

## WMA DECLARATION ON PSEUDOSCIENCE AND PSEUDOTHERAPIES IN THE FIELD OF HEALTH

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### DEFINITIONS

- “Pseudoscience” (false science) refers to the set of statements, assumptions, methods, beliefs or practices that, without following a valid and recognised scientific method, are falsely presented as scientific or evidence-based.
- “Pseudotherapies” (false therapies) are those practices intended for curing diseases, alleviating symptoms or improving health with procedures, techniques, products or substances based on criteria without the support of available up-to-date scientific evidence; and which may have significant potential risks and harms.

### PREAMBLE

Medical practice must be based on the best available up-to-date scientifically proven evidence. The differences between conventional medicine and other practices that are not supported by scientific evidence make up the complex universe of pseudosciences and pseudotherapies.

Pseudosciences and pseudotherapies represent a complex system of theories, assumptions, assertions and methods erroneously regarded as scientific, they may cause some patients to perceive a cause-and-effect relationship between pseudotherapies and the perception of improvement, hence they may be very dangerous and are unethical.

There are therapies and techniques accepted by the scientific community that, used in a complementary manner (such as nutritional, comfort or wellness, environmental and relaxation therapies, psychotherapeutic support or reinforcement, affectivity and the use of placebos), provide benefits to the validated main and effective medical therapy.

Many countries lack the regulatory framework to address these pseudotherapies, which has allowed their proliferation. In the past, the medical profession considered them to be harmless due to their perceived lack of side effects, but nowadays there is enough evidence to suggest that they can pose a risk to patient safety.

Pseudoscience and Pseudotherapies may have significant potential risks and harms for various reasons:

- There is a risk that patients abandon effective proved-to-be effective medical treatments or prevention measures in favour of practices that have not demonstrated therapeutic value, sometimes leading to treatment failure for critical conditions that may even lead to death.
- There are frequent likelihood of dangerous delays and loss of opportunity in the application of medicines, procedures and techniques recognised and endorsed by the scientific medical community as evidence-based effective interventions.
- They may cause patients to suffer financial damages psychological-physical traumas, and go against the

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dignity of people, threatening their moral integrity.

- Unproven therapies may contribute to the rising costs of healthcare procedures.

All new diagnostic, preventive and therapeutic methods should be tested in accordance with scientific methods and ethical principles in order to assess their safety, efficiency, efficacy and scope of application.

A physician's duty is to provide quality medical care to all patients based on best available scientific evidence, as referred in the [WMA Declaration of Geneva](#) and the [International Code of Medical Ethics](#) commending the highest ethical norms and quality care for the safety of the patient. The interest of the patient must be placed before any other interest, including the physician's own.

The WMA reaffirms its [Lisbon Declaration on Patient Rights](#) and recalls that Patient Safety requires addressing all opportunities for the patient to receive appropriate, evidence-based care.

## RECOMMENDATIONS

Thus, the WMA makes the following recommendations:

### *National Health Authorities*

1. Appropriate and rigorous regulation commensurate with best practices is necessary to address the risks and reduce the potential harms arising from pseudotherapies and pseudoscience.
2. National authorities and healthcare systems should decline approval of and reimbursement of costs providing pseudotherapies.
3. In collaboration with professional medical organisations, scientific societies and patients' associations, national authorities should develop public campaign raising awareness on the risk of pseudotherapies and pseudosciences.

### *WMA Constituent members and the medical profession*

4. WMA constituent members and the medical profession must recognize and be aware of the risks of pseudotherapies and pseudosciences.
5. Pseudotherapies and pseudosciences should not be regarded as medical specialties recognized by the scientific community and legally endorsed as a specialist or sub-specialist pseudoscience.
6. All acts of professional intrusion, pseudoscience and pseudotherapy activities that put public health at risk must be reported to the competent authorities, including misleading advertising and unaccredited healthcare websites that offer services and/or products and that put the health of patients at risk, yet patient confidentiality has to be respected. The role of the general and specialized media for transparency and truthfulness in increasing critical public scientific awareness is essential.
7. Constituent members should work with governments to establish the highest level of protection for patients treated with pseudotherapies/pseudosciences. When such a practice is found to be harmful or unethical to apply, there should be a system in place to either immediately stop or substantially restrict any given treatment classified as complementary and/or alternative in order to protect public health.

### *Physicians*

8. With the support of the relevant organisations and authorities involved in the governance and regulation of the medical profession, physicians must continue to practice medicine as a service based on the application of critical scientific current knowledge, specialist skills and ethical behaviour and to maintain their skills up to date on developments in their professional field.

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9. For the patient's safety and quality of care, the physician must have the freedom to prescribe, while respecting scientific evidence and the standard of care.
10. The patient must be kept duly informed about the available therapy options, their effectiveness and risks, and be able to participate in the best therapeutic decision-making. Good communication, mutual trust and person-centered healthcare are cornerstones of the physician-patient relationship. Patients and physicians should and must be able to discuss the risks of pseudoscience and pseudotherapies. Health education is fundamental.
11. Physicians should be educated to identify pseudoscience/pseudotherapies, logical fallacies, and cognitive biases and counsel their patients accordingly. They should be aware that some patient groups, such as patients with cancer, psychiatric illnesses or serious chronic diseases, as well as children, are particularly vulnerable to the risks associated with using pseudotherapies.
12. When obtaining the patient's history (anamnesis), the physician should inquire about all therapeutic measures (proven or otherwise) the patient has been exposed or is still exposed to. If necessary, the physician should inform the patient on potential harms associated with the previous use of Pseudotherapies and pseudosciences.
13. The physician must inform the patient that complementary treatment is not a therapeutic alternative or substitute for a validated main medical treatment.

*Note: The aim of this declaration is not the traditional ancestral medicines nor the so-called indigenous medicines, firmly rooted in peoples and nations, forming an intrinsic part of their culture, rites, traditions and history.*