

Review Article

Unconventional and conventional medicine: Who should learn from whom?

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Unconventional methods are increasingly used to treat allergic diseases. This article identifies various factors influencing physicians and patients in their choice of treatment and therapist. It is often difficult for patients and physicians to distinguish between the natural course of disease and the effects of medical intervention. The 'placebo-effect' as well as other mechanisms may contribute to the therapeutic success. Chances and risks of unconventional methods are discussed. However, only by considering controlled studies can conventional and unconventional diagnostic and therapeutic methods be advocated on the basis of evidence rather than ideology.

Bodo Niggemann and Christoph Grüber

Department of Pediatric Pneumology and Immunology, University Children's Hospital Charité, Humboldt University, Berlin, Germany

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Bodo Niggemann, MD, Department of Pediatric Pneumology and Immunology, Children's Hospital Charité, Humboldt University, Augustenburger Platz 1, D – 13353 Berlin, Germany
Tel.: +49 30 450 56 66 43
Fax: +49 30 450 56 69 31
E-mail: bodo.niggemann@charité.de

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*'You should keep an open mind, but not so open
that your brain falls out'*

Unknown

People suffering from chronic illness or disability are increasingly turning to unconventional diagnostic and therapeutic methods (1–11). This applies particularly in the case of allergic diseases, and in our daily work with children and their parents we are constantly confronted with the problems of conventional and unconventional methods.

Various terms are used interchangeably, although different things may be meant: unconventional medicine, alternative medicine, complementary medicine, holistic medicine, integrative medicine, and naturopathy; scientific medicine is often called allopathy, orthodox or conventional medicine. Figure 1 offers a proposal for a possible integration. In this sense, naturopathy can be complementary both to scientific medicine and to unconventional medicine. Scientific medicine and unconventional medicine, however, are usually felt to be mutually irreconcilable. In the literature, 'complementary and

alternative medicine' (CAM) are often used in combination.

The list of common alternative diagnostic and therapeutic procedures seems endless and includes methods from bioresonance to pendulums, from acupuncture to yoga (12). The Internet has dramatically increased the exposure of families to sophisticated marketing (2). Unconventional methods are subject to fashionable trends as is scientific medicine, i.e. they are trendy and widely used for some time, only to fall into oblivion later on. Physicians and healers are all liable to reject seemingly solid evidence because it is incompatible with their theory; sometimes they discard a theory because of new facts, but at other times they cling to a theory despite the facts (13). There seems to be a tendency, for both physicians/healers and patients to attract like-minded patients and vice versa. Similarly, diagnostic or therapeutic measures will also tend to be mutually acceptable (Fig. 2).

The aim here is not to discuss basic principles or to judge any therapeutic method, but to consider factors that influence the choice of therapists and therapeutic methods. We also

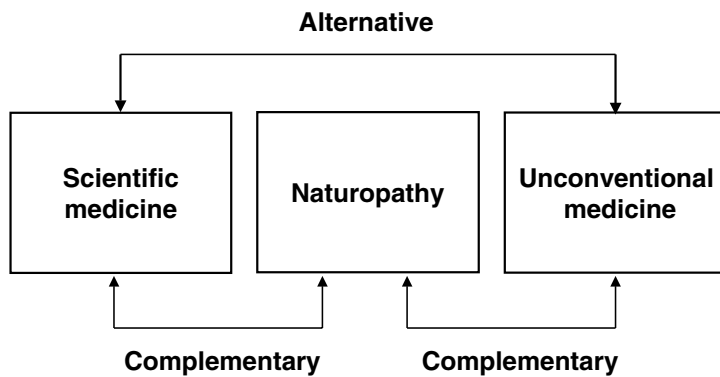


Fig. 1. Relationship of scientific medicine, naturopathy and unconventional medicine.

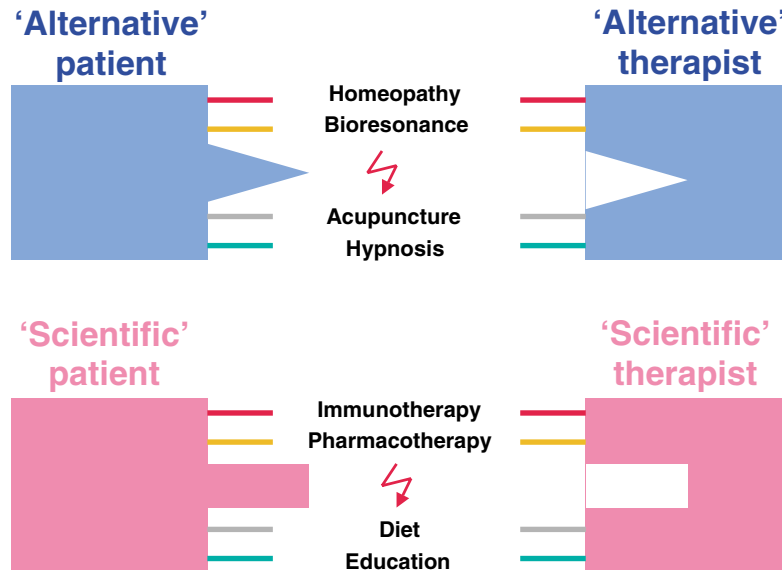


Fig. 2. Patients and therapists attract like-minded persons.

discuss possible strategies for successful disease management by therapists and patients attracted by unconventional medicine. While many points mentioned in this article are not covered by scientific studies, we still consider it worthwhile bringing up and discussing phenomena encountered when dealing with patients attracted by unconventional medicine.

Influencing factors

The prescribing **physician** is exposed to conflicting influences:

- The basic principle: 'Primum non nocere', and on the other hand a belief 'everything can be done'.
- On the one hand scientific knowledge and training, on the other hand the influence of advertisements and the 'Zeitgeist'.
- On the one hand rejection of the patient's demands, on the other hand the temptation 'With one prescription I get rid of the patient'.

- On the one hand the need to do everything possible, on the other hand the presence of economic constraints.

The **patient** is also subjected to ambivalent influences when it comes to therapies offered by physicians:

- The desire for a successful cure, but on the other hand the reluctance to take drugs.
- On the one hand a belief in the power of drugs, on the other hand a fear of package inserts and potential side-effects.
- On the one hand, a culturally based obeisance to the 'God in white', on the other hand the suspicion that 'The physician only wants to earn money'.

In the case of allergic problems there are added complications namely: an 'Allergy' for some patient is not an immunologically mediated allergy, and the cause is perceived as 'Chemicals and pollution' rather than Mother Nature (pollen, animal dander, foods). Finally, three physicians or

healers will give at least five different (if not mutually exclusive) recommendations.

Many parents find themselves in a classic double bind. No matter how they decide, they believe they will harm their child: if they let the child with atopic eczema be treated with drugs (e.g. topical corticosteroids) they suffer from a dread of side-effects; if the nocturnal scratching with substantial loss of sleep is not treated effectively, the symptoms are unbearable. The result is often a 'Therapeutic nihilism', favoring harm and preventing meaningful therapeutic measures. Identical mechanisms may be true for sick patients themselves.

The effect of superstition in medicine has been nicely shown in an English study in which 'Friday the 13th' was compared with any other Friday with respect to traffic accidents (14). Indeed on 'Friday the 13th' more patients seek help in out-patient departments due to traffic accidents. The conclusion can only be that driving behavior is influenced by superstition (14).

Effects and causes

A substantial 'confounder' in the assessment of medical therapeutic measures is the tendency of patient and physician to attribute 'causes' to each perceived effect (Fig. 3). Treating any exacerbation of an underlying eczema with topical glucocorticosteroids will usually result in an immediate marked improvement. Stopping this treatment after a short period (a) will lead to symptoms increasing to the level they would have been at without steroid treatment, and many patients claim: 'Look, steroids make the eczema worse'. However, treating until the end of the exacerbation (b), would be followed by improvements after discontinuation, and the patient could say:

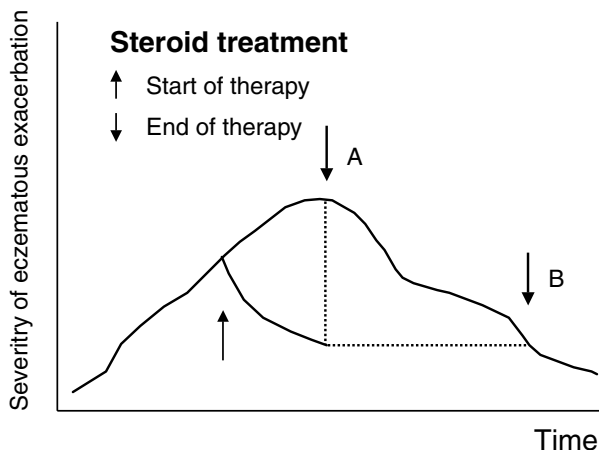


Fig. 3. Exacerbation of atopic dermatitis and topical steroid treatment.

'Steroids cure eczema'. Both statements are of course wrong, because steroids effectively treat inflammation (and therefore symptoms), but cannot eliminate the underlying cause of the exacerbation. Another illustrative example has been published by Sies demonstrating the putative relation between the decrease of both births and storks (15).

For the physician/healer and patient it is always difficult to judge whether a therapeutic effect is due to the natural or spontaneous course of the disease (e.g. the chronic relapsing course of an atopic dermatitis) or due to medical intervention. Age-related, environment-related, circadian and seasonal influences also make it more difficult to assess success and failure.

The need to see causes is especially marked in the case of food. Because people eat a wide variety of different foods, every day, in various combinations, and as foods are an important factor in peoples' daily lives, it is small wonder that many symptoms are thought to be food-related.

Reasons why patients seek unconventional medicine

Increasingly, the driving force for patients to turn towards healers and unconventional medicine is disappointment in physicians and conventional medicine. A number of reasons are typically mentioned:

- the physician does not listen,
- the physician has no time,
- the physician only treats a symptom or an organ,
- the physician does not treat individually,
- the physician uses too many strong drugs.

Reinforcing factors are:

- surroundings (e.g. the newspaper cutting from the mother-in-law which implies that 'Atopic dermatitis can now be cured'),
- advertisements (e.g. of drugs, healers, health farms),
- activism (e.g. 'Leave no stone unturned' or 'At least, it won't harm'),
- belief in cure (e.g. complete loss of symptoms as an aim).

The choice of therapist and method may be influenced by imposing names, and titles; even if these are assumed unjustly:

- the name of an establishment (e.g. 'Research institute' or 'Center for XYZ'),

- the name of a method (e.g. 'biologic', 'gentle', 'natural', 'strengthening the immune system', 'clinically proven', etc.),
- the (academic) title or education of the therapist (e.g. 'officially certified', professor, certificates in the waiting-room, natural therapy, etc.).

All these labels may not always keep what they seem to promise.

In general, pharmacotherapy can be used or taken for various reasons:

- rational ('I understand this', 'It makes sense to me'),
- empirical ('This has been quite a success', 'It was always done that way'),
- emotional ('It suits me', 'I think this could help'),
- ideological ('Nothing other than cortison works', 'Don't come near me with cortison'),
- psychological conditioning ('As soon as I have taken the pill, I feel much better' or 'That always works in my case').

The placebo effect and other mechanisms

Two more factors play an important role in the therapeutic success: 'The physician/healer as a drug' and the 'Placebo effect'.

The 'physician or healer as a drug' is probably due to the charisma of the therapist, perhaps combined with an impressive title, an ideology (scientific or alternative) that fits to the one of the user, and most of all – time. A therapist who pays attention to the patient and listens carefully will build up confidence. If the patient has gained confidence, symptoms may be perceived as less severe and may be more likely to improve or disappear.

The 'placebo-effect' implies that positive expectations after administration of a drug or use of a method will improve or cure symptoms. In numerous pharmacotherapy studies (e.g. in asthmatic patients) a placebo-effect has been proven (16). Some typical placebo-enhancers are listed in Table 1. Someone who has paid Euro 250 for a treatment may more easily perceive an

effect than anyone who has never seen the bill. 'If it doesn't cost anything, it cannot be worth anything' – this also holds true in medicine for many people. The placebo-effect is therefore not restricted to pills or methods, but also characterizes the beneficial effects derived from a positive physician/healer–patient relationship.

On the other hand, many patients show signs of a 'nocebo-effect', meaning that negative expectations induce or enforce adverse effects of drugs and methods (17, 18).

Scientific medicine often makes the mistake of considering the placebo-effect predominantly in a negative sense, i.e. to prove that patients have no evidence or real pain. The placebo-effect could be integrated in our medical work in some cases, by carefully directing the positive effects.

'Cure' of symptoms or disease is not only dependent on the physician/healer. Usually chronic symptoms or a chronic disease cannot be 'cured' against the patient's will. On the contrary, the belief in a certain method may considerably enhance the degree of 'cure'. An important factor seems to be the interaction between physician/healer and the patient. Different people may profit from completely different methods: does this argue for an individual disposition or susceptibility for certain therapeutic situations? Is therefore the most successful physician/healer the one who is able to attract 'his' clientele? Is then this success largely independent of the method used?

Why then do many methods have so many successes and followers (even without proof)? *e.g. homoeopathy may be successful in many cases, because it ideally combines:*

- 1 a long, thorough session (at least 1 h), in which the patient may be asked some personal questions for the first time and in which the physician listens carefully;
- 2 an individual and holistic pharmacotherapy, usually free from side-effects;
- 3 the principle of 'Primary deterioration'. Surely, many symptoms and diseases improve during the next weeks or months due to the natural or spontaneous course of disease – irrespective of, or even despite the medical intervention.

Bioresonance, although proven to be ineffective, e.g. for the diagnosis and treatment of atopic dermatitis (19, 20), may exhibit its imaginary positive properties because:

- 1 in the first step the healer diagnoses some putative 'allergies' and the patient (intent on a causative diagnosis) is content for the first time;

Table 1. Typical placebo-enhancers

1. Garish color (e.g. orange better than white)
2. Size (e.g. large better than small)
3. Taste (e.g. bitter better than sweet)
4. Painful administration (e.g. subcutaneous immunotherapy)
5. Impressive apparatus (e.g. computerized methods)
6. Exoticism (e.g. Asian)
7. Price ('The bill is the pill')

2 in a second step the ‘allergies’ are ‘extinguished’ and the patient is satisfied again.

In addition, this method impresses by its high-tech character and its cost, combining two important placebo-enhancers.

Whereas the patient turns away from the physician when dissatisfied, many physicians believe that terminating a physician/patient relationship is unethical. This may lead to annoyance and even threats of dire consequences for the ‘non-compliant’ patient.

Attempt to classify unconventional methods

Unconventional methods may be categorized according to their potential risks and benefits:

- potentially hazardous: methods such as ‘Niehans’ therapy’ or ‘autohemotherapy’,
- proven ineffective methods such as: ‘bioresonance’ and ‘ionisers’,
- never really proven effective: ‘homeopathy’,
- possibly effective, but not principally without adverse effects: ‘herbal therapies’,
- may possibly be effective as complementary methods: ‘yoga’,
- unconventional methods that may be effective, but are inferior to conventional methods: ‘acupuncture’ in bronchial asthma.

Counselling of patients

Many patients have been on a therapeutical odyssey including a wide range of therapists and methods. Most of them will not simply turn away from conventional medicine, but will use several therapeutic approaches in parallel. This provides the opportunity and necessity to keep in or start a dialogue with patients in order to avoid future disappointments related with therapy. It is therefore important for the patient to distinguish between serious and unserious therapists, physicians or healers. A serious therapist [modified after (21)] will:

- have a documented professional history,
- show interest in previous diagnostic and therapeutic measures,
- conduct a thorough physical examination,
- present alternatives for diagnostic and therapy,
- recommend scientific methods where these are more suitable,
- provide a plan of treatment,
- indicate the costs of treatment.

On the other hand it is suspicious (again for physician and healer), if [modified after (21)]:

- the method is used by only a few therapists,
- there is little time for the first consultation,
- there is quick advice to take expensive (serial) therapy,
- the treatment should start immediately and the wish to take advice from others is rejected,
- severe disease is threatened if the treatment is rejected by the patient,
- it is declared that the treatment has a 100% success rate and is without any adverse effects,
- the demand is made to discontinue any other treatment.

The aspects listed in Table 2 should be used in order to educate the patient as a responsible and equal partner in the relationship between patient and physician/healer.

Conclusions

Unconventional methods involve chances and risks (12, 22–24). **Risks** are:

- The unproven suitability of many unconventional diagnostic procedures, or even their proven insufficiency. This entails the risk of false diagnoses and consecutive unsuccessful or even superfluous therapeutic measures.
- The efficacy of many unconventional therapeutic methods is also unproven. Therefore, there is a danger that patients, supposing that they are receiving a suitable therapy may run

Table 2. Important aspects for the management of patients in the pediatric practice

Patients should be encouraged:

1. To emphasize an equally critical approach to every method (cortison as well as unconventional methods)
2. To avoid ideology and to use common sense instead
3. To counter the tendency to find a cause for everything
4. ‘To study’ instead of ‘to try’ therapeutic methods (e.g. using two emollients on each side some days in the treatment of atopic dermatitis)
5. To tolerate residual symptoms if possible (e.g. the aim of treating atopic dermatitis is to avoid suffering, not to clear the skin at any price)
6. To allow exceptions from rules – as far as justifiable from a medical point of view (in order to ensure normal development of children with a diet and to tolerate temporary eczematous symptoms after a birthday party)

into life-threatening situations (e.g. patients with severe bronchial asthma). The chance is lost to receive a suitable therapy.

- Unconventional methods are not necessarily harmless. In some cases adverse effects have been documented (and published); however, there is a lack of systematic data. There may be a high number of unknown cases, particularly as most of the methods are performed outside conventional settings, and are not registered by standard control mechanisms.
- Unconventional methods are not necessarily less expensive than conventional ones (7). In many cases considerable costs have to be borne by the patients if health insurances will not pay.

In contrast to this, unconventional methods have following **chances**:

Patients report that representatives of unconventional methods show more readiness to listen than conventional physicians. Here, scientific medicine could learn and try to adjust deficits.

Unconventional methods imply for many patients that they take on more personal responsibility for their health and illness. If therapy should be 'help to self-help', unconventional methods that are effective and do no harm could induce a more active approach to coping with disease (25).

Leaving aside obvious charlatans, some unconventional methods could offer potentially helpful resources for the development of meaningful therapeutic approaches. Proof of efficacy, isolation of effective compounds, and quality control are prerequisites for safe application in patients (26).

Physicians and patients are concerned that not every prospective, multicenter, randomized, double-blind, placebo-controlled, double-dummy, cross-over, long-term study offers proven results which revolutionize the daily health care. It is true that 'Not everything which is statistically significant is also clinically relevant'. Nevertheless, there are no alternatives to adequate controlled studies in the assessment of any method (27, 28). The scientific and the unconventional approaches should agree on criteria according to which results should be assessed. These should include objective factors (e.g. lung function data) as well as subjective ones (e.g. quality of life assessment). Such a procedure is conceivable for both scientific and unconventional methods. Only by suitable controlled studies can diagnostic and therapeutic methods be assessed impar-

tially. These studies should not only be placebo-controlled, but should include comparisons with proven methods. However, there are so far no criteria as to which therapy should be investigated and which not (29).

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