Primum Nihil Nocere

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First do no harm. This has been the supreme law in medicine since Hippocrates and it applies to any form of medicine, complementary or mainstream. In mainstream medicine, the principle has been well established by the implementation of a wide range of safety nets ranging from the insistence on toxicology data to quality control and post-marketing surveillance. But what about complementary medicine (CM)? Ask this question to experts in CM and you will probably cause an embarrassing silence. Then you will encounter several arguments, opinions or prejudices that come up with stereotypical regularity. First, you are likely to hear that complementary therapies are 'natural' and therefore 'safe'. In fact, you may be told that people turn to CM because they wish to have treatments without side effects. How solid is this argument? In many cases, natural therapies might be safer than synthetic ones [1], but without hard data the notion amounts to little less than belief. Often the argument is based on the recurring theme of traditional use, i.e. something that has been for a thousand years cannot be dangerous. Sadly this notion is unconvincing and has been proven wrong by several examples drawn from the history of medicine (e.g. blood letting was used for thousands of years in most cultures, yet it killed millions). The sober facts indicate that some (but not all) complementary therapies are natural, but even these are not per se safe.

The second argument is usually along the following line: what could possibly be unsafe about benign treatments such as homoeopathy, healing, reflexology etc? True, many such treatments seem to be totally devoid of side effects, yet there are still important safety issues to be addressed. They relate to the competence of the therapist rather than to the hazard of a therapy. Any therapy, however harmless, can become dangerous when applied inadequately or inappropriately. The only way to safeguard competence is to make sure that therapists are sufficiently trained and experienced in their field. Medical training aims at providing the essential tools for treating patients. However, in many countries, practitioners exist who have virtually no compulsory medical training at all, e.g. the German Heilpraktiker.

The third argument compares the known risks of mainstream treatments with those of CM: surely, one is told, CM is several

dimensions safer than mainstream medicine. This statement may be true, but unfortunately, it is also meaningless. Comparing the absolute risks of 2 forms of medicine fails to take into account their likely benefits – just think of comparing the adverse effects of a common cold remedy with those of a cancer treatment. This would be quite foolish and irrelevant. Only comparisons of net benefit (expected benefit minus expected risk) make sense. Comparing CM with orthodox medicine in this way would be extremely valuable, but at present relevant data are still insufficient to attempt doing this. So what do we know about the risks of CM? Very little! We

know that approximately 12% of users of CM report (usually mild) adverse reactions [2]. But establishing causality between an intervention and an adverse event is notoriously problematic. We also know of severe adverse effects and complications that have occurred with complementary therapies, e.g. strokes after spinal manipulation, fatalities after acupuncture, and liver failure after the use of herbal remedies [e.g. 3]. Finally, we also know of indirect risks of CM, in particular, where practitioners exceed their capabilities and advise against essential (e.g. insulin in type I diabetes) or effective (e.g. immunisation of children) interventions [4]. Thus we are aware of potential problems, but we cannot even begin to estimate their prevalence. It follows that we must take the next logical step and determine the size of the problem. This should be done with adequate methodology (e.g. post-marketing surveillance) and without delay. To omit this important task would be nothing less than unethical. It would violate the supreme principle in medicine, it would be a disastrous disfavour to CM, and it would mean forgetting that doctors and therapists can only help some patients but they can harm all.

References

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