

Complementary Medicine

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"Life is short, art is long, the opportunity is fleeting, the experiment faltering, the judgment difficult. Not only the doctor should be ready to do by himself things that should be done, but also patients, assistants, external things"
Hippocrates

"The art of medicine cannot be neither inherited nor copied from books"
Paracelsus

"I think that your solution is good, but why brooding? Why not doing the experiment?"
J. Hunter



Unconventional Medicines

- Which are the most used unconventional medicines by patients?
- The main CAMs, beyond their ancient traditions and clinic results with anecdotal characteristics, have a documented scientific strength, too?

CAMs and G.P.

- The knowledge and practice of one or more of these disciplines adds value to the GP's professionalism?
- In which way the GP can use, within his daily practice, and carry out the so-called "Integrated Medicine"?

Introduction

The growing diffusion of complementary or unconventional medicines (CAM) force, more and more often, the doctor of general medicine to give clarifications and indications about them¹. The belief, shown through several analysis on European and American users, that complementary therapies are efficacious and well tolerated, and the particular type of relationship established between patient and therapist (contact, easy language, etc.) proof that, in the western part of the world, complementary therapies are used by 40% of the citizens, a percentage of 30-35% in European countries and beyond 50% in the USA² and a growing trend in the past twenty years^{3 4 5 6}. It is necessary, then, that the GP is informed, at least generally, of scientific and clinic evidences, of indications, contra-indications and limits of the main CAM, so that s/he can, if requested, to give useful advices and know if the integrations with drug therapies is possible, useful or, on the contrary, contra-indicated^{7 8}. Firstly, we believe useful to give a precise definition of CAM,

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taking into considerations what experts, after years and years of research, have produced regarding definitions that are not superficial rather, as we are going to see, greatly sensitive, open-minded and intelligent^{9 10 11 12}. Above all, we have to examine the essential terms of the comparison between scientific medicine and CAM and to draw two borders between: 1) what is medicine and what is “other” and 2) conventional medicine and alternative (or complementary or unconventional) medicine. Are we able to draw these borders? It is not easy, as medical practice is strictly mingled with socio-cultural and economic context, which is never fixed and unchanging. Since a long time, our culture has distinguished between religious faiths, philosophic beliefs and medical practices, while in other civilizations characters like shamans, wizards or healers had and still have a definite meaning, which in that cultural environment can be understood and justified.

Today and in the present society in order to talk about “medicine”, apart from any adjectives, we have to satisfy all the following requirements:

- practiced by doctors or, anyhow, under medical control;
- its aim being the care of physical and mental health;
- it should exist a theoretical corpus as a reference with its own logical coherence, at least intrinsic;
- the knowledge should be left in texts (pharmacopoeias, methodological texts, actual literature), which clearly describe used therapeutic and diagnostic methods, their indications and contra-indications;
- it should be possible to verify—following the methods typical of each discipline—the reliability and the effectiveness of the different operations.

As said so far, it is clear that it is not possible to define medical practices—then, neither “alternative medicines” or CAM—the ones with the following characteristics:

- having different aims from the therapy (ex. love, socio-economic, philosophical, religious etc. matters);
- referring to occult, mysterious methods reserved to initiates;
- using methods whose provenance and way of preparation are not known and checked;
- showing off therapeutic results without giving any documentation and without any chance to verify them.

This clarification, which might surprise someone, is essential to understand, in the final part of this introduction, the reasons to believe an integration between scientific medicine and CAM possible. Let us go back, now, to the definition of CAM. Being them several, we can only give a general definition: *the theories and the therapeutic practices on the whole which do not fall within the rules of the conventional medicine*. They are called alternatives as:

- they are often used to substitute, or in opposition to, conventional medicine;
- they are used as an alternative to the failure of conventional treatments;
- they come from cultures that are different from the western scientific rationality;
- they are often excluded from the main institutions (Universities, NHS, National Committee for Researches) ;
- their practice is not officially recognized.

The word “alternative medicine” should be critically analysed and discussed. Many do not like this word, as it can easily create a conflict between two separated worlds and, also, because it allows the confusion with “alternative” practices, which do not deal with medicine itself. In the past, beyond alternative medicines, people talked about “heretical medicines”, underlying more and more the transgression they carry within their meaning, or about “parallel medicines”, “ecological medicines”, “non violent”, “sweet”, “biological” or, finally, “natural medicines”. All these adjectives reduce their real value and they often add colours to their true meaning. At international levels, the most used names—in scientific reviews and in committee created on purpose by health authorities—are “complementary

medicine” or “unconventional medicine”. For example, it exists a review, published by Churchill Livingstone, called "*Complementary Therapies in Medicine*"; it exists a "*Complementary Medicine Index*" edited by the British Library; CEE has launched a survey and a research project (COST B4^M) called "*Unconventional Medicine in Europe*". As said so far and thanks to the growing international consent, it seems that the most appropriated names are “complementary medicine” or “unconventional medicine”, which are explained as it follows : *the whole of clinic practices coming from—due to historical or geographical reasons—theoretical and methodological fundaments, more or less different and distinguishable from biomedical science, but not necessarily opposed to it*. The adjective “complementary” should indicate that the use of these medicines could be done in addition of conventional medicines. This name seems appropriate as it suggests that the use of one or more of these therapies represents “one more means” to already used therapies, once they show not to be enough. Nevertheless, it has to be said that the word “complementary” could not be enough to grasp the whole essence of the problem and to reduce the value of tradition full of culture and fine methodologies, even if they are not scientific. For a doctor who practices acupuncture or homoeopathy, it is possible that the “preferred” methodology becomes prevalent, while s/he might consider complementary therapies the analgesics or antibiotics when they are necessary. Nevertheless, in this phase where many hope for an integration of the different methodologies, which starts from the fundament of the universal knowledge of scientific medicine, it seems right to use this word also if it seems to reduce its real meaning.

The word “unconventional” is clear, but it has an important weak spot: it is...temporary! What today is “unconventional”, tomorrow could be “conventional”. In fact, it can be seen that it already exists a wide area of “intermediate” therapeutic and medical practices: let us think to dietetics, psychotherapy, thermal therapies, medical hypnosis, some kinds of manipulative therapies (as chiropractice), reflex therapy, oxygen-ozone therapy, relaxing techniques, oligoelements, antioxidants based on plants extracts, immunotherapy with bacterial extracts in small doses. Many of this practices are used as they have shown to be efficacious also if it is not possible to guarantee their full scientific value.

It is not less complicated trying to classify unconventional medical practices.

The Index of British Library is dedicated to the following therapeutic categories^V:

^I the project was launched in 1994 and ended with a production of more than 500 works, in 1998. For further details, please see:
Di Stanislao C., Evangelista P., Lomuscio A., Sabelli I.: *Agopuntura: validazione scientifica ed evidenze cliniche*, La Mandorla (www.agopuntura.org), 2002, 22.

^V It exists a wide scientific bibliography for them that is completely reported as it follows:

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3. Piscitelli SC, Burstein AH, Chait D, Alfaro RM, Falloon J. Indinavir concentrations and St John's wort. *Lancet* 2000; 355: 547-548[Medline].
4. Wilt T, Ishani A, Stark G, MacDonald R, Mulrow C, Lau J. Serenoa repens for benign prostatic hyperplasia. In: *Cochrane Collaboration,ed. Cochrane Library. Issue 2. Oxford: Update Software, 2000.*
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6. Ernst E, Pittler MH. The effectiveness of acupuncture in treating acute dental pain: a systematic review. *Br Dent J* 1998; 184: 443-447[Medline].
7. Vickers AJ. Can acupuncture have specific effects on health? A systematic review of acupuncture antiemesis trials. *J R Soc Med* 1996; 89: 303-311[Medline].

- Acupuncture

8. White AR, Rampes H, Ernst E. Acupuncture for smoking cessation. In: Cochrane Collaboration,ed. Cochrane Library. Issue 2. Oxford: Update Software, 2000.
9. Vickers A, Zollman C. ABC of Complementary Medicine: the manipulative therapies osteopathy and chiropractic. *BMJ* 1999; 319: 1176-1179[Full Text].
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19. Fraser J, Kerr JR. Psychophysiological effects of back massage on elderly institutionalized patients. *J Adv Nurs* 1993; 18: 238-245[Medline].
20. Richards KC. Effect of a back massage and relaxation intervention on sleep in critically ill patients. *Am J Crit Care* 1998; 7: 288-299[Medline].
21. Christensen BV, Ihl IU, Vilbek H, Bulow HH, Dreijer NC, Rasmussen HF. Acupuncture treatment of severe knee osteoarthritis. A long-term study. *Acta Anaesthesiol Scand* 1992; 36: 519-525[Medline].
22. Deluze C, Bosia L, Zirbs A, Chantraine A, Vischer TL. Electroacupuncture in fibromyalgia: results of a controlled trial. *BMJ* 1992; 305: 1249-1252[Medline].
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24. Winter MJ, Paskin S, Baker T. Music reduces stress and anxiety of patients in the surgical holding area. *J Post Anesth Nurs* 1994; 9: 340-343[Medline].
25. Zollman C, Vickers A. ABC of complementary medicine: what is complementary medicine? *BMJ* 1999; 319: 693-696[Full Text].
26. Bhattacharya B. M.D. programs in the United States with complementary and alternative medicine education opportunities: an ongoing listing. *J Alternative Complementary Med* 2000; 6: 77-90[Medline].
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- Homoeopathy
- Manipulative therapies
- Psychosomatic therapies
- Diet and Nutrition
- Phytotherapy (Herbalism in English, which also includes Ayurveda)
- Other therapies.

A wider classification is the one of the *Office of Alternative Medicine del National Institutes of Health*^{VI}. This classification includes seven categories (Alternative Medical Techniques, Bioelectromagnetic Application, Diet-Nutrition and Life Styles, Phytotherapy, Manipulative Therapies, Soul/Body Control, Pharmacological and Biological Treatments) with 63 unconventional medical practices. Lately, the Italian National Federation of Medical-Surgical and Dental Association (FNOMCeO), waiting for the Italian Government passing a Unique Text of Law about CAM, has drawn up a document where are recognised nine complementary practices called "medical acts"¹³.

The CAM called medical acts (and then being the prerogative of the student of medicine) are:

1. Acupuncture
2. Chiropractic
3. Phytotherapy
4. Anthroposophic Medicine
5. Ayurvedic Medicine
6. Traditional Chinese Medicine
7. Homoeopathy
8. Homotoxicology
9. Osteopathy

Then at the end of this introduction, it should be said something about the possible integration between CAM and scientific medicine. At the moment, there are several signs of a growing acceptance, by the official institutions and the scientific community, of the positive contribution of complementary medicines¹⁴:

- There is a growing quantity and quality of published works on international reviews regarding complementary techniques (acupuncture, homoeopathy,...); new reviews dealing with this field are going to be published and the actual publications present on international data-banks are growing at a tremendous rate;
- It has existed for the past ten years an international group (with a hundred members) whose aim is to coordinate the research in the field of homoeopathy and of high dilutions (*Group International de Recherche sur l'Infinitésimal*);
- The institutions of public researches are becoming more open towards this field: the European Community has launched a survey (COST B4 project) answered by, at its first census, 550 groups researching in the field of unconventional medicine;
- The European Parliament has promulgated on 29/5/97 a resolution (A4-0075/97) on the "*Status of non-conventional medicine*", which invites the European Community to launch rigorous studies on the security and effectiveness of medicines with a complementary or alternative nature and to add notions of complementary medicine on official university curricula;
- The Government of the United States has instituted, at the *National Institutes of Health*, an office specifically dedicated to the study of alternative medicines (*Office of Alternative Medicine*);
- The homoeopathic medicaments have been recognised and their production and sell have been regulated by recent European directives, also accepted by Italian laws;

^{VI} Vedi: <http://altmed.od.nih.gov/>

- In some European Universities and in many U.S. Universities it has been taken into consideration complementary medicine (acupuncture and homoeopathy, above all) on a research and information course level, at least^{VII}.

It seems clear, then, that a tendency towards the integration of different therapeutic systems is unavoidable, even if the process will be very difficult and chaotic if it is not going to be carried out in a balanced and competent way. In order to create this integration, it is important to understand above all the role of different approaches—conventional and unconventional—while, on the other hand, some passages that guarantee adequate quality controls should be established.

Having this view, conventional medicine contributes and will always contribute with:

- basic knowledge, universal also if renewable: physics, chemistry, biology, etc;
- experimental methods: each theory and each affirmation on the effectiveness of a therapeutic method should be confirmed (or, as Popper says, falsified) through proper experiments and statistics evaluations¹⁵;
- indispensable technologies to reach a classic diagnosis, from which it is never possible to leave out of consideration: laboratory, imaging diagnosis, functional bio-electric surveys, etc;
- therapeutic means, which have shown to be effective in many pathologies: medicines, radiotherapy, surgery, substitutive therapies, etc;
- the language, being non ambiguous, as a fundamental means of communication between the operators. Clearly, keeping in mind the integration, it could be implemented with typical notions from unconventional medicine, whose fundamental elements should be put in the university curricula.

On the other hand, complementary medicines would make the contribution of¹⁶:

- an asset of empirical knowledge: the tradition of acupuncture and phytotherapy, pharmacopoeias for homoeopathy. When there is the presence of empiricism there is, also, experience and knowledge, which cannot be put apart as they are still not codified and explained scientifically ;
- procedures for anamnesis and semeiotics addressed, in a programmed way, to understand the patient as a whole and as an individual. It is an asset of high clinical-therapeutic methodologies created to respond to the deficiencies in the psycho-physic balance of the patients. It may help to overcome the attention to mere technical details of conventional medicine¹⁷;
- new ideas for the research, which can be used as a stimulus and orientation to the ones who want to investigate, in a scientific and rational way, the field of physiologic complexity, of dynamic systems and of micro dosage of medicines.

If this process of osmosis will happen, then some of the therapeutic categories, today considered complementary, could be tomorrow regarded as conventional and they could contribute to the only treatment of the patient, which we will call “integrated medicine”.

Right now, though, the following steps are necessary^{18 19}:

- pilot-experiences of cooperation between conventional and unconventional doctors, creation of groups of experts who examine the integration, in an experimental way;
- scientific research on its effectiveness and the probable action mechanisms of complementary therapies ;
- creation of documentation centres, observers of the unfavourable effects and data-banks for literature.

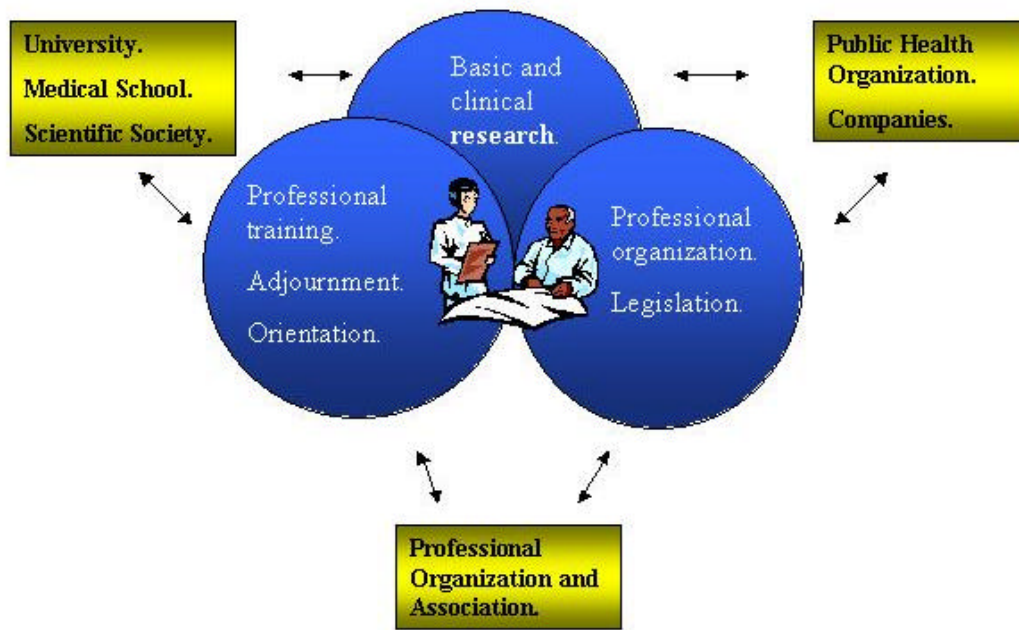
VII An updated list of classes of complementary medicine in American Universities can be found on the site of Columbia University of New York created on purpose, <http://cpmnet.columbia.edu/dept/rosenthal/>. A list of European courses can be found on www.agopuntura.org/Agopuntura and Non-Conventional Medicine on the net (<http://www.agopuntura.org/documenti.htm>).

Finally, the topic of the integration in medicine, of what is “conventional” and what that is not, is receiving a growing attention from civil society, doctors and science. In the past years, the current medical literature (ex.: *Brit. Med. J.*, *JAMA*, *Lancet*) has become more and more “open” to the integration of the knowledge coming from different cultures, and then to the conventional medicines, too. The integration between some complementary or unconventional medical systems and the culturally and politically dominant medical system represents a great challenge to the scientific knowledge and to the university and health organisation. This challenge is played on several fields: scientific research (above all on the effectiveness, appropriateness and on the cost/benefit relation of the different practices), didactic (with reference to the formation as an undergraduate and a graduate, the creation of new courses at the university and the control of the quality of the formative offers), management (health system, professional organisations, deontology, legislation). After the recognitions of OMS²⁰, of NHF²¹ and of CEE²², the ones of the House of Lords^{VIII} and of FNOMCeO they show us that, for many CAM, the integration is already happening^{23 24}. Integrative medicine means practicing medicine in a way to take over elements of complementary and alternative practices on preventive and therapeutic fields, along with the most reliable diagnostic and therapeutic orthodox methods^{25 26 27}. The main thing to do is to create synergies between experts of each discipline, institutions of public and private research along with organisms both political and administrative, whose aim is to develop first of all the experimental and epidemiological-observational research, first step and raw material for an integration and professional formation based on evidences. Without investments and adequate financial support there is no research and with no research there is no answer on the effectiveness and the risks of complementary therapies. Another fundamental prerequisite for an efficacious integration is to define formative paths, then the ways of verifications and certifications of competences, of the doctors (possibly, with special conditions, of other non medical jobs in the field of health) in different disciplines. In order to have a very good start of the research and of the didactic, having the highest guarantee of their reliability and scientific value, co-operations and/or agreements between different institutions dealing with this matter should be stimulated: universities, private training schools, scientific societies, professional associations, national health system, companies. Briefly, this integration is an historical process already started and not avoidable; whereas in order to be possible and, above all, possible for the health of the citizens in a rational and productive way it is still to be fixed. The means and the steps (actions) used to reach the aims of the integration are of three different kinds, summarised as follows^{28 29}:

1. **research**: it has a fundamental resolutive role within the innovation process; it will be possible to integrate efficaciously those medical practices that are safe and effective in the clinic research and suitable for a research about their functioning mechanisms through a basic research.
2. **training**: it will be possible to integrate those operators who are efficaciously trained in their discipline and in the communication skills and who really have the competences regarding the integration; competences that are going to be guaranteed by a good training system and by professional refresher courses.
3. **planning**: scientific societies, professional associations, health and training institutions, companies, information means should interact in a coordinative and efficacious way,

⁵ Please, see British Medical Journal 2001; 322:119-120, also House of Lords, Science and Technology – Sixth Report, Science and Technology Committee Publications, London, 2000

taking into consideration the financial side and having a resolute role also on a legislative level.



We want to end this introduction hoping for a further integrative development between medical models quoting a famous American clinic doctor, Prof. Rees, who has written³⁰:
“Integrated medicine does not deal only with herbs instead of drugs. It deals with the restoration of the basic values of being a doctor, which have been eroded by social and economic factors. Integrated medicine is a good medicine and its success will be shown by the disappearance of its adjective. Today, integrated medicine should be the medicine of the new millennium.”

CAMs. Their definitions, evidences and indications.

*“let’s love above all our love”
 Lord Byron*

We will take into consideration acupuncture, homoeopathy, phytotherapy, oriental massage techniques (shiatsu, primarily) and, finally, manual medicine (osteopathy and chiropractice).

Acupuncture

It has been used for thousands of years by Chinese people and it spread widely first in the eastern part of the world (Korea, Vietnam, Indochina) then in the western one (starting

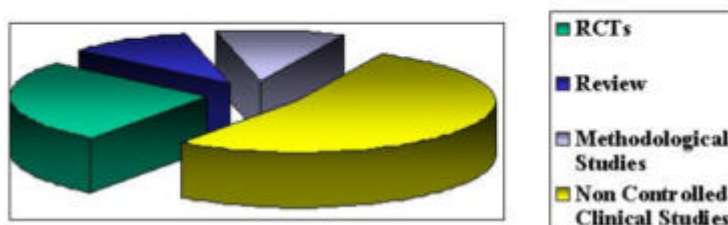
from XIX century). It is founded on the theoretical principle that the human being is governed by the same laws of the universe and within him/herself two energies, opposed and complementary, flow (Yin and Yang); their balance is crucial for the health of a person. After having valued the energetic status of the flow of the so-called Meridians (preferential ways of the flow of the Energy), the doctor gives a diagnosis and creates a re-balance through exact points codified by classics. Traditionally, the inflexion of the needles can be combined with the usage of *moxa*, small rods made of *Artemisia* that are lighted up and placed close behind the part of the skin, which is going to be stimulated by the heat. In paediatric or geriatric age, this technique (called moxibustion or firetherapy) is highly efficacious. At the moment, it exists a development, called *reflessotherapy*, which interprets clinic results through neuro-hormonal and immunitary modulations. Recognised in Italy as “medical act” since 1982, it is nowadays spread in the hospitals. The OMS and NIH have recognised its strength in a dozen painful and dysfunctional pathologies³¹.

Most recent and wide studies have shown, also, that if practiced by competent people, acupuncture has almost no undesirable effects and it is well accepted by the patient³². The most interesting works, produced between 1975-1995, dealt with chronic idiopathic pain, chronic lumbar pain, nociceptive visceral pain, post-surgical pain. According to these studies, the parameters of acupuncture, which influence the outcome, are³³:

- place of needle insertion: it is to prefer the combination of needles infixed locally in the segmental receptive fields and needles infixed distally in myotomes and dermatomes, then both in the segments where the pain has origin and in other segments.
- Intensity of stimulation: the pain gets less intense with each superficial insertion or with a deep stimulation of the spot, more patients respond positively to the latter.
- Choosing when to operate: preventive acupuncture for dental extractions increase the post-surgical pain and the usage of analgesics. On the other hand, the treatment of chronic episodic dysmenorrhea using acupuncture one week before menstruation reduces pain and the usage of analgesics.
- Stimulation procedures: nociceptive chronic pain, both muscular and of the skeleton, is reduced thanks to an electric stimulation with low frequency. Periosteal stimulation has a greater effect on visceral nociceptive effect of dysmenorrhea, though other methods for acupuncture and TENS at low frequency can reduce the pain. .

A year to remember for clinic evidence of acupuncture is 1997 when Prof Klein of the National Library of Medicine publishes a review about 2032 works taken from 9 reviews (from 1970 to 1996) and shows the wide production and the high segregation of data available³⁴. The typology of these works (with 10% of random and controlled researches) is the following:.

National Library of Medicine, Methanalysis, 1997.



After this research, the NIH, involving different American medical associations^X, draws up a document (named Consensus Conference on Acupuncture)³⁵(35), where it expresses its

^X

favourable opinion regarding the use of acupuncture in a dozen of different pathologies^X. We should remember that already OMS had, in a document dated 1977 (and modified in 1990, 1993 and in 1998³⁶), shown a particular interest on Chinese acupuncture, in about thirty algic and internal pathologies^{XI}. The European Community, too, was interested in acupuncture, with the already quoted COST B4 project, which has noticed its effectiveness in osteoarticular pain, dysmenorrhea, surgical and post-pregnancy pain³⁷(37). Recently, the British Medical Society and the British Medical Association^{38 39} have shown their favourable opinion on pathologies that, following international works, are responsive to the treatment with acupuncture^{XII}. The same associations have been able to document that many recent researches exist and show not only the clinic effectiveness but also the action mechanism of acupuncture⁴⁰. Also, other international groups of scientific strength (Effective Health Care, ABC Journal club, Cochrane Library) have promoted researches on the indications of acupuncture, which have verified their effectiveness having chronic and sharp pain, hemesis, tinnutus, bronchial asthma, obesity and neuro-motorial rehabilitation after ictus^{41 42 43 44}.

Why the G.P. is the ideal character for the integration between conventional and complementary medicines, especially acupuncture?

Probably, it does not exist a G.P. who, at least once, has questioned himself about the reliability of acupuncture; maybe because some patients of his/her asked him/her an opinion before starting a treatment, or maybe because the patient told the doctor to have used it, so to give many G.P. the chance to test directly its effectiveness.

There is a growing interest by G.P. to ask for information about this matter, due, maybe, to the Consensus Development Statement of the American National Institute of Health ⁴⁵, which has dispelled any doubt.

We believe that the G.P. is the ideal doctor to know the usefulness of the Oriental Medicine, at least for what it concerns the usage of needles and complementary techniques, as moxibustion, cupping, and skin needles, due to the following reasons :

- in the G.P.'s ambulatory, several pathologies are present; this allows acupuncture, which has got the ability to deal with a wide range of diseases, to be an ideal means to complete the range of instruments available for the G.P.,

National Heart, Lung and Blood Institute
 National Institute of Allergy and Infectious Diseases
 National Institute of Arthritis and Musculo-skeletal and Skin Diseases
 National Institute for Dental Diseases
 National Institute for Drug Abuse
 Office of Research on Women's Health of NHI

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Postsurgical and chemotherapeutic emesis, dental extraction pain, Dysmenorrhoea, Headache, Epicondilitis, Fibromialgy, Osteoarthritis, miofascial pain, drug addiction, post ictus rehabilitation, Asthma, Rinitis, carpal tunnel.

^{XI} Acne, Anxiety , asthma, Bursitis, Headache' irritable colon ' rinitis, cyclic idiopathic, mellitus diabetes, reactivity depression, Herpes simplex, Herpes zoster, Hepatitis, Influenza, Lombalgy, inflammatory pelvic disease, Osteoartrosi, Otite, Paralysis a frigore, Nevralgies, Sciatic, Emiplegy, Tinnitus, Vertigos, Vaginitis.

^{XII} Lumbago, Tensive cephalalgya, Dysmenorrhea, Hypoalgesia and labor induction, Bad position of foetus, Post-surgical gravidic an iatrogenic vomiting, Post-estractive toothache, Asthma.

- the global view of the single person, typical of general medicine, is closer, for its nature, to the global (holistic) view of the traditional Chinese medicine regarding the healthy and the ill person,
- the G.P. is a problem solver, his role involves the necessity to give immediate and effective answers to a wide range of problems: the ability to answer on the spot to a patient's problem is greatly helped by acupuncture, which does not request preliminary studies using instruments and does not cause important collateral effects,
- the G.P. has got the chance to go to the patient's house if s/he is not able to go by him/herself to the ambulatory, due to chronic pathologies or pathologies that involve disablement. If the doctor is familiar with acupuncture, at least with its analgetic applications, s/he can avoid, at a first step, contacting other doctors; in this way, it is possible to avoid the discomfort due to the transportation of the patient to centres for physiotherapy, and to avoid adding other medicines to therapies followed by people who, usually, take many of them being chronic and/or neoplastic patients,
- very often, patients who go to the G.P.'s ambulatory do not give specific indications attributed to a disease or a known syndrome, but they suffer from isolated symptoms that represent their way of feeling ill at ease. As a consequence, the G.P. can answer to the problem in two different ways: the first is to reassure the patient and/or to make the symptom appear less dramatic, something that the patient feels to be as an under-evaluation of his/her problem, or to prescribe exams through specific means (blood tests, x-rays, etc.), something perceived as quite redundant by the G.P. but that is necessary to set the symptom in a global pathologic frame. Or, s/he has to prescribe a treatment using drugs, which would be avoided with pleasure, but it represents the only means at his/her disposal to solve the patient's problem.

In these situations, often present in an ambulatory, acupuncture represents a valid complementary instrument: it allows to face and solve the symptom directly, without recurring to exams or medicines.

- the pain, in all its manifestations, is one of the most frequent reasons to go to a G.P.'s ambulatory⁴⁶. Very often, they deal with patients having chronic pain, where FANS is contra-indicated as its earlier usage has brought gastro-intestinal intolerance. Moreover, very often this kinds of pain respond only partially, or at all, to physiokinesitherapy. This is one of the situations when the G.P. is highly frustrated who has not got any other means of his to use.

On the other hand, though, it represents an ideal situation to use acupuncture.

Acupuncture, then, becomes a very useful instrument in the situations when the G.P. seems to be in a therapeutic blind alley.

- during recent years, the G.P. has been invested with another, heavy duty: the control of the expenses⁴⁷.

There are two requests for expenses, which are the most expensive, made by the G.P.: physiokinesitherapy and F.A.N.S. prescriptions.

As concerns health expenses, acupuncture is a very good: a needle, which costs few Euro cents, can be used about ten times on the same patient and, then, a cycle of acupuncture doe not cost more than 3,00 Euros—as concerns the instruments to use. Now, the problem we have is how to train the G.P. interested to acupuncture⁴⁸. The courses last 3 or 4 years, followed by one topic seminars and meetings, arranged by the schools, which improve the doctor's preparation. We believe, though, that 4 years are not enough for the G.P. to reach the preparation we believe s/he should have, as shown in the first part of this work.

On the other hand, in the actual China, there are different learning levels of acupuncture, starting from courses that last 1 year to a Master course of 7 years. We believe, though, it is possible to reduce the learning time through active training techniques

In 1996, as a matter of fact, WHO has drawn up the Guide Lines to train to practice acupuncture, which grade the courses, according to the doctor's needs. Courses go up to 1.500 hours, but there are short courses—their duration depending on different needs—that train the operator to treat single, definite pathologies⁴⁹.

We believe that in this last field training courses for the GP should be added in order to learn, at least, how to use acupuncture in an antalgic and symptomatic way^{50, 51, 52, 53, 54}.

Homoeopathy.

Homoeopathic medicine is a clinic-pharmaceutical system that uses microdoses of substances taken from vegetables, minerals or animals in order to stimulate the response of natural recovery. This system states to treat diseases using medicines (usually called *remedies*) prepared according to particular methodologies of *dilution-dynamisation* and chosen following a complex methodology, which is based on the *similitude principle*. This “law” or, better, “principle” of similitude is the main acquisition of homoeopathy and the fundament for its understanding. According to this principle, already present in some of the medical and philosophical systems of the past as in Hippocrates and Paracelsus, but re-discovered by the German Samuel Hahnemann (1755-1843) above all, a disease can be treated giving to the patient a substance that to a healthy person cause symptoms similar to the ones of the disease itself (so the saying *similia similibus curentur*)⁵⁵. Strictly speaking, it means that:

- a. Each biologically active substance (medicine or remedy) produces typical symptoms in healthy organisms who can be, by this substance, disturbed in same way;
- b. Each ill organism expresses several typical symptoms, which show a pathologic alteration in that patient;
- c. The recovery of an ill organism, characterised by progressive disappearance of all symptoms, can be obtained through a specific giving of the medicine producing a frame of symptoms *similar* in healthy organisms⁵⁶.

For example, the homoeopathic doctor, starting from the observation that the bee poison creates a typical pomphus with pain and erythema subsided by cold poultices, gives bee extract in homoeopathic preparation (diluted or dinamished) to treat patients with nettlerash with pomphi and pains similar to the ones of bee sting, even if with other ethiology. In order to identify the most suitable remedies for each single case, the pharmacopoeia of homoeopathy has been created, since the beginning, in consequence of toxicological tests, observing the effects of accidental and professional intoxications, or giving to healthy volunteers small doses of several substances and taking meticulously the results of symptoms as soon as an effect showed⁵⁷.

These provings have been collected in the so-called *Medical Subject*, which is continuously up-dated and has got data about symptoms caused by hundreds of different mineral, vegetal and animal substances⁵⁸. The *Medical Subject* has been and is continuously verified, modified and up-dated thanks, too, to experiences done with patients. As a matter of facts, in order to have a particular remedy introduced or used in the homoeopathic pharmacopoeia it is not enough to be able to create symptoms in a healthy person, but it is necessary to show to be able to treat patients who have the symptoms shown in the provings. Another aspect that should be underlined, being it often present in the literature, is that in the meticulous and patient analysis of the symptoms, called *repertoirisation*, great importance is given to the most peculiar ones, which might show a particular individual reactivity, and to the ones of the psychological sphere along with the somatic one. A correct repertoirisation needs, as a matter of facts, an analytical approach and, at the same time, a patient's global one. Following this way only, according to the homoeopathic methods, a right choice of the right medicine for each patient will be

possible. During its history, homoeopathy has undergone many versions—according to the intentions of the ones who proposed them—which aimed to facilitate its usage and/or increase its therapeutic power. Nevertheless, the lack of agreement between the scientific and methodological fundaments has led, very often, to arguments between different schools, which still easily confuse those who approach homoeopathy to understand its reasons and to verify its real effectiveness. Here it follows, briefly, the different methods⁵⁹.

The classical method of Hahnemann consists of prescribing medicines individually, taking into account the symptoms on the whole and the similitudiness principle. In this way “the patient is cured before the disease”. Within this method, there are different versions with the main ones being the *unicistic system* (or *unicism*), where only one remedy per time is prescribed, and the *pluralist system* (or *pluralism*), where more than one prescription is allowed in order to “cover” the majority of the symptoms if a single remedy seems not to be enough. The so-called *clinic homoeopathy*, instead, deals with the prescriptions of one homoeopathic remedy according to the present pathology, using, then, the conventional clinic diagnosis. According to this view, each disease has got its homoeopathic remedies. There are, also in this way of thinking, unique and plural tendencies—with a prevalence of pluralism—as the tendency to prescribe specific remedies for specific symptoms⁶⁰(60). A well-known kind of clinic homeopathy is *complexism*, where already made mixtures of remedies are prescribed, especially at low dilutions, for specific pathologies. The supporters of this project believe that, thanks to it, it is easier the use and prescriptions of homeopathic remedies also by conventional doctors and, moreover, it is possible to have a “synergism” of action between different substances present in the complex.

Omotoxicology is a homeopathic current, founded by H. Reckeweg during the 1960s, which tries to create a synthesis between scientific knowledge, within the bio-chemical and immunological field, and homeopathic tradition (primarily complexist) aiming to the regulation and activation of the inflammatory process seen as a natural way out to recover. We talk about *isopathy* when the homeopathic preparation (diluted and dynamited) of the remedy uses the etiologic agent of the same disease (for example, the usage of pollens in allergic asthma, the use of poisons to treat poisonings). A particular kind of isopathy is *autoemotherapy*, where it is used the same blood of the patient, usually given per intramuscular via, after a treatment on purpose (for example, dilution-dynamisation, ozonisation, addition of homeopathic medicine)⁶¹. In the past centuries, there were critics to the homeopathic doctrine⁶², which nowadays are still tenacious and documented^{63 64}. Often, when natural medicine and medicine through medicaments get closer it is not a spontaneous process and the extreme subdivision of medicaments makes it difficult to accept drugs. Regarding the first point, it should be noticed that the mercurial ulcer is not similar to the luetic one (appearance, consistency and painfulness are different) and the exanthema from scarlet fever is not as the one given by belladonna. Hahneman, too, is vague on the “exact experiences” in the search for simillimum and, sometimes, the organo-therapies seem to have a mere oposurgical and substitutive value. But the most criticised aspect is the extreme dilution and subdivision of the medicaments and their supposed dynamisation. For practical reasons, Hahneman made geometric deconcentrations (dilutions) on the base 1/10 or 1/100, having as intervals a particular “agitation”, defined as “dynamisation” ($\delta\upsilon\nu\alpha\mu\omicron\sigma$ = energy), able to load the medicaments. The number of dilutions is, usually, between 1 and 30. In homeopathic dilutions the dose of the medicament is almost non-existent, being below the Avogadrus number ($(6,022 \times 10)^{23}$). What said so far undermines, in its basis, each pharmacological principles and, also considering the smallest molecules or ions in which molecules can separate, the maximum limit-value goes up to 15° dilution. Thus, we are not stating that the effect is not depending on the dose, but we want to believe that the solute and not the active principle is able to cure. Anyway, notwithstanding the attacks had in two hundreds years of history (*Organon*

de l'arte del guarire dates back to 1810), the homeopathic theory has greatly developed in Europe, Asia (India, Pakistan, Israel), Africa (Tunisia, Algeria, Morocco, Kenya, Togo, South Africa, Ivory Coast, Ghana), North America (USA, Canada, Mexico), South America (Argentina, Brazil, Peru, Colombia) and Oceania (Australia and New Zealand). As a matter of fact, despite the difficulty by the scientific acceptation of similitudine concepts, of dilution and dynamisation, the therapeutic successes have been numerous and various, also in pathologies unamenable to pharmaceutical therapy,. Several Hahneman's pupils (Von Boenninghausen, Gressilich ed Hering in USA; Quinn in England, de Guidi in France and Necker in the Reign of the two Sicilies) have allowed a very accurate diffusion of the theories of Hahneman and, in the past 50 years, we have seen a better order in the preparation and distribution of the principles. At the moment, homeopathy has a very good fame among those who use it and among many doctors and pharmacists. This fortune is shared with other "alternative" practices and it is often based on the influence that some words have on public opinion—words as "holistic", "natural", "soft". First of all, though, we want to show what is in common between academic and homeopathic medicine, at least in the guidelines of the relationship doctor patient disease. More than twenty years ago, Prof. Ugo Teodori brought our attention to the holistic, diathetic, morpho-semeiologic and psychosomatic contents of biomedicine, regarded in its historical development⁶⁵. Concepts as hereditary diathesis, individual constitution, correlations between morphological fields and functional and psychological characters belong to medicine on a broader meaning (and not only to the "alternative" ones), then, not since Vannier, but since Paracelsus, Morgani et al., medicine has a holistic vision of the human being and a documented and dynamic psychosomatic vision of the disease⁶⁶. Then, stating that only the "other" medicines recognise psychosomatic constitutionally-acquired interconnections in different diseases, it is a methodological mistake that has to be cancelled. The principle according to which purely somatic diseases or only psychic ones do not exist, as there are several correlations between organic and functional alterations on a side and the psychic personality on the other, belongs to scientific medicines in its historical documents and in its present implications⁶⁷(69). A wide up-dated (to 2001) bibliography on clinic and basic research about homeopathy is available on the web site of the Observatory of Complementary Medicines, University of Verona (Italy)⁶⁸. From the data, it seems clear that it is useful in paediatrics, geriatrics and, above all, in the field of allergies⁶⁹. Even if the different meta-analysis convince us about the role of homeopathic remedies when having atopic dermatitis, bronchial asthma, growth disturbs, syndrome of tension-effort and in the senile neurological disturbs^{70 71 72 73 74}. There are also unfavourable reactions to homeopathic remedies, primarily allergic with rashes and Quincke's oedema. Never fatal events have been reported^{75 76 77}.

Phytotherapy

Phytotherapy deals with the usage, for a preventive or therapeutic aim, of medical plants and their by-products (phytotherapeutic or phytomedicaments), to give in several pharmaceutical kinds (dry extract, mother tincture, fluid extract, etc.)⁷⁸. In the past decades, it has been particularly appreciated both for the discovery of new plants, both for the interest shown by clinic and experimental researches, which have confirmed and explained many pharmacological properties often learnt in an empirical way⁷⁹. Phytotherapy is regarded to be, by many, the least orthodox within the field of CAM as, based on the indispensable phytochemical research and on experimental models of validation, it is right in the field of pharmacological orthodoxy⁸⁰. W.H.O. has already expressed its opinion regarding the therapeutic use of medical plants being them an integral part of the medical arsenal⁸¹.

If, on one end, there is a growth of chemical studies on active components of the different plants, on the other end, some authors believe that is important to give the phytocomplex, which is the whole plant and not the active principle, in order to improve its effectiveness⁸².

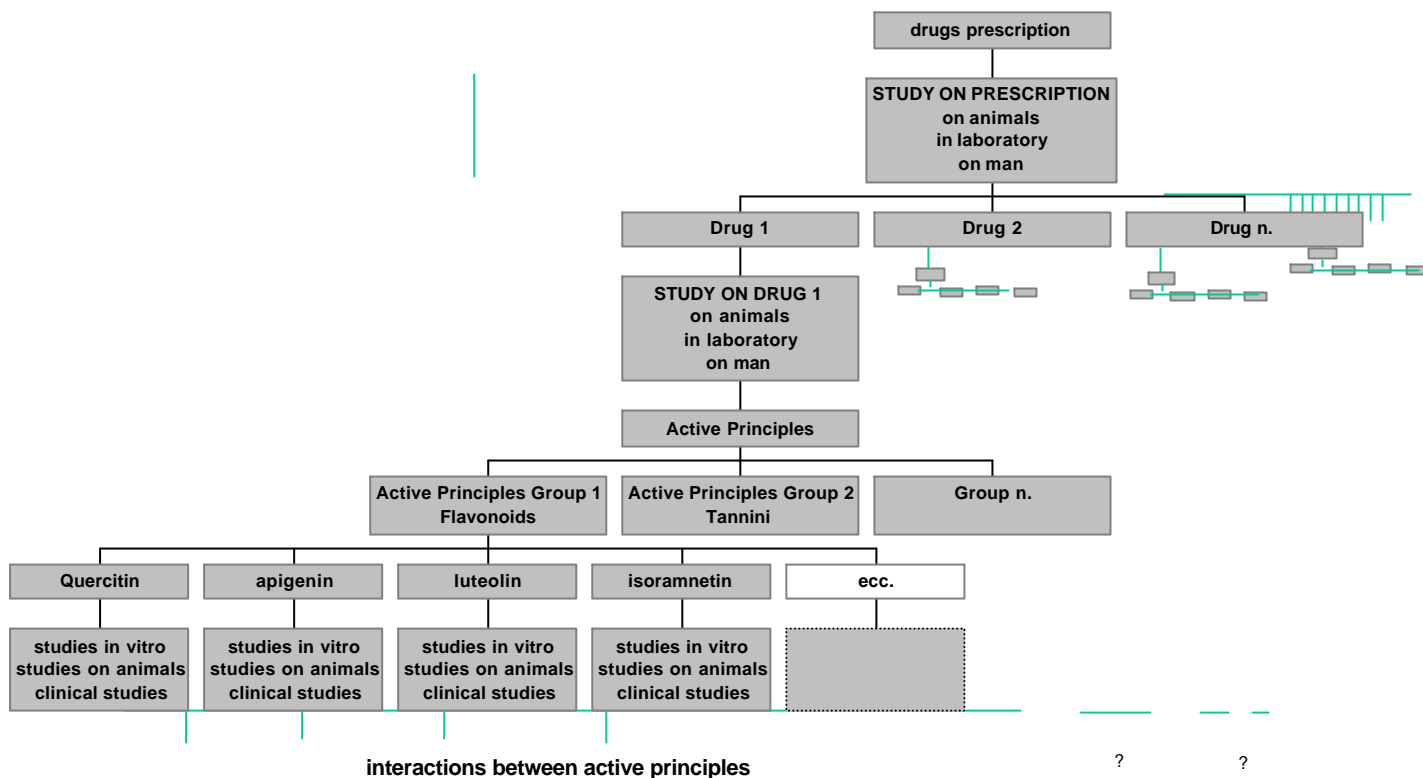
The phytocomplex of a drug is a whole of molecules of a various chemical structure: common molecules that have a nutritional value, as sugar, proteins, fat and vitamins; specific molecules of vegetal biology, as flavonoids, coumarins, tannins, saponins, etc, which are molecules that belong to the so-called "secondary metabolism" of the plant. Nutritional molecules, usually, do not have an important role in the action of the phytocomplex, as the amount of drug, which is normally given, is unimportant on an alimentary field.

Molecules that show important pharmacological actions are those coming from the "secondary metabolism" of the drug, called "natural products" of the plants, too. Each organ of the human body can benefit from their biochemical activities. The dosage of these extracts is as the same as that of conventional medicines: a tisane is prepared using few grams of drug, or few drops of a mother tincture. The absorbed amount of the phytocomplex can be valued in tenth of grams. But, differently from conventional medicines that have one or two active principles, the phytocomplex is made of several different molecules, in some cases they can be hundreds; the amount of each component that is absorbed is minimum. The study of phytocomplex should only deal, then, with its pharmacology: active principles, pharmacokinetics, molecular action sites, pharmacodynamics, interactions, clinic effects, collateral effects, etc.^{83 84}. In a recent past, people believed that clinic effectiveness of a drug came from the presence of a particular molecule having intense and specific pharmacological activity. Since then, the research of molecular isolation and production of conventional medicines begun. Nowadays, though, scientific works on phytocomplex show, for each studied drug, loads of active chemical principles. Usually, it underlines that the therapeutic effectiveness of a drug is due not to one or few active principles, rather it is determined by a combined effect of some, or all, the components of the phytocomplex.

An easy example is given by drugs with willow acids, as the bark of the white willow, the bark and the leaves of the poplar, the leaves of *Gaultheria procumbens*, the birch and the *Spiraea* of the ulm. From these phytocomplex it has been isolated in 1838 the acid of the willow that has lead to very important clinic applications and very detailed studies. It was possible to see that the clinic effects of the willow bark drug are different from the ones had with the aspirin. In particular, the gastro-damaging seems to be completely absent in phytotherapeutic treatments. It seems depending on the link that the alcohol of the willow has with the glucidic fraction in the glycosides of the willow (salicins, salicortins, populins): in the stomach the macro-molecular glycosidic form seems to be innocuous; for hydrolysis the alcohol of the willow is released slowly and, then, is oxidised in the liver with willow acid. But it also can be that a gastro-protective action is made by the other drug components, the flavonoids and tannins. The last compounds could have a significant pharmacological activity. Another example is the *Achillea Millefolium*, always used as a tonic, stomachic and anti-spastic and anti-inflammatory, astringent.

Between its known compounds, azulene shows an antispasmodic activity along with different flavonoids having spasmolytic actions (apigenins, luteolins, isorhamnetin, flavonolignans, glycosylflavones). Spasmolytic seems also to be the actions of several alkaloids (achillein, betonicin, stachidin, trigonellin) having a choleric action, too. Also coumarinic compounds can have a spasmolytic action. Betaines (betain, stachidin and achillein) have a choleric activity. The antibiotic action is attributed to the etheric compound, which can contribute to the spasmolytic action. Polyunsaturated alcohols have shown an inhibiting activity on cyclooxygenase and on 5-lipoxygenase. Anti-oedema, anti-phlogosis and spasmolytic activity is also recognised to sesquiterpene (3-oxoagajanolide, eudesmanolide,

longipinene, germacrene). Tannins do haemostatic-astringent activity. The bitter substances of the phytocomplex stimulate, in a reflex way, the vagal system. New studies make the list of pharmacological effects of phytocomplex wider: sesquiterpens of recent isolation (ac. Achimillico A, B e C) are anti-leukemia in rats. New guaianolids extracted from achillea seem to be responsible of allergic reactions. Another example is made by the anti-depression action of Hypericum: the myriad of therapeutic effects (augmentation of deep sleep, anxiety, reduction of cortisol, M.A.O. inhibition, intersynaptic augmentation of serotonin, stimulus of melanine, inhibition of prolactine, anti-hypertension, anti-viral, etc.) is attributed to the several compounds of the phytocomplex: naftodiantrons (ipericin and other), flavonoids, essential oils, tannins, flobafens, sterols, triterpens. A molecule, ipericine, can have several activities, from the MAO inhibition, to the anti-viral one, to the inhibition of mitochondrial succinoxidasi in photoactivation^{85 86 87}. An aspect that should be underlined, both in the use of phytocomplexes and of each principle with a vegetal origin, is that their kinetics depends on diet, age and the patient's conditions and also they can largely influence (synergism, antagonism, inactivation) the metabolism of different medicines. Thus, just to give some examples, hypericin of Hypericum perforatum interferes with P450 citromomo with inhibits the action of some anti-retroviral medicines; Gingko biloba increase the action of the anti-aggregates of the piastrines; Taraxacum, Cherry-tree and Juniper increase the kaliuretic action of thiazidic diuretics. It is necessary to know usage precautions and collateral effects of each vegetal principle and not considering a plant without high or chronic toxicity. Then, bilberry can cause constipation from intestinal irritation, liquorice the syndrome from iper-aldosteronism, Balm-mint interference with TSH, Cimifuga augmentation of progesterone and a receptorial competitive block with estrogens. Medical models that use, in an empirical way, vegetal remedies are Traditional Chinese Medicine and Ayurvedic Medicine. Both models give interesting herboristic remedies and formula but they have to be studied and known regarding direct risks and possible pharmacological interactions. Unfavourable events shown within literature are due to an inappropriate use and to non medical and non qualified personell.⁸⁸ It is important not only being trained and competent of the above-mentioned medical models and to know their traditional indications and contra-indications but, at the same time, to weigh the eventual and possible interaction between these synthesis remedies and medicines taken in chronic state, or also rarely, by the patient. People, to whom phytotherapeutic treatments are offered, are generally open to understand their indications and contra-indications on behalf of an alliance with the curative resources of nature itself, which usually evokes faith and charm. This openness can be a sign of a credulous person, sometimes. It is important to remember, in fact, that within Phytotherapy, no matter the model, active principles having very trenchant pharmacological and chemical actions are used. Nowadays we can have plants coming from all around the world and from different cultures and popular medicines, but we have



to level and on an informed consensus to the patient ⁸⁹. A correct algorithm of behaviour in the use of formulations with several drugs is shown above. Nevertheless, useful indications and general explaining notes can be found on several web sites. We give those which we believe are more complete and clear than others:

- <http://www.globalnet.it/erbe/home1.html>
- <http://www.italmed.com/home.cfm>
- <http://www.nimh.btinternet.co.uk/ejhm/>
- <http://www.amfoundation.org/index.htm>
- <http://www.amcmh.org/amcmh.htm>
- <http://wwwwww.giofil.it/protected/fito.htm>
- www.farmacovigilanza.org
- <http://cpmcnet.columbia.edu/dept/cme/>
- <http://digilander.libero.it/fitoamici/fito/fito.htm>
- http://www.cinese.com/mot_ricerca/erbe_cinesi.html
- <http://www.herbmed.org/>
- <http://digilander.libero.it/fitoamici/fito/avvisi/Centro%20CRAFIT.doc>
- www.erbe.it

Far East traditional massages

The therapeutic massage consists of the manipulation of soft tissues of wide areas of the body to obtain effects as relaxation, improvement of the quality or quantity of sleep or relief from muscular pains⁹⁰. The application of the massage with therapeutic aims is a common practice for several cultures, as the Indian and Chinese ones⁹¹. Per Hendrik Ling developed the European massage in the XVII century, the creator of the so-called "Swedish massage". It is a vigorous technique for massages, which according to Ling, could positively work on hematic and lymphatic circulation. As years passed by, this

technique was modified by therapists who use it emphasizing its psychological and spiritual aspects. The benefits of this therapy are described as “calm” or “completeness” feelings more than dissolution of rusted joints or improvement in blood circulation. Moreover, also the massage technique has been modified during the years, as the present one is more delicate, relaxing, fluent and intuitive than the one theorised by Ling. One session of massotherapy lasts between 15 and 90 minutes. During the session, the masseur can collect data through patient’s palpation, useful to adapt the treatment to the individual needs (as the individuation of areas with a high muscular tension to work primarily on). The ideal conditions of treatment see the patient undressed on a specific bed for massages, with a soft but firm padding and a hole for the face. The treatment room is to be warm and tranquil, sometimes having music in the background. Usually, the entire body is treated using oil to facilitate the flow of the hands on the patient’s body. During the massage it is possible to use a wide varieties of moves, as efflorage (light strokes on the entire length of the muscle), petrissage (pressure application on the entire width of the muscle), *impastamento* (“squeezing” of the muscle for its entire width) and friction (deep massage with circular movements of the thumbs or of fingers points). The masseur who deals with sports injuries and muscular-skeleton diseases can add in their preparation mutual techniques from physiotherapy, osteopathy and chiropractic, which comprehend deep massage, active and passive stretching and techniques of muscular strengthening (where the patient is asked to do movements against resistance). The patient, usually, thinks that the massage is a deep relaxing and enjoying experience. Some techniques use deep pressures, which can cause painful feelings, but usually the latter ones last shortly. Nowadays, several practices coming from different origins of the European massage are quite used, as reflexology, which gives to different areas of the foot plant links with different organs and body structures. According to this discipline, if a certain part of the patient’s body suffers from a pathology, this one will affect the corresponding part of the foot plant on which the lightest pressure will infer different painful feelings; through a massage on this plantar portion, reflexologists believe to indirectly work on the organ pathology suffered from the patient. Traditional kinds of Chinese (*tuina*) and Japanese (*shiatsu*) massage, based on a scientific principle, are often practiced and which believe the body being animated by “energy” able to influence different organs and functions⁹². The most recent “energetic” Oriental massage arrived in Italy is the “sea malay”, a traditional Indonesian massage from the I century A.C., particularly active on rheumatic pathology and especially on fibromialgy⁹³. The massage, with its different kinds, is used especially for its relaxing effects, to treat muscular pains and anxiety. Those using it state its effectiveness in the treatment of sleeping problems and of pain, both anxiety conditions: the application in this case is wide and diffused. According to someone, the benefit action of the massage on the patient’s health does not stop here: both doctors who use it and patients talk about positive effects on self-estimation in the case of physical disability and terminal diseases, which could be due to the general well-being sensation that is commonly reported after sessions⁹⁴. It is possible that the physical contact does a therapeutic action lacking in some patients, as those with no family and close friends or those with painful pathologies. Moreover, the massage helps the patient to feel that people are taking care of him/her: s/he is more willing to talk and approach delicate psychological topics having diminished his/her anxiety, feeling more at ease with him/herself and trusting his/her doctor better⁹⁵. In paediatrics, massage can be used as a communication means with the child when a bad disability makes physical contact the main means between the child and the external world. This is, nowadays, a common practice inserted often in the daily therapies of these young patients; courses for “infantile massage” for midwives, in which massage techniques are taught to improve the midwife-child relationship⁹⁶. Those who practice reflexology and Oriental energetic massages state that, in addition to

relaxation and other beneficial effects of massage, their particular technique is able to provide with more specific therapeutic effects, as in cases of ataxia, osteoarthritis and epilepsy. Another technique is called "aroma therapy" and consists of the application, while massaging, of some substances of vegetal derivation called "essential oils", to which is added basic oil that works as a lubricant. This technique is used both in the European massages and in the Oriental massages of reflexology⁹⁷. These oils are used primarily for their perfumes⁹⁸, but people think they have a range of therapeutic properties, as positive effects on circulation, digestion, infections and wounds. The therapeutic effect would be reached through a combination of the pharmacological effect (due to the intra-skin penetration of the substance) and the reflexes from the olfactory sensations created from the substance itself. Some aroma therapists have good results within the treatment of infertility, acne, diabetes, hay fever and multiple sclerosis. So far, scientific research made to verify the true advantages of simple massotherapy or with aromatic essences (essential oils) has been quite limited and oriented to examine the psychological effects of the treatment⁹⁹. The random case-control studies on this matter show the effectiveness of the massage to reduce briefly the level of anxiety in several contexts, while the evidences that these effects can last Longley are more limited^{100 101}. Always following these studies, the effects of massages on sleep or on pain are rare; there are some evidences of the "most traditional" effects of this therapy, as the improvement of circulation and the diminution of muscular tension, but there are no reliable data to link these changes with clinically relevant benefits, as relief from muscular-skeleton pain, augmentation of mobility or improvement of athletic performances. Some tests have shown that the application of massage in premature infants has positive effects, as weight improvement and faster growth; clinic tests, in order to show an effect of the massage on pathologies, as osteoarthritis, epilepsy, infertility or diabetes, are less. Many other episodic effects of these techniques are still not submitted to random case-control studies. Then, it has to be specified that the majority of the massage technique have low risk of collateral effects: the cases about this matter in the literature are extremely rare and come from uncommon techniques, as extremely vigorous massage. The contra-indications to massage come from common sense and not from empirical data, as the need to avoid friction on burns or a massage on a limb with deep vein thrombosis. The application of the massage after myocardic hearth attack represents a point of disagreement, even if studies have shown that a delicate massage represents only a moderate physiological stimulus, which does not cause dangerous stimulations on hearth. There are no evidences that the massage on a patient with a tumour can improve the metastatis diffusion, also if the strengthful pressure on the active tumoural sites should be avoided. The problem of the security of essential oils used in aromatherapy creates a concern: also if they are active pharmacological substances, and some of them could be potentially cancer-producing with high concentrations. The cases of negative effects directly conducting to them are extremely rare, probably due to the inter-skin way of sub ministraton and to the low concentrations usually used (1-3%). But, the lack of systematic data on the matter makes the security of the oils something still to demonstrate^{102 103 104}. In the case of massage with essential oils, it is important to keep in mind the following precautions: in the anamnesis pay particular attention to allergies or cutaneous reactions to perfumed products; checking the family history for cases of similar reactions. A particular attention in the choice of the oils has to be paid in the case of: dermatitis, eczema, feeble, damaged or inflamed skin, and each cutaneous condition that does not appear normal. Avoiding any essential oil suspected to create sensitiveness on atopic subjects, suffering from asthma, allergic rinitis, eczema, wool or animal substance intolerance or in subjects with a family history of athopy.

Before operating on face and neck, please remove make-up or perfume to reduce the risks from crossed sensitiveness in areas subjected to usual make-up or perfume applications and, then, with major risks.

It is not suggested to put essential oils on armpits. In this area it is possible that perfumed deodorant or powder, combined with sweat, could increase the absorption and the risk of crossed reactions. It is not suggested to use aromatherapy (cutaneous applications) with patients going after the session to sauna, Turkish bath, solarium or beech: the high humidity of these spaces increase the absorption of the essential oils.

It is suggested to be careful with the choice of the oils when the patient is going to do aerobic or intense physical exercise. The perspiration increases the intra-skin penetration and, then, the sensitiveness risks. The most practised Oriental massage is nowadays shiatsu^{105 106}. With this word (in Japanese *shi*=fingers, *atsu*=pressure) it is shown a particular kind of manual therapy elaborated empirically by T. Namikoshi in the first decades of 1900, which foresees the technique of the traditional Chinese massage *anma*, characterised by static pressures, kept on spots, called *tsubo*, along with therapeutic manual technique coming from the West, as limb mobilisations, stretching, pumps and other manipulative manoeuvres used in the rehabilitation therapy, osteopathy and chiropractic¹⁰⁷. This manual therapy is a curative method that uses pressure to stimulate and treat the spots on hands and feet. The treatment of these spots allows indirectly the organs and the body parts that are on the corresponding meridians. On the whole body and on the organs in it, it flows an energy that, if stopped, creates pathologies connected to the spot in which the stop happened. The stops (painful or sand spots) can be seen on different body areas. Both shiatsu and reflexology try to see the human body as a unique entity, then not only painful spots will be treated but also a massage will be practised, on a single area or spread on the body, on all spots and areas of the body to arrive successively to treat painful stops previously seen¹⁰⁸. Contra-indications to the application to these methods do not exist, except few cases of dangerous diseases, pregnancy and in the treatment of people following a quite "heavy" medical therapy or with particular medicines¹⁰⁹.

Manual Medicine

With this word (or with the synonym as *chirotherapy* or *manu medica*) we refer to those manipulative practices based on passive movements that overcome the limit of the physiologic movement without overcoming the anatomic limit, though^{110 111 112}. These practices were elaborated at the end of XIX century by two American doctors, Still and Palmer, who arrived in Europe (first in England and France) around 1940. The movements have to be single, energetic and very fast¹¹³. Two essential versions exist: chiropractic^{XIII} and osteopathy^{XIV}, with distinguished conceptual and practical differences that have some general basic elements in common, though^{114 115}. First of all, the impulse at vertebral or articular level is made through the following phases: relaxing through connective massage; passive mobilisation on preliminary put into tension then, a single articulation with direct,

^{XIII} Technique based on vertebral manipulation. David Palmer in 1895 used for first and today it is still used especially to treat some kinds of osteopathy caused by the deviation of the cervical column and disturbs of neurovegetal origin.

^{XIV} This is a manual therapy and a global method of cure-prevention that, also if it is based on fundamental sciences and traditional medical knowledge, uses specific techniques to re-establish the mobility and functional harmony of limbs, of rachidid, miofasciale, visceral, skull-sacrum and psychosomatic system, provoking nervous reactions of the circulation and of the temperament. Please, see: www.osteopathy.org.uk

indirect or semi-direct impulses is made¹¹⁶. The aim is to obtain the restoration of the dynamic balance especially, through the manual action on a “motory complex” or “movement segment” that is made of two articular surfaces (or two adjacent ribs) together with the interposed soft structures (ligament apparatus or intervertebral disk). Each central or peripheral articulation can be treated with fast, precise and often efficacious manoeuvres¹¹⁷. The techniques can be continuous or discontinuous and are particularly useful in interapofisary and discal pathology of the spinal column (lumbago, lumbosciaticneuralgia, cervical pain, armpain, etc.)¹¹⁸. Together with the active and passive kinesitherapy (global or analytic) and along with procedures of neuromuscular facilitation (with afferential or cortical start), manual medicine is very useful in the rehabilitation of neuropathic patients after stroke. Manipulations of neck, shoulders, knees, wrist can suddenly resolve local sequels and also far from traumatic events. Finally, manipulations offer a fast reestablishment of the articular movement after plasters. Manipulations at a costovertebral level are very useful, in the treatment of dorsalgic situations, due to position (sedentary and protracted work), hardly resolvable in other ways^{119 120}. Relatively recent studies show their effectiveness in the fibromyalgic syndromes¹²¹ and in myofascial pain¹²². Osteopathy, which operates manipulation of the skull sindemosis^{XV}, is useful for cepheas¹²³, in dysfunctions of the pelvic pavement (womb and bladder prolax), in growth defects, in the dysfunctions of the temporal-mandibular articulation¹²⁴. An Italian research has demonstrated its effectiveness, together with acupuncture, with chronic rinitis¹²⁵. Contra-indications are limited to sharp inflammatory facts (arthritis, osteitis), to expulsive and compressive discal hernias, to the decalcification of the bones (Paget and osteoporosis) and to tumoural kinds¹²⁶. Manipulative medicine is widely spread I USE, England, Germany and France. It exists a world organisation having members coming from 60 different countries called World Federation of Chiropractic (WFC) and confirmed by W.H.O.. W.H.O. has sponsored, along with WFC, the Low-back Pain interdisciplinary symposia (London 1993) and The Cervical Spine (Tokyo 1997)^{XVI}. Regarding its creation, it is valid at international level since 1991 by the Council on Chiropractic Education^{XVII}. At the moment, in Italy still does not exist a law on chiropractic and an adequate university course to become doctor in chiropractic. The Italian Association on Chiropractic has been and still is working to reach this aim^{XVIII}.

^{XV} It is a wider and more difficult therapeutic approach, based on some anatomic, physiologic and clinic observations. The skull-sacral system (movement synchrony between skull and sacral bone) is characterised by a rhythmic fisiological activity animated by a succession of contractions and decontractions of the nervous tissue of the encephalus. This move is perceived by palpation (skull listening), which gives precious indications in osteopathyc diagnosis. A disfunction at skullsacral system level can cause the omeostasi of the entire organism. Simptomathologies can affect different apparata and functional areas:

- Stomotognatic apparatus (articular noises, bad occlusion, trigeminal neuralgia)
- auditory-vestibularis apparatus (otitis, tinnitus, vertigo)
- respiratoriy apparatus (sinusitis, rinitis, asthma)
- digestive apparatus (dysphagia, constipation)
- reproductive apparatus (dysmenorrhea)
- head (with general or local headache)
- neurovegetative system (tachycardia, nausea)

^{XVI} <http://www.chiropratica.com/sito/home.htm/>

^{XVII} E-mail: FCERNOW@aol.com

^{XVIII} For further details on different assosiations in USA, Canada, France, etc, please see: <http://www.chiropratica.com/sito/links.htm>.

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