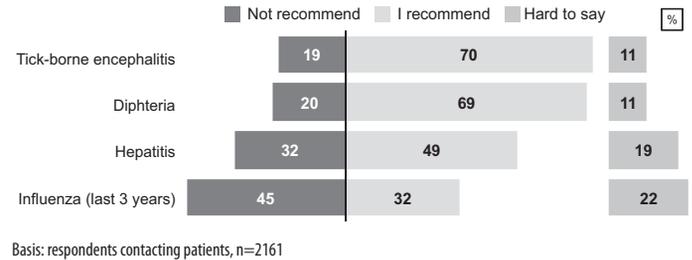


Figure 20. Vaccination (Doctors' answers)

Have you been vaccinated against the following infections?



Do you recommend your patients vaccination against the following infections?



(People's answers)

There are different opinions about vaccination against infections. Please, identify the infections everybody should be vaccinated against:

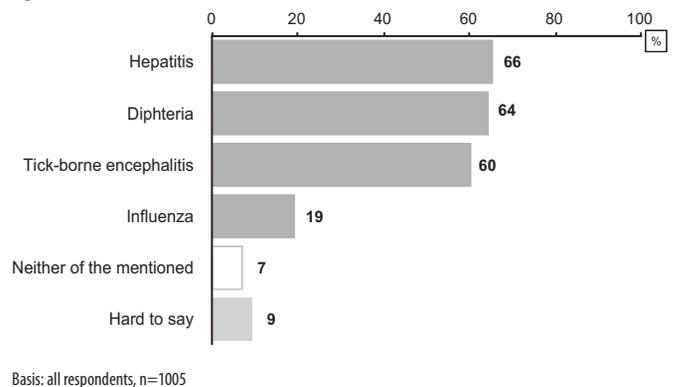
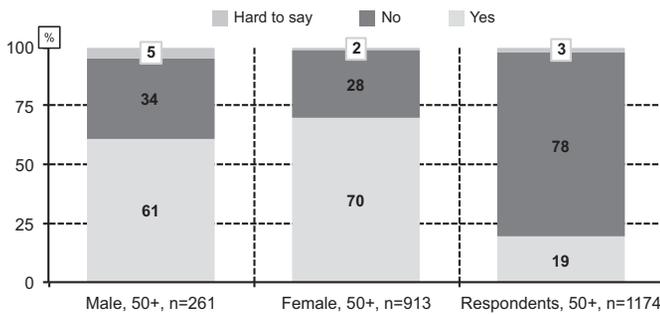




Figure 21. Early diagnosis of oncologic diseases
(Doctors' answers)

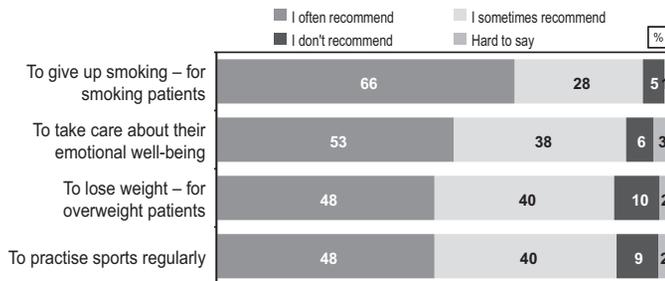
Have you had prostatic specific antigen (PSA) timely determined according to guidelines? Have you had mammography done timely according to guidelines? Have you had hemoplus in faeces timely determined according to guidelines?



Basis: respondents at least 50 years of age, (see "n=" in the graph)

Figure 22. Recommendations for patients

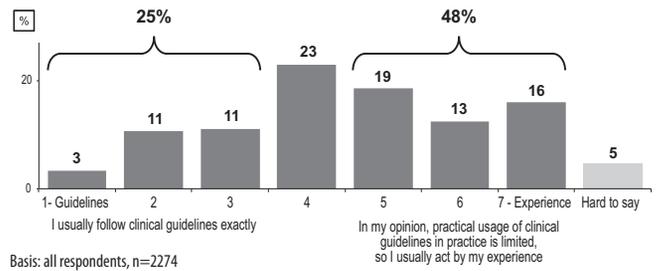
Doctors' attitude to their patients can be different. Some of them give advice on healthy lifestyle while others do it rarely or never. Do you recommend your patients the following actions?



Basis: all respondents, n=2161

Figure 23. Attitude towards clinical guidelines

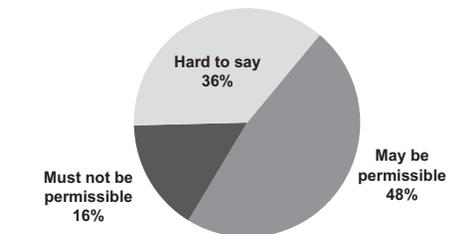
Doctors differ in their attitude towards evidence based medicine. Part believes in accurate following the guidelines, performing the indicated activities, the sequence of their application and the tactics in the treatment. Others consider that such guidelines cannot substitute the doctors' experience, intuition and individual approach to each patient. Where will you place yourself in the 7 point scale?



Basis: all respondents, n=2274

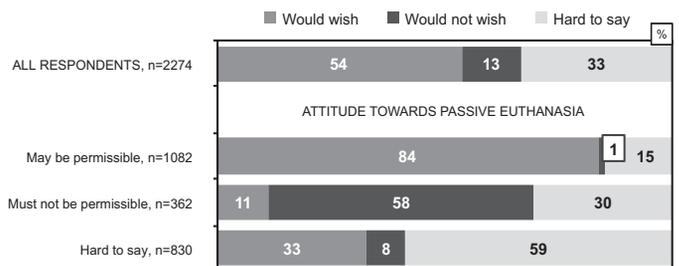
Figure 24. Passive euthanasia

In case, you would get into a situation when you are unconscious and cannot make any decisions, and your life would be maintained in terminal condition without any medical solutions to improve the situation, would you wish to have passive euthanasia performed??



Basis: all respondents, n=2274

In case, you would get into a situation when you are unconscious and cannot make any decisions, and your life would be maintained in terminal condition without any medical solutions to improve the situation, would you wish to have passive euthanasia performed??

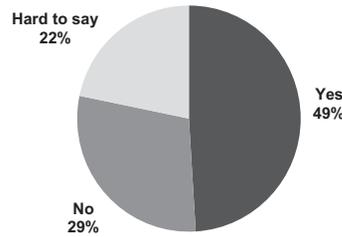


Basis: respondent of respective groups, (see "n=" in the graph)



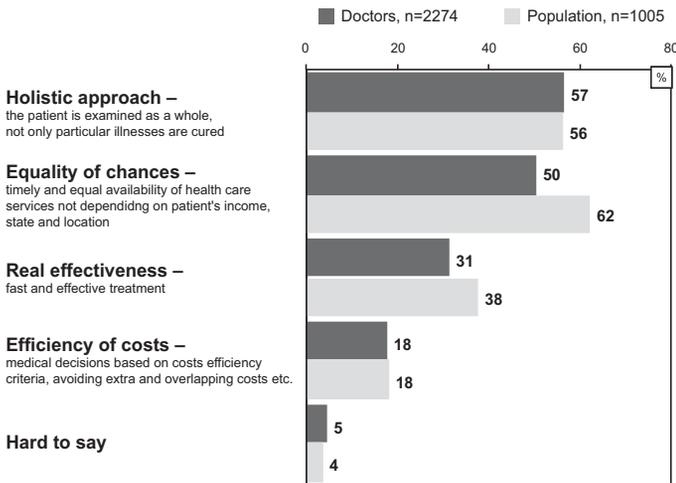
4. Health care system in Latvia

Figure 25. Available services and tax payment
In your opinion, should the health care paid by the state be connected with the taxes paid by respective patients?



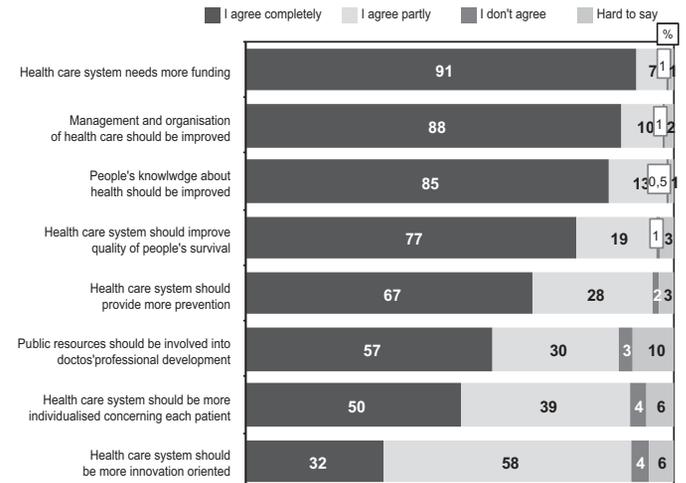
Basis: all respondents, n=2274

Figure 26. Core values of health care system
Which two of the mentioned values should be the most important in Latvian medical care system, in your opinion?



Basis: respondents of respective groups, (see "n=" in the graph)

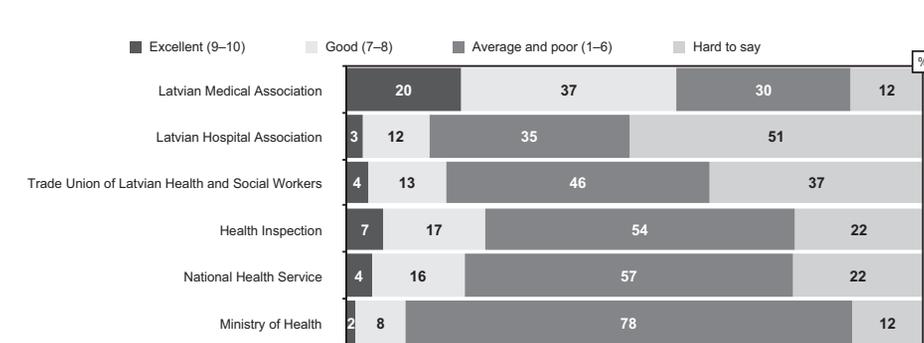
Figure 27. Health care system in the future
Thinking about future development of health care in Latvia which two theses do you agree with?



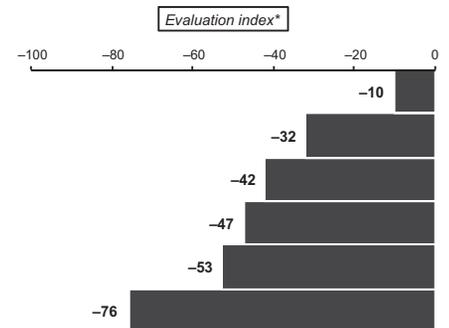
Basis: all respondents, n=2274

5. Evaluation of the performance of the Latvian Medical Association

Figure 28. Evaluation of the Association's performance
How do you evaluate activities of the following institutions?



Basis: all respondents, n=2274

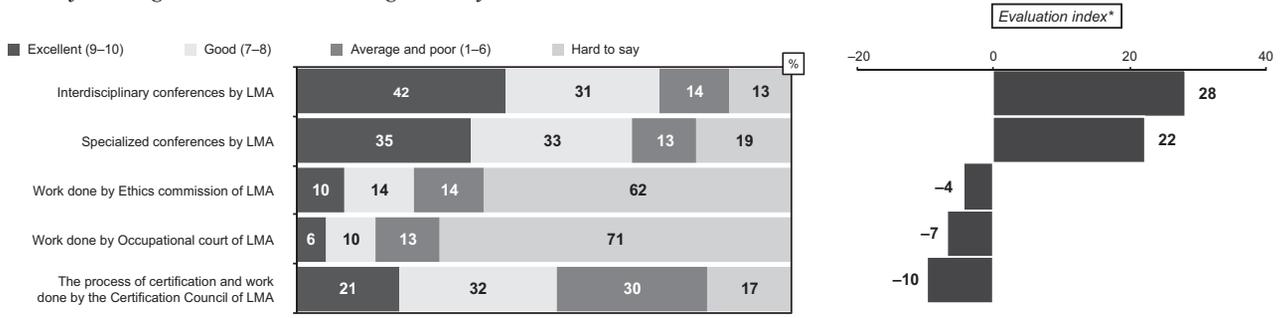


Evaluation index* – (excellent (9–10)) – (average and poor (1–6))



Figure 29. Evaluation of the Association's performance

Please, evaluate the following events and activities organized by the Latvian Medical Association:



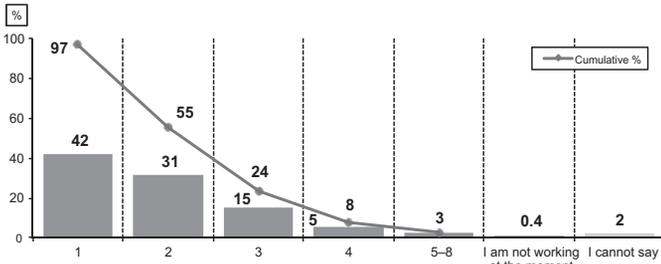
Basis: all respondents, n=2274

Evaluation index* = (excellent (9-10)) - (average and poor (1-6))

6. Statistics on the doctors-respondents

Figure 30. Number of work places

How many paid work places do you currently have?

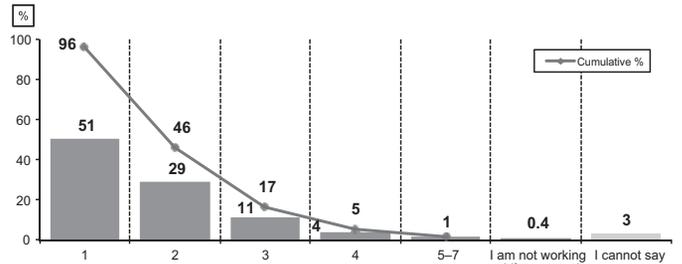


A Latvian doctor works average in 1.93 work places. Several work places are common for men, doctors of younger age group, as well as radiologists, surgeons, neurologists

Basis: all respondents, n=2274

Figure 30. Number of work places

In how many work places do you currently get income from medical activities?

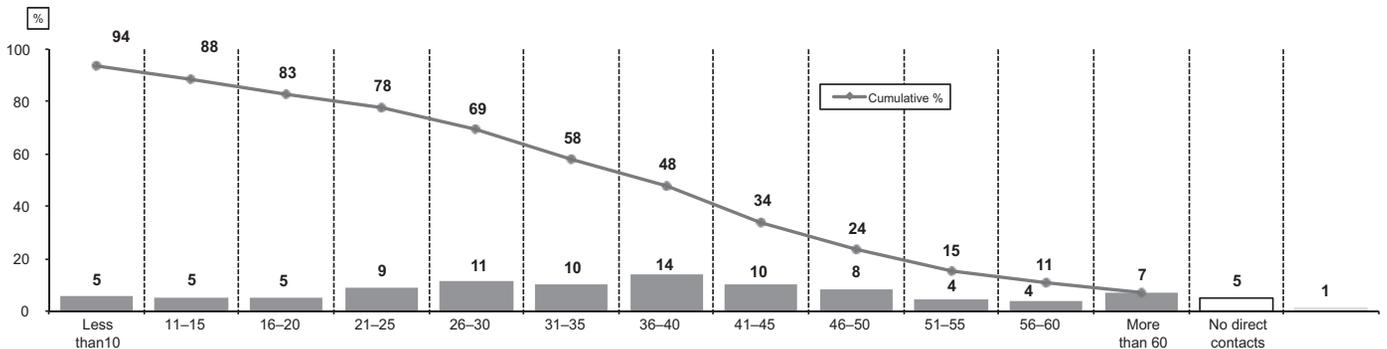


Earnings of a Latvian doctor from medical practice come average from 1.73 work places

Basis: all respondents, n=2274

Figure 31. Contacts with patients

On average for how many hours a week do you contact your patients directly?

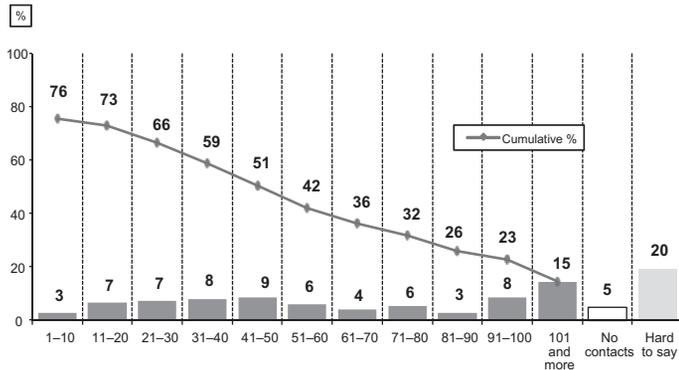


More than 40 hours per week are usually worked by doctors in hospitals, as well as anesthesiologists, reanimatologists, specialists in obstetrics and gynecology

Basis: all respondents, n=2274



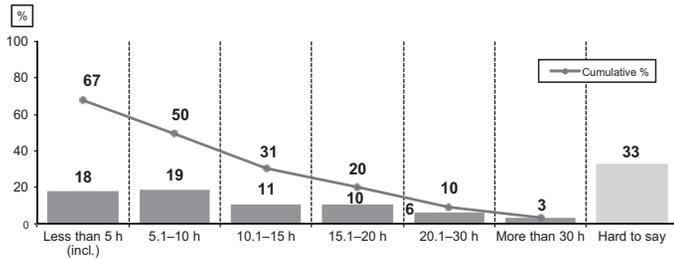
How many patients do you contact on average per week?



Basis: all respondents, n=2274

Figure 32. Time spent on bureaucratic and administrative work

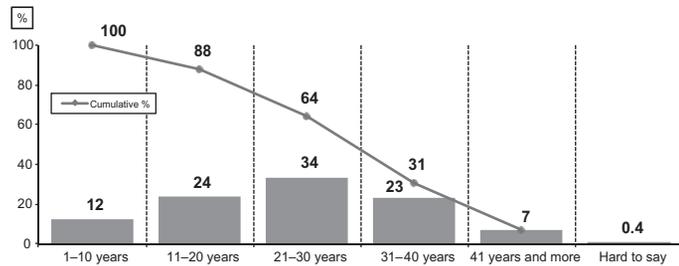
How many hours on average do you spend filling out documents and reports and doing administrative work?



Basis: all respondents, n=2274

Figure 33. Total length of service

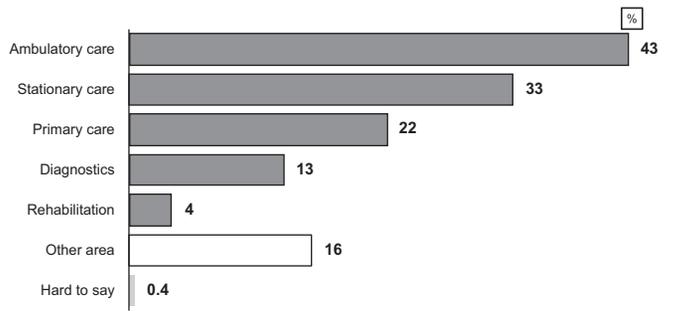
For how many years have you been in a medical profession?



Basis: all respondents, n=2274

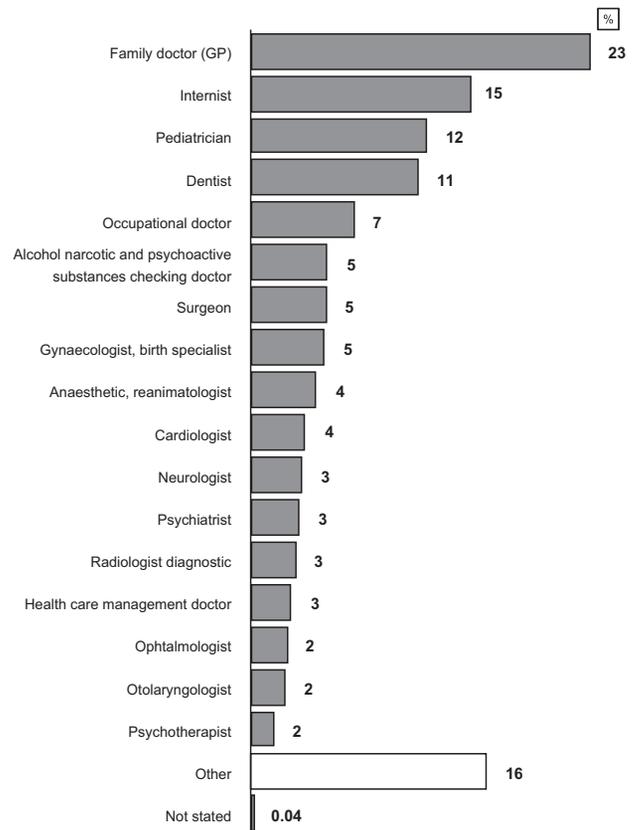
Figure 34. Statistics on the doctors-respondents

In what medical area do you work?



Basis: all respondents, n=2274

Doctor's speciality



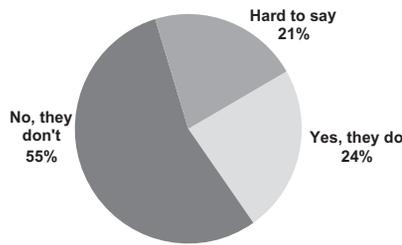
Basis: all respondents, n=2274



7. Data from the population questionnaire

Figure 35. Adequate remuneration for doctors

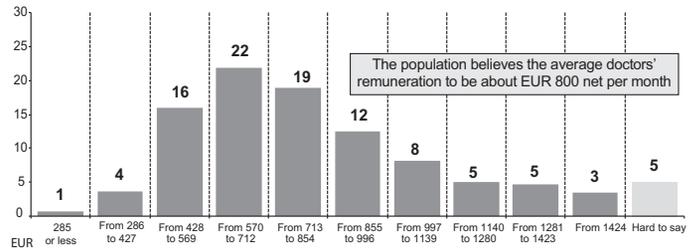
Taking into account everything you know about doctors and their salaries, do you think that doctors in Latvia are sufficiently financially rewarded?



Basis: all respondents, n=1005

Figure 36. Ideas on doctors' remuneration

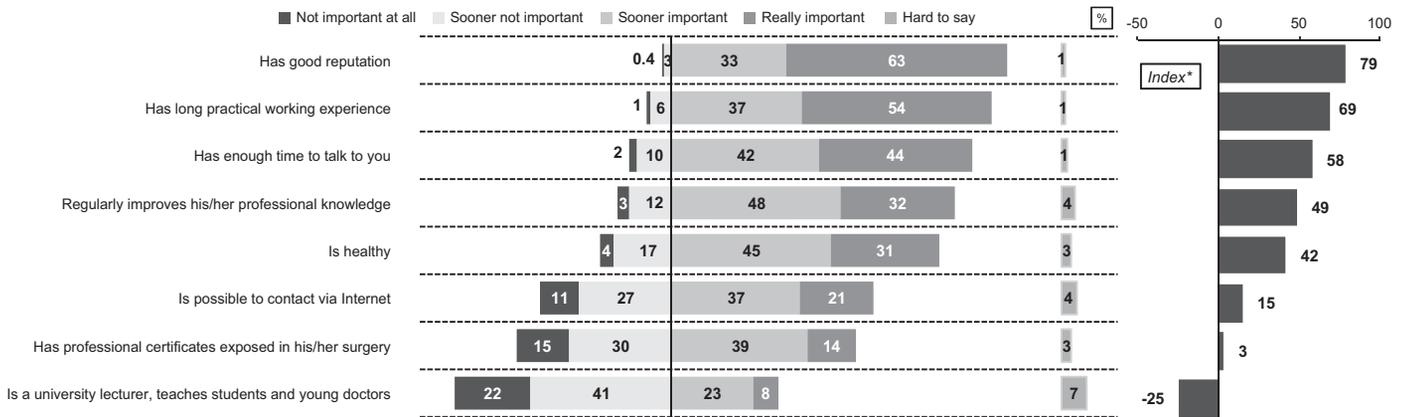
What is in your opinion an average Latvian doctors monthly earnings after taxes?



Basis: all respondents, n=1005

Figure 37. Requirements for the doctor

How important for you is that your doctor ...

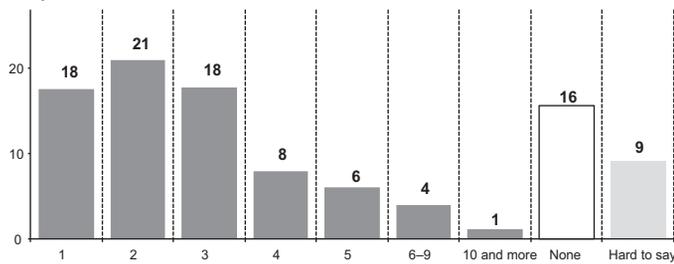


Basis: all respondents, n=1005

* Index scale from -100 (not important at all) up to +100 (very important)

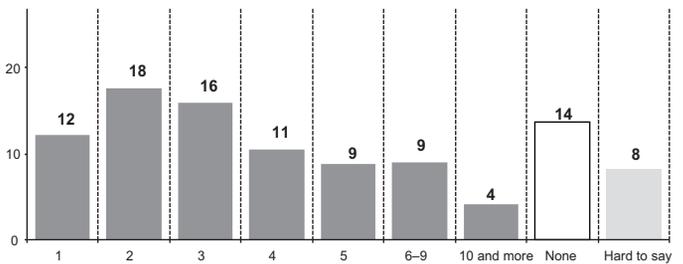
Figure 38. Statistics on the people-respondents

How many medical institutions did you visit as a patient last year at least once?



Basis: all respondents, n=1005

How many doctors did you visit last year (including family doctors, dentists etc.)?



Basis: all respondents, n=1005

Dr. Pēteris Apinis, President of Latvian Medical Association
 Arnis Kaktiņš, sociologist, executive director of the public opinion research centre SKDS

On the Road to Tobacco-Free Finland



Kristiina Patja

Background

Tobacco use leads to high morbidity and increased mortality, shortening the user's life expectancy by 7–15 years. It accounts for one in 10 deaths among adults [1]. Every day 80,000–100,000 young people around the world become addicted to tobacco. If the current trends of tobacco use continue, 250 million children and young people alive today will die from tobacco-related diseases [1]. Tobacco remains a major health issue.

Finland was one of the first countries to introduce a comprehensive Tobacco Control Act (TCA, adopted in 1976, came into force in 1977) [2]. The TCA restricted marketing, banned advertising, and set an age limit to sales. It also allocated resources, 0.5% of tobacco tax revenue, for prevention, monitoring and development. Smoking was prohibited in schools, public transport and public indoor areas, and allowed only in specially designated places. The Finnish TCA was the toughest act in its time, and over the decades it has been developed due to improved knowledge of tobacco-induced

health hazards. Workplaces and public areas are smoke-free, and environmental tobacco smoke (ETS) was classified by law as a carcinogenic substance. Overall, the Finnish experience demonstrates a remarkable process from new medical knowledge to comprehensive action and public policy. Adult male smoking prevalence has decreased from 60% to 21% in a few decades (Figure). This has encouraged the Finnish tobacco policy makers to adopt an ambitious goal: Tobacco-Free Finland by 2040. This was set as the objective in the TCA in 2010 (Table).

Successes and Challenges of Tobacco Control in Finland

The impact of the TCA has been monitored over the years and there are several achievements that have genuinely increased health

at the population level. Cardiovascular mortality was high in the 1970s when the North Karelia project was launched to improve health behaviours in the Eastern province of Finland [3]. By the 1990s, male CVD mortality had decreased by 68 %, with an estimated 10% of which was due to declining smoking rates [4]. Exposure to ETS was shown conclusively to be a health hazard, and in 1995 workplaces became smoke-free; currently 1–2% of non-smokers are exposed to ETS (AVTK 2012) [5]. The health benefits deriving from smoking bans have been well documented in the UK, for instance, where there is a marked decrease in CVD mortality [6]. Tobacco use is responsive to the cost of tobacco, and the World Bank has recommended price elasticity as one of the most effective measures of prevention [7]. Finland used this tool successfully in the early 1980s and then again in the 2010s, which has contributed to the declining smoking initiation rate, together with health education, cessation support and measures to limit tobacco use in the public space [8].

Figure. Tobacco Control time – of Finland 1950–2010

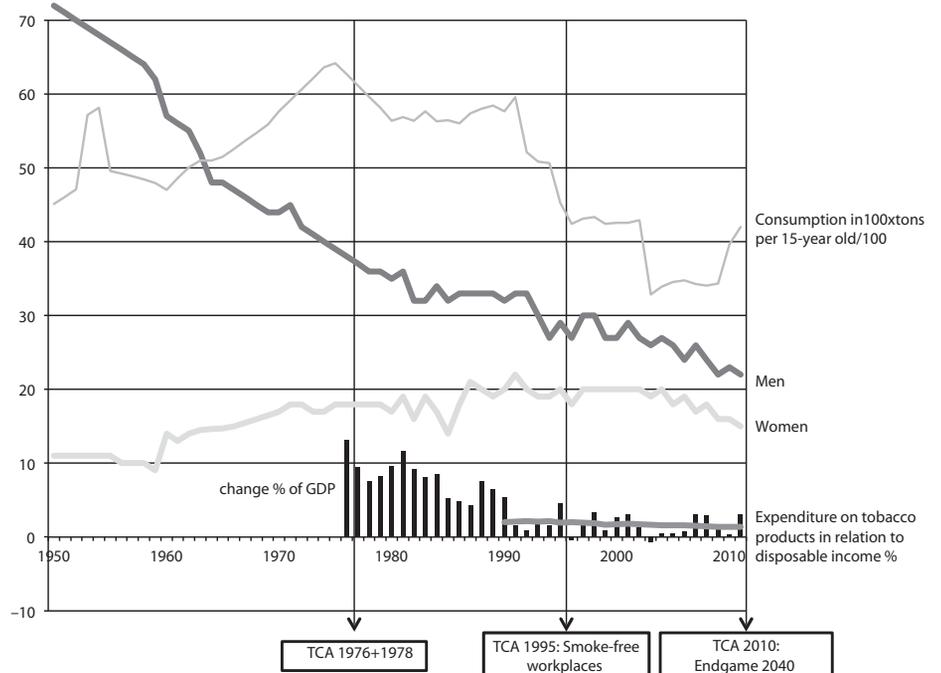


Table. Proposed actions from Framework Convention for Tobacco Control (FCTC) and how and when they have been implemented in Finnish Tobacco Control Acts between 1977 and 2012. *In italics the new initiatives from Tobacco Free Finland in 2013*

Framework Convention for Tobacco Control (FCTC)	Finnish TCA 1977–2012 <i>New initiatives from Tobacco Free Finland in 2013</i>
Taxation and duty-free sales:	
Tax policies reducing tobacco consumption	Tobacco tax has increased with direct mechanism since 2009. In the 1980s tax increased nearly annually, but then the real price actually decreased due to good economic growth in the early 2000s as tobacco tax was not increased.
Duty-free sales are discouraged: Countries may prohibit/restrict duty-free sales and import	Duty-free allowed in airports and ferries, but import of snuff allowed only for personal use. Restrictions on sales in some ferries to Estonia.
	Any sale of snuff is forbidden. Ordering snuff, e.g. via the Internet, will also be forbidden. A maximum of 30 packets, each containing 50 grams snuff, may, however, be imported for one's own use. It will be forbidden to import snuff as a gift.
	<i>Setting a new insurance system for covering costs of tobacco induced diseases funded by insurance payment from tobacco industry.</i>
Second-hand smoke (Article 8): Non-smokers must be protected from exposure to tobacco smoke:	
Indoor workplaces	ETS classified as carcinogenic substance since 1995 at work sites and smoke free workplaces since 1995, restaurants from 2007.
Public transport	Smoking not allowed in public transport in 1977, totally smoke-free airplanes since 1995 and trains since 2012.
Indoor public places	Smoke-free since 1977.
Other public places: schools, kindergartens, libraries a.o.	All public facilities have been smoke-free since 1977. In 2010 TCA the prohibitions against smoking were extended, outdoor (e.g. outdoor facilities used by children and young people) used by children and young people, the common facilities of apartment house companies, events organised outdoors and hotel rooms.
	<i>Obligation to protect from second-hand smoke for the housing association or the owner of the house.</i>
	<i>Banning smoking in cars, when minors in a car.</i>
	<i>Communities and other public organisations have a right to ban smoking and use of tobacco products at their premises indoors and outdoors.</i>
Product regulation and ingredient disclosure (Articles 9 and 10):	
Countries shall adopt and implement measures for such testing, measuring and regulation	TCA includes guidelines for testing and measuring, currently the EU-legislation as well.
Ingredients are to be disclosed	Ingredients are partly disclosed within the EU.
Manufacturers and importers shall disclose to governmental authorities information on contents and emission	Ingredients are partly disclosed within the EU.
Measures for public disclosure of information about toxic constituents and emissions	Information available, not fully implemented with campaigns.
	<i>Tobacco products will be classified as unusual consumer products and can be regulated more: any chemical formulation of pH or addictiveness of nicotine will be banned as well as sugar.</i>
	New tobacco products, tobacco and tobacco imitations offsets the import, sale or other transfer is prohibited <i>but cessation products regulated by medical agency.</i>
	<i>Limiting availability of tobacco products in reducing points of sales to 500 in 2020.</i>

Framework Convention for Tobacco Control (FCTC)	Finnish TCA 1977–2012 <i>New initiatives from Tobacco Free Finland in 2013</i>
Packaging and labelling (Article 11): Large health warning labels are required:	
Warnings	Since 2003 text warnings; pictorial warnings the latest in 2016 with a new EU directive
Large, clear, visible and legible	Since 2003.
Should be 50% or more of the principal display areas (shall not be less than 30%)	Not applied in the EU.
Deceptive labels must be prohibited False/misleading term, description, trademark or any other sign shall be prohibited (e.g. mild, low tar, light)	Applied in 1977.
	<i>Plain packaging planning with a health warning over 90 % of the package.</i>
	<i>Packages have information on the environmental hazards.</i>
	<i>Tobacco waste contains hazardous chemicals for environment: the manufacturer responsible for collection and disposal (compare electronic waste).</i>
Education, communication, training and public awareness (Article 12): Each party shall promote and strengthen public awareness of tobacco control issues:	
Broad access to effective and comprehensive educational and public awareness programmes on	Since 1977 TCA separate finding from tobacco tax within TCA.
health risks of tobacco consumption;	Since 1977 TCA separate finding from tobacco tax within TCA and special health education, including on tobacco, for all minors at schools
risks of exposure to tobacco smoke;	Included in 1995 TCA.
risk of addiction;	Added in 2012 TCA for grounds of TCA.
benefits of tobacco cessation;	Since 1977 TCA, strengthened with the national current care guidelines in 2003.
public access to a range of information on the tobacco industry.	New text added after this: Public health associations provide information on TI actions.
Training or sensitization and awareness programmes to various stakeholder groups on the health, economic and environmental consequences of tobacco production and consumption.	In Finland, for decades there is a long tradition of the involvement of non-governmental organisations (NGO), like public health associations and patient organisations, in tobacco control. Government funds can be applied for public health programmes and collaboration with public services. Majority of campaigns are carried out by NGOs.
Advertising, promotion and sponsorship (Article 13): A comprehensive ban is required:	
	No point of sales advertising, brands hidden at sales since 2012.
	Sellers of tobacco products must be at least 18 years of age since 2010.
Minimum package of measures prescribed	Since 2012 TCA.
Direct and indirect advertising and promotion covered	Since 1977 direct and indirect since 1995.
Cross-border advertising subject to ban and penalty	Since 1995, joining the EU.
	<i>Banning movies with smoking from minors</i>
Tobacco dependence and cessation (Article 14):	
Designing and implementing effective tobacco cessation programme in such establishments as educational institutions, health care facilities.	Since 1977.
Including diagnosis and treatment of tobacco dependence and counselling services on cessation of tobacco use in national health and education programmes, plans and strategies	Formally from the late 1990s, but initiated since the 1972 North Karelia Project. National Current Care Guideline published in 2003.
Establishing tobacco cessation programmes in health care facilities and rehabilitation centres	From the 1990s.

Framework Convention for Tobacco Control (FCTC)	Finnish TCA 1977–2012 <i>New initiatives from Tobacco Free Finland in 2013</i>
Facilitating accessibility and affordability for treatment of tobacco dependence, including pharmaceutical products	Nicotine replacement therapy over counter sales in 2005.
	<i>Tailored cessations programs, e.g. pregnant smokers.</i>
Smuggling (Article 15): Action is required to eliminate tobacco smuggling:	
Origin and final destination must be indicated on the packaging	Applied by customs and manufacturers.
Developing a practical tracking/tracing regime.	Applied by customs and manufacturers.
Confiscating products and proceeds of illicit trade	Applied by customs.
Mutual cooperation in anti-smuggling, law enforcement and litigation efforts	Applied by customs and the Ministry of Internal Affairs.
Sales to and by minors (Article 16): Prohibition of the following is required:	
Parties shall prohibit the sale of tobacco products to persons under the age set by national law or eighteen years of age	Since 1977 TCA (first 16, then 18 years in 1995).
Parties shall prohibit or promote the prohibition of the distribution of free tobacco products	Since 1977 TCA.
Curbs on or prohibition of tobacco vending machines	Will be applied in 2015.
Prohibition of sale by minors, as per national law.	Since 1977 TCA, even selling one cigarette or fetching a packet of cigarettes from a shop to a minor person should be interpreted as a tobacco selling violation, for which the person can be fined or sentenced to prison for a maximum of six months.

Challenges exist. The less-educated segment of the population still suffers more severely from tobacco-induced health hazards. Smoking prevalence among men is three times higher in the lowest education group compared to the highest, and the ratio is similar for women [8]. Smoking during pregnancy remains common in the less educated group as well, with every third child of these mothers being exposed to tobacco chemicals prenatally. And if ETS has been defeated in the workplace, the same cannot be said for the home: 17% of the population report domestic exposure every year [8]. These challenges need to be met in a new phase of tobacco control.

From Reduction to Endgame

At the National Conference on Tobacco in 2006, the Speaker of the Parliament,

former Prime Minister Paavo Lipponen, asked the audience what their ultimate goal was: to cut down tobacco use or end it. He suggested that Finland should aim at Tobacco-Free Finland within a timeframe of 35 years, the goal being set for 2040. This was received with some bewilderment, but soon researchers, public health advocates and health professionals organised a meeting for establishing a new network, which all stakeholders could join in. By 2009, the network had formulated the first roadmap and gave a proposal for a new TCA that emphasised the need to move ahead toward an eventual total prohibition of tobacco use: the endgame had begun.

New alliances were formed that had new approaches, such as child protection associations or municipalities. The Government acted timely, and in 2010 the new TCA was adopted, with the aim of legislating a

Tobacco-Free Finland in 2040. This year the network has provided a detailed, graduated roadmap for Finland to achieve this goal. Although the term endgame did not exist in Finland in 2006, in actuality it was launched at the time.

The Endgame Policy Today

There are four pathways in combating tobacco-related health harms at the population level: preventing the initiation of tobacco use, promoting and supporting tobacco use cessation, protecting the population from ETS, and the treatment of tobacco induced diseases. These are all covered in the Finnish tobacco policy (Table). In implementing the TCA, multiple partners are needed. They include tobacco-free cities/municipalities (220 out of a total of 300 smoke-free), smoke-free hospitals,

smoke-free schools, universities and vocational schools, doctors against smoking, health educators, trade unions and sports associations. Finland has adhered to most of the FCTC implementation guidelines and is strongly supporting the European Union in its efforts to set ambitious health targets for its tobacco policy. Unfortunately, negotiations have been influenced by the tobacco industry, and Finland will have to keep to the strict aim without full support from the EU.

What has Changed?

The new Finnish approach has changed the target from reducing to ending tobacco use altogether. The language and the image have both become more positive: tobacco control is an investment and a proactive measure, not just a cost. We now have a clear new roadmap for the endgame, and it has already led to new alliances that deepen the engagement of civil society [9]. The social climate in Finland is generally rather favourable to tobacco control owing to a steady process that has lasted over four decades. The self-image of tobacco control community has reversed, which may

be the key feature in the success. The tobacco control community has a vision of victory in the struggle to defend human life. The target is simple and measurable. We do not need any proof to justify our actions. We have a positive message and no need to defend our actions. Obviously there will be struggles, but with forty years of experience, these can be solved. One lesson has been learned: no compromises with the tobacco industry.

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The Hong Kong Medical Association

Founded in 1920, the Hong Kong Medical Association brings together all medical practitioners practicing in and serving the people of Hong Kong, with the objective to promote the welfare of the medical profession and the health of the public. With the continuous efforts of our colleagues, the Association's membership has grown steadily over the past year with currently over 9,000 members from all sectors of medical practice. We speak collectively for our members and aim to keep our members abreast of medical ethics and issues around the world. "To safeguard the health of the people" is the motto

we proudly display in the Association's emblem, and it could not be achieved in

vacuum. We tried as much as we could to work with the Government for the betterment of public health. As representatives of doctors, our supervisory role on the Government is irreplaceable. We ad-



The Hong Kong Medical Association Council 2013–2014

World Medical Journal



wise, and we criticize as the case demands us to, and we have been unwavering in so doing.

There has been a public-private imbalance in the provision of medical services in Hong Kong for long. The Hong Kong Medical Association tries its best to voice our concern, and urges for a revamp or even overhaul of the Hospital Authority of Hong Kong. The jump of doctors, juniors and seniors, from public to private sector, has created a shortage of manpower in some public hospitals in recent years. The ever-increasing chronic medical cases further expose the shortage of manpower in the specialist outpatient service. Partner-

ship between the public and private sector in the caring of these chronic cases would improve public health efficiency, and after all benefit both patients and doctors. We look forward to an all-win proposal from the Government in the near future.

The Hong Kong Medical Association has also established a close relation with all doctors' groups in the society, as well as with the Chinese Medical Association. The 15th Beijing/Hong Kong Medical Exchange on "Recent Advances in Cancer Medicine" was successfully held in Beijing in 2013. Exchange visits to China were also organized for young doctors and medical students.

In the support of life-long medical education, we accredited 522 continuous medical education (CME) events in 2013, of which we organized 345. We are the CME administrator for 1,065 doctors. Thanks to our Community Networks which are instrumental in providing members with CME lectures.

For many years we organize exercise for health training courses to teach participants a number of exercises for different chronic diseases for them to apply in daily practice. These are extended to various Community Networks.

To help doctors face adversities in the daily practice, and to go around avoidable pitfalls, the Hong Kong Medical Association jointly published a Clinical Risk Management Handbook with the Medical Protection Society in late 2013. A two-day training course was organized in September the same year to help doctors become expert witness for inquiries, courts and tribunals. We have a Duty Council Member Scheme to constantly answer to members' queries month-to-month, year-to-year. Our Patient Complaints Mediation Committee handles cases with care, with resolution between interested parties most of the time.

We observe work-life balance as an important component of our lives. The Hong Kong Medical Association organizes a number of social and recreational activities for our members, from photo shooting, charity concerts to professional choir and orchestra performances and band shows. We also arrange countless sports events including ball games such as football, basketball, volleyball, badminton, tennis, table-tennis, squash, bowling, snooker and golf, as well as bench pressing, power-lifting, hiking, and the annual dragon boat competition and Trailwalker event.

Patient's well-being is in the heart of our members whose welfare is in the heart of the Hong Kong Medical Association. We pledge to serve both the community and the doctors, to safeguard the health of the people of Hong Kong.

*Dr. TSE Hung Hing,
President of the Hong Kong
Medical Association*



The HKMA Choir



15th Beijing/Hong Kong Medical Exchange

New Chamber of Physicians Established in Kosovo

On 10 November this year, 134 elected physicians met in Pristina to celebrate the establishment of the Chamber of Physicians of the Republic of Kosovo. In the presence of the Kosovan Minister of Health and international guests, the delegates of the chamber assembly were sworn in and a new President elected. Up until this point there had been no representative organisation of physicians in this emerging state, which has so far been recognised by 105 countries in the world since its declaration of independence from Serbia in 2008. Although 90% of its population is Albanian speaking, there is a region in the northern part of the country with a large Serbian population. At the European level, Serbia and Kosovo are currently negotiating solutions for the future of this part of Europe.

Before the establishment of the Chamber of Physicians, all matters concerning physicians and other healthcare professions in Kosovo had been regulated by the Ministry of Health. As is common practice in many states of Central and Eastern Europe, this chamber will not only be responsible for representing the interests of physicians, but will also take on regulatory and licensing tasks.

The foundation of the Chamber represented the culmination of a process in which the German Medical Association (GMA) has been closely involved.

Over the past two years a legal framework has been established and elections to the chamber assembly took place on 17 October 2013, with the participation of 85% of the roughly 4,000 Kosovan physicians.

During the inaugural celebrations, elections were held for the Chamber leadership. The only female candidate of the four presiden-

tial candidates, neuropsychologist Dr Zylfije Hundozi, was chosen to represent the physicians of Kosovo over the next four years.

Involvement at the international and European level is of great importance to the physicians of Kosovo and their newly established organisation as they do not yet have many contacts with other physicians' organisations abroad. A seminar was therefore organised by the German Medical Association following the inauguration of the chamber during which examples were given of international organisations of physicians' self-governance including the World Medical Association (WMA) and the Standing Committee of European Doctors (CPME).

Dr. Otmar Kloiber, Secretary General of the World Medical Association, encouraged the physicians of Kosovo to live up to their responsibilities and speak out on behalf of their patients, even if this may not be looked upon favourably by some politicians. Along with a delegation from the GMA, representatives of the medical chambers of Austria, Albania, Bosnia-Herzegovina, Croatia, Hungary, Macedonia (FYROM) and Montenegro were guests of honour in Pristina. CPME was represented at the

event by its Vice-President, Dr. Istvan Éger, and Secretary General, Birgit Beger.

The GMA's approach throughout was to assist the physicians of Kosovo at the professional level independent of political issues, helping them to establish their own organisation and thereby guarantee better health care for all patients in Kosovo, regardless of their ethnicity. It was therefore a success that physicians from the Serbian population also registered for the chamber elections. In the end, four Serbian physicians were among the elected delegates of the new Chamber.

With the legal framework already in place, the inaugural event on 10 November in Pristina represented the beginning of the work of the Chamber of Physicians in Kosovo. It is now time to breathe life into the new Chamber and welcome it into the European and international community of medical associations.

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Medical Chamber of Montenegro

New Member of WMA



Đoko Jočić

Medical Chamber of Montenegro was established by the Decree of the Parliament of Montenegro in 1994, within Changes and Amendments of the Law on Health Care, and based on the initiative of the Medical Association of Montenegro. It was established as a professional organization consisting of medical doctors and dentists, with the objective of improving professionalism, maintaining medical ethics, improving quality of health care and protecting professional interests, with rights and obligations established in the Law on Health Care.

After long preparatory procedures, the Chamber was established at the Constitutional Assembly held on June 21, 1995. Prim. Dr. Djoko Jocić, specialist in internal medicine-haematologist, was elected as the first president of the Chamber in 1996, and he is still the president of the Chamber. Pursuant to the Law on Health Care, the Chamber is responsible for maintain of the register, issuing, and renewal and revoking of licenses, as well as education. Current Register of the Chamber includes 2800 medical doctors and

dentist, whereof 650 are dentists. We are expecting that the Dental Chamber will be established soon, as an independent professional institution, based on the request of Dental Association and approval obtained from the Medical Chamber and Ministry of Health.

Medical Chamber has its bodies (Assembly, Executive Board, Chamber's Court, prosecutor, barristers and Supervisory Board) and commissions. President of Executive Board is also the President of the Chamber. Chamber has nine commissions, among which is the Commission for International Cooperation, headed by doc. dr Olivera Miljanović, who has been delegated to participate in meetings of international medical associations.

Pursuant to our Law and rulebooks, license for work is obtained upon graduating the Medical Faculty and passing of professional exam and fulfilling of other requirements established in our rulebooks. Employment relation cannot be established without this license. Limited validity of the license is not prescribed by the Law.

Health Care Law stipulates license based on practice that is obtained upon completed specialization and other forms of professional training (additional education, publishing of professional and scientific works, professional publications, and periodical stays in institutions in the country and abroad, etc.). Number of points is prescribed for obtaining of this license, which is determined based on categorization of all forms of professional training. This is the responsibility of the Chamber's Commission for Continuous Education. Doctor that doesn't hold this license cannot be elected to professional and managerial positions and cannot become member of professional. expert and educational teams, and has to work under control of licensed doctor, regardless of his

specialty. This license is valid for seven years and after this period it can be extended. License must be extended in order to retain all the benefits arising from it.

Special activities of the Chamber include education of its members, conducted through organizing of professional and educational conferences and issuing of publication. Participation in conferences are also basis for awarding points to doctors to help them meet the requirements for obtaining license based on practice. Chamber has a relatively good cooperation with line ministry – Ministry of Health, and participates in development of laws that are of interest for profession and health care service as a whole. Chamber has started the initiative for establishing of professional trade union of physicians and has conducted all the activities for its establishing, which was done in June 2013. This is an independent professional body that will be a competent representative of the profession together with the Medical Chamber.

We are making efforts to have greater competencies, similar to other Chambers and to have Law on Chambers and Law on Physicians, since the existing legal solutions prescribe only rights of patients and our obligations and we want to regulate our rights with the new law. We are not satisfied with the current status of profession which is exposed to unargued attacks and accusations by different media and non-governmental organizations. Chamber doesn't tolerate violations of professional ethics and superficial and unprofessional work. However this should be proven first and then sanctioned. Therefore, it is our priority to protect doctors from potential mistakes, which we are currently doing in cooperation with newly-established professional trade union of physicians and we are expecting to have a better solution, as we didn't have support of domestic insurance companies in the past.

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Irish Medical Organisation Celebrates 30 years



Vanessa Hetherington

The Irish Medical Organisation (IMO) is the representative body for all doctors in Ireland and is celebrating its 30th anniversary this year. The IMO was formed in 1984 following the amalgamation of the Irish Medical Association and the Irish Medical Union, to act as the national representative medical organisation linking all branches of the medical profession in Ireland.

The basic objective of the IMO is to fulfil its Mission Statement:

“The role of the IMO is to represent doctors in Ireland and to provide them with all relevant services. It is committed to the development of a caring, efficient and effective Health Service.”

The IMO is a registered trade union in Ireland and for three decades has been working to safeguard both the working conditions of our doctors and the integrity of our health services.

Recently we ran a successful campaign calling for an end to 24 hour shifts and

the full implementation of the European Working Time Directive (EWTD). This culminated in the first strike action in a generation by our junior doctors (Non-Consultant Hospital Doctors – NCHDs) on the 8th October 2013. Many of our junior doctors were working shifts of over 24 hours and working weeks of up to 100 hours posing significant safety issues to both patient and doctors. Since 2000, the IMO has been engaged with government bodies on the implementation of the EWTD, however frustrated by continued lack of progress, the IMO launched its “24 No More” campaign early last year. The IMO engaged with health service management to produce proposals to address the issues, however the NCHDs were not totally satisfied that penalties would be imposed on employers for non-compliance and voted unanimously for strike action. In November 2013, the IMO reached a settlement agreement with the health service management to achieve maximum 24 hour shifts and the implementation of an action plan to achieve full compliance with the EWTD.

Resources for General Practice have been successively cut over recent years and in early November last year the IMO launched our “Help us to Help More” campaign calling on the Government to increase resources for General Practice. The IMO are also continually engaged in issues concerning our Consultant members and our Specialists in Public and Community Health.

While the core activity of the IMO is industrial relations, as the leading representative body for the medical profession in Ireland, the IMO has an important role in advocacy. The IMO has been particularly concerned about growing inequalities in

health and access to health care. In recent years the IMO have published position papers on Universal Health Coverage, Health Inequalities and Child Health. At our AGM in April this year, the IMO will be celebrating 30 years and will be holding a policy seminar and publishing a discussion paper entitled *Balancing a Strong Economy and an Equitable Society*. The IMO will aim to create debate on the future of Irish Society as Ireland as the country returns to economic growth.

Over the years the IMO has been and remains at the forefront promoting public health policy on Obesity, Tobacco, Alcohol and Road Safety and advocating for resources for the provision of public health services, including Mental Health Services, Elderly Care Services and Acute Hospital Services.

The IMO also promotes professionalism and has developed a number of papers on the Role of the Doctor in Ireland. The IMO recently published papers on Social Media, Doctor-Patient Confidentiality and the Role of the Doctor as Advocate.

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Ethics at the BMA



Vivienne Nathanson

Early in the life of the World Medical Journal one of my predecessors wrote about ethics at the BMA. We have been providing ethics advice to doctors in the UK for the best part of a century, while campaigning and advocating for legislative and regulatory change. The most recent change in our activities was nearly 30 years ago when we started to undertake an active role in promoting and protecting human rights. In this article I shall look at the current areas of work and how we undertake a series of tasks to support members.

One of the earliest ethics matters on which the BMA lobbied was on the regulation of the medical profession. In the 1840's only a minority of those in the UK calling themselves medical practitioners were medically qualified – either through an apprenticeship route or via universities and the medical Royal College examinations. The BMA published an expose of quackery, leading to the establishment of the UK's General Medical Council. This body regulates medicine, including ensuring that the universities are training undergraduates properly.

For the last 25 years it has also produced an increasingly complex set of advisory booklets and other materials to help doctors understand the expectations that the GMC has of doctors, addressing among other areas some of the ethically complex matters that doctors see whether every day, or at least frequently.

The BMA also provides advice in the form of published material for doctors. Fifty years ago this amounted to a very slim volume setting out some of the rules, and stressing the avoidance of behaviours that might lead to being erased from the medical register by the GMC. But that has now transformed into a serious text book of medical ethics and medical law "Medical Ethics Today – the BMA's Handbook of Ethics and Law"^{*}. The current edition is over 900 pages, and covers all aspects of health care ethics and the relevant statute and case law (judge made law) in the UK, including identifying the differences in the four countries of the UK. It is not designed to be a text that is read through once, but is a reference work. BMA members have free access to it on-line in a fully searchable version accessed through the BMA's on-line library.

The book was written by the BMA staff who write all our ethics guidance, work with members to negotiate on legislative changes, and answer the queries that come in to the Association from members facing decisions with difficult ethical aspects. They are experts, but experts who can write in a manner that is academically excellent and also readable and readily intelligible.

Given that the books size alone militates against wide readership we have also pro-

duced a pocket sized book, "Everyday Medical Ethics and Law"^{**} which covers the areas on which we receive the most queries. It is based on the larger book, but at just under 300 pages is readily readable.

In addition we produce guidance documents and a series of small toolkits on common problems such as consent and confidentiality, or for groups with a need for specific guidance such as doctors in the armed forces, and doctors new to practice in the UK.

But how does the advice the BMA offers to members come about? And how do we decide on our ethics stance on new developments in medical practice, before we put those into words of explanation and exposition?

The BMA has had a committee looking at matters of medical ethics for over 100 years. While the committee has had different iterations its current shape has been fixed for nearly 25 years. The majority of members are doctors (and medical students) elected annually at our annual meeting. They may come from any area of medicine – general family practice, hospital medical specialties, academic medicine, public health, occupational health etc – and bring a rich variety of clinical experience to committee discussions. In addition the BMA's ruling Council appoints 8 extra members to the committee, who are not doctors but who have specific expertise in the ethics area. These may include philosophers, professors of medical law, theologians, social scientists and other disciplines. All these members, and the staff who support the Association's work on ethics, then debate the issues of the day.

Usually committee debates start with a paper written by the secretariat, and setting out the area under consideration. These

^{*} Medical Ethics Today; The BMA's Handbook of Ethics and Law, Third Edition, BMA, Wiley-Blackwell, ISBN 978-1-4443-3708-2, pub 2012

^{**} Everyday Medical Ethics and Law, BMA Ethics Department, Wiley-Blackwell, ISBN 976-1-1183-8489-3, pub 2013



papers include questions which the author has identified as ones on which we need a debate to establish a policy position, but debate is not limited to those question-points. Sometimes the paper will then be rewritten and represented, on other occasions it moves more quickly to publication as a position statement, part of our evidence to an enquiry or some other equivalent disposal. As with everyone else much of our published guidance goes straight onto our web pages; we are exploring ways of making such web based guidance more interactive.

If the matter under consideration is a government regulatory or legislative proposal then the staff, working with members, will start to lobby on legislative changes. Increasingly the committee looks at matters before the government has decided on its legislative direction and the discussions are with civil servants to attempt to influence legislation as it is being developed to ensure it is ethically sound.

All this sounds very dry – the reality is far from that. All of the staff in the department teach, from undergraduates through to CPD, and they draw on the real cases they are presented with when answering member queries to bring the issues alive, to ensure they are relevant to clinicians in active practice, and to help those in the audience see how the academic material relates to their working environment. The UK has very many experts on philosophy and ethics; the BMA is very unusual in bringing that academic expertise together with real life clinical examples and relevance. Frankly, members want the clinically relevant support rather than ivory tower excellence. The fact that our advice is – as one of the “ivory tower” experts says – also academically excellent is a benefit but arguably not essential.

From time to time we analyse what the most commonly asked questions are – it was essential to know before preparing the second book cited above, but it also helps us in considering whether there are other matters

that would benefit from additional guidance and advice. It also helps us to see if there are trends, for example in challenges, or in legal uncertainty.

Issues under consideration at present include a number relating to the beginning of life, including the operation of Abortion legislation, communication about death and the process of dying, including decisions to terminate treatment, consent to treatment, new technologies impacting on diagnostics, including maternal plasma testing for foetal genetic anomalies, resource allocation, research regulation, whistle-blowing (informing on bad or dangerous working conditions) and professionalism.

For decades the commonest issue has been confidentiality. The law is extremely complex – and there are regular changes following from new legislation. There are also regular challenges as government and others seek to use rich medical and other health care data for management of health care, for medical research and – from time to time – for other government purposes. Governments often, in our experience, fail to understand the simple truth that people give health care workers, and especially doctors, sensitive private information to aid them in their role as their health care provider. While repeated public opinion surveys have shown willingness to share genuinely anonymised, usually aggregated, data for purposes such as medical research (population based epidemiological research in particular) and better health services management, it is also clear that they expect that such data will not be shared with other government departments or commercial companies. One element of our role is ensuring that government understands the guardianship role we share in relation to patient data, and do not exploit this data inappropriately. It can be a very delicate line to tread when we are also seeking to ensure medical research has proper access to information; more research is in our interests as doctors and also as patients and families of patients.

In much the same way government proposes legislative and regulatory changes that will affect medical practice. Recently attempts to diminish the number of Quasi Autonomous Non Governmental Organisations (QANGO's) or “Arms-length bodies” which regulate sensitive areas of public life have led to substantial areas of work.

Examples in recent months include the regulation of the use of Human Tissue and of Assisted Reproductive Technology. Our members will be affected by the way in which the regulations affect their daily work, and expect us to ensure that they make ethical and legal sense as well as clinical sense. So we work with government and with arms-length agencies to attempt to ensure that we can regulate properly, keep public confidence, maintain the highest ethical standards and do so in ways that work with rather than against good clinical practices.

Frequently we develop short or medium term alliances with other interested groups and work together to try to ensure a better outcome for patients, scientists and doctors. One example of an informal alliance relates to organ transplantation. The BMA has run a campaign for a number of years to encourage the UK governments to choose a policy of presumed consent or opt out. This would mean that when someone died in the right clinical circumstances unless they had previously registered a refusal to be a donor their organs could be retrieved for transplantation. We prefer what is often called a soft opt out system, where organ retrieval would not go ahead if the family were opposed and would be seriously distressed. The basis of the BMA policy is that the government would have to fund a major publicity campaign over several years to give people information about opting out and the opportunity to do so. That would ensure families had many chances to discuss their wishes, preferences and fear. While we have had a significant increase in investment in the infrastructure for organ transplantation,



pleasingly increasing the numbers of organs retrieved, and lives saved, only the Welsh Assembly Government has so far legislated as we would want. Wales will therefore become a within-the-UK “pilot” for this policy.

To get this policy adopted we got together a coalition of many groups interested in increasing the number of organs donated and transplanted. Not all agreed with opt out, but there was common agreement on many other areas. We all supported each other as research was released or policy papers distributed, and that has in no small part helped with the attaining the high levels of public awareness that has procured the increase in donation achieved so far. In other areas of work similar loose coalitions have worked in achieving tobacco control and are beginning to work in alcohol control.

One large area of work undertaken within our ethics team is on human rights. This started over 25 years ago with a report that made it clear that doctors and other health care professionals were or had recently been involved in torture in many countries. Since then two other reports have followed. The last – “The Medical Professional and Human Rights; Handbook for a changing

agenda”^{*} is used as a core book by many entering the human rights arena for the first time. The book sets out traditional human rights and explains what these mean, how doctors can become involved in protecting or otherwise defending them, and gives examples of abuse.

In writing this the BMA was aware that many doctors, and their medical associations, see human rights as someone else’s responsibility. The BMA has long taken the view that doctors are often the people who see the evidence of abuses – we examine the patients who survive and we certify the death of those who die. We can gather evidence, or we can ignore and become part of a system seeking to hide the abuses it perpetrates.

In addition to working with Human Rights activists, seeking to achieve a world free from torture, we also take up individual cases of human rights abuses. We concentrate especially on cases where there is a health issue – for example when there are reports of a prisoner being denied access to health care, or with serious health problems being

^{*} The medical profession and human rights; Handbook for a changing agenda, BMA, Zed Books ISBN 1-85649-612-0, pub 2001

inadequately treated. We also act on all cases where health care professionals are targeted, especially where that links to their provision of care. Currently we, like the WMA itself, are involved in trying to help the Turkish Medical Association get their government to understand that when doctors offer care to people injured in riots or demonstrations they do as a part of their ethical duty to proffer care to all who need it, and not as supporters of a particular political view. Doctors, as all other citizens, will have partisan views. But when acting as doctors we do not act in a partisan manner. And here ethics and human rights sit closely together.

Fifty years ago this article would have stressed trying to stop doctors from being struck off the register, and trying to help doctors understand their privileged position – and not abuse patients or indeed the power that they have. Today we are acting as advocates for patients, working with their representative groups, and ensuring that the power doctors still retain is used for public good as well as benefitting individual patients.

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Excess Weight and Obesity

In the last decades men and women have gained weight and the global prevalence of obesity (defined as a BMI ≥ 30) doubled between 1980 and 2008, to 9.8% among men and 13.8% among women – equivalent to more than half a billion obese people worldwide (205 million men and 297 million women)^{*}. Another 950 million adults

^{*} Finucane MM, Stevens GA, Cowan MJ, et al. National, regional, and global trends in body-mass index since 1980: systematic analysis of health examination surveys and epidemiological

have a BMI of 25 to less than 30. The United States has had the largest absolute increase in the number of obese people since 1980, followed by China, Brazil, and Mexico.^{**} Obesity and excess body weight have been associated with increased total

studies with 960 country-years and 9.1 million participants. *Lancet* 2011;377:557-67.

^{**} Stevens GA, Singh GM, Lu Y, et al. National, regional, and global trends in adult overweight and obesity prevalences. *Popul Health Metr* 2012;10:22

mortality and increased risks of disease or death from diabetes, coronary heart disease, stroke, cancers, and chronic kidney disease,^{***}.

^{***} Whitlock G, Lewington S, Sherliker P, et al. Body-mass index and cause-specific mortality in 900 000 adults: collaborative analyses of 57 prospective studies. *Lancet* 2009;373:1083-96. Wormser D, Kaptoge S, Di Angelantonio E, et al. Separate and combined associations of body-mass index and abdominal adiposity with cardiovascular disease: collaborative analysis of 58 prospective studies. *Lancet* 2011;377:1085-95. Renehan AG, Tyson M, Egger M, Heller RF, Zwahlen M. Body-mass index and incidence of cancer: a systematic review and meta-analysis of prospective observational studies. *Lancet* 2008;371:569-78.

Excess weight is responsible for about 3.8% of the global burden of disease, implicating in 3.4 million annual deaths, also accounting for diseases that have low mortality and long periods of disability, such as diabetes and musculoskeletal diseases.

In this scenario physical activity has become an important way in reverse the burden of weight gain. Studies of the beneficial health effects of physical activity date back to the 1950s* and have been replicated in large cohorts.** Regular physical exercise improves the CV risk profile and is a robust recommendation for primary and secondary prevention, according to current current guidelines [1;2]. In addition, low-to-moderate running reduces levels of the inflammatory markers [3]. On the other hand, vigorous exercise, such as marathon running, may increase the short-term risk of coronary events [4]. Coronary atherosclerosis is the main underlying cause of exercise-related coronary events not only among elderly persons unaccustomed to exercise [5], but also in adult athletes including marathon runners [6;7]. Over the past decades, the number of recreational marathon runners, including those at older age, is constantly rising.

In developed countries air pollution, strictly related to industrialization, has become a major public health concern in the last years, specially because of its association as a risk factor of many kind of common diseases, such as respiratory and CVD. Cutruffello et. al. [8] in a recent review among pollutant exposure on healthy individuals, have noticed that, despite detrimental effects are still in question, the inhalation

of particulate matter (PM) is linked to an increased inflammatory status and adverse myocardial and vascular functions. Consequently, onset of higher blood pressure levels, decreased heart rate variability and myocardial ischemia follows, contributing to higher morbidity and mortality. Oxidative stress, through endothelial dysfunction, seems to be one of the most important mechanisms by which pollutants affect CV performance [9]. Despite compensatory mechanisms, chronic exposure to air pollution still leads to decreased pulmonary and cardiovascular function and increased mortality, as it is recurrently shown on traffic related air-pollution studies [10].

Notably, studies indicate that the forceful inhalation, as in intense exercise, of small environmental particles may directly or indirectly result in vascular damage, an early feature of the atherogenic process [11; 12]. The mechanisms responsible for this vascular dysfunction remain unknown. One hypothesis is that the amplification of shear and oxidative stresses, present during vigorous running in air-polluted surroundings, promote the activation of inflammatory and thrombotic mediators as well as endothelial injury [13; 14; 15]

Since the Los Angeles Olympics in 1984, this issue has become a frequent global concern, attracting inclusively media attention. Several studies were designed to correlate exposure to PM and other gases (i.e., O₃, CO and NO_x) to its effects on athlete's performance. This particular population may have higher risk of inhaling pollutants because of vigorous breathing [16]. Rundell, in his 2012 review [17] on effect of air pollution on athlete health and performance, established that vascular dysfunction related to pollution inhalation limits performance. However, he empathically says that there has been no research into the effects of long-term exposure to air pollution on athletic performance and a paucity of studies that describe the effects of acute exposure on exercise performance.

To date, little is known about the genetic responses to human exercise [18]. Exercise training induces numerous cardiovascular changes in the cellular and molecular level, including mitochondrial synthesis [19], myocardial remodeling [20] and angiogenesis [21]. Although such adaptations and their attendant impact on exercise capacity and health outcomes have been well documented, the genetic mechanisms leading to these changes remain incompletely understood. In addition, it is important to point out that genetic susceptibility is likely to play a role in response to air pollution [22]. Hence, gene-environment interaction studies can be a tool for exploring the mechanisms and the importance of the pathway in the association between exercise, air pollution and a cardiovascular outcome [23].

As seems above, many scientists around the world dedicated their studies to the harmful effects of pollutant inhalation restrict to their own cities or countries, proving that training or living close to major roads or to industrial centers may assemble CV risks and reduce exercise performance. But is the burden of CVD attributed to outdoor air pollution similar among different running volumes? Has air pollution exposure any implication on international competitions, as training programs are developed in different cities and countries?

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The World Medical Association has offered its support to the newly appointed Minister of Health in Ukraine, Dr. Oleg Musij

Dr. Musij, an anaesthetist and President of the Ukrainian Medical Association, has represented his country at the WMA in recent years.

Commenting on his appointment, Dr. Musij said: „The Ministry of Health of Ukraine faces many challenges that urgently need solving. The country has a poor economy and poor health care and to tackle these the Ministry has to take a number of organizational measures to work efficiently. Its main goal is to preserve and ensure the health of the Ukrainian nation. Despite the difficulties we face, health care reform must not stop”.

Dr. Otmar Kloiber, Secretary General of the WMA, said: „We offer our friend and



Oleg Musij

colleague Dr. Musij our best wishes and full support in the difficult tasks he faces. These have been difficult months so far and it will not be easy in the near future.”

Dr. Musij, who has studied in Poland, the USA, Finland, Austria and Germany, has been chairman of the Kiev Medical Association and Vice-President of the World Federation of Ukrainian medical societies. He is a board member of the international medical organization – Southeast European Medical Forum (Southeast European Medical Forum, SEEMF, Bulgaria) and has been involved in drafting many of his country’s laws on health, professional self-government and self-regulation of markets.

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