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Therapeutic value (TV) of alternative medicine (non-drug CAM). Rough estimates for all clinical conditions based on Cochrane reviews and the ratio: Number Needed to Harm/Number Needed to Treat ($TV=NNH_{total}/NNT$).

- **Soren Ventegodt, Director**
- **Joav Merrick**

Quality-of-Life Research Center, Copenhagen

BMJ-deputy editor Trish Groves writes about the great problems related to medical evidence, putting the whole project of evidence-based medicine in danger (1). But it is mainly drug-medicine which is endangered by the problems mentioned by Groves. Non-drug medicine can also be evidence-based, and because of the limited financial interests in non-drug medicine these studies might suffer less from bias.

Non-drug medicine is often documented with the before-and-after design, using (chronic and stable) patients as their own control, which is a design that is much more difficult to manipulate than the RCT-test (2).

Therapeutic value of non-drug CAM treatments

In the US a "Committee on the Use of Complementary and Alternative Medicine by the American Public" has reviewed all Cochrane meta-analyses of CAM (3). This independent research group found 145 alternative medicine Cochrane reviews, and the study found that 38.4% of the CAM-Cochrane reviews concluded positive effect or possibly positive (12.4%) effect, 4.8% concluded no effect, 0.69% concluded harmful effect, and 56.6% concluded insufficient evidence. The group concluded that CAM is very safe for the patients and that CAM often is effective. Typical CAM NNTs found in the Cochrane reviews with active treatments were 2-10, while a typical CAM NNH_{total} were >1000 . Thus $TV=NNH_{total}/NNT=100-500$. Compared with the TV of drugs of one at best ($NNH_{total}/NNT<1$ as NNT of drugs is often about 20 (4)), CAM is doing fine in such an analysis.

The 145 Cochrane reviews documented all together that out of hundreds of thousands of CAM patients very few CAM patients were harmed (some got fractures from chiropractic treatment, some got allergy from strongly aromatic, herbal treatments and some got symptoms from radical changes in diet). Taken all together the 145 Cochrane metaanalyses showed a $NNH_{total} > 1.000$ for CAM in general, with lots of CAM treatment not being very efficient ($NNT=10$) or undocumented, but still giving $TV = NNH_{total}/NNT > 1000/10 = 100$. The extreme safety and fair efficacy of CAM justifies the high and increasing popularity of CAM with the patients (3).

As there is only little commercial interest in CAM, most CAM- treatments are still not sufficiently documented, as the study showed. And CAM-research is not easy; CAM research has often been obstructed, and CAM- researchers severely discredited, by people and organizations close to the pharmaceutical industry (5), as could be expected from the conflict of financial interests coming from more and more patients choosing CAM and wishing to avoid drugs.

Therapeutic value of Clinical Holistic Medicine (CHM) Another problem is that there are so many different types of CAM that it is difficult to talk about the effects of CAM in general (3). We have made a review of the positive effects (6) and a meta-analysis of the negative effects (6,7) of holistic mind-body medicine, (clinical holistic medicine, CHM). We believe this type of holistic treatment to be among the most efficient CAM methods, and as it mainly intends to improve quality of life it is also useful for most clinical conditions (8). It's practiced as a combination of therapeutic talk (STPP) and therapeutic touch (healing massage). We found $NNT=2$ for physical and mental diseases and symptoms like chronic pain and depression, $NNT=2$ for low self-esteem, existential problems and low quality of life, and $NNT=1$ for most sexual dysfunctions (6,7,8). In the metaanalysis we found $NNH_{total}=18,500$. From this we calculated the therapeutic value $TV = NNH_{total}/NNT = 18,500/2 = 9,250$ (6).

DISCUSSION

Physicians and health politicians need to be wise and understand how the world works around medicine. Strong commercial interests will always give bias in research and the pharmaceutical industry also has a strong political influence and commercial power to market their findings (2). It is hardly a coincidence that we found that the information about pharmaceutical drugs in the official Danish drug directory (Medicin.dk) mostly came from the pharmaceutical industry's own drug trials while the information from the Cochrane reviews almost never were found here (9). While we definitely needs drugs like antibiotics in medicine, we cannot hope to keep a population healthy with treatments for mental illnesses and cancer that only cure or help one patient in 20, 50 or 100, and harm one in three or even more (2,4). The drugs simply don't work (4); they won't do that for us. This is why populations with nationalized biomedicine like Denmark have about 50% of its populations chronically ill now (10). (You think we are happy in Denmark? Well, we are! But according to the official statistics we are not healthy.) CAM as we know it today from the many Cochrane reviews is often undocumented or inefficient, but at least CAM is found to be safe for the patients. We believe that some types of CAM like holistic mind-body medicine is much more efficient than other types of CAM, like herbal treatments. We are very impressed by studies

from USA showing that coronary heart disease can be effectively cured by holistic medicine (NNT=2) seemingly without side-effects (3,6,7,8). This is where we think medicine should go in the future. Therapeutic Value (TV) is not a perfect measure; it can never be more than a rough indicator. When TV of a CAM treatment is 100, 1000 or 10.000 times as large as the TV of a treatment of the same clinical condition with a drug (TV<1), this should make us think. Maybe CAM is really the treatment of choice for most clinical conditions? We know that most physicians today are trained to prescribe biomedicine and would have difficulties if they suddenly were expected to provide healing touch and existential conversations instead. The future generations of physicians - and this goes for all the medical students of the world - should be trained to use the most efficient and safe types of CAM to heal and help their patients.

CONCLUSIONS

In the future it will not be enough for a physician just to prescribe drugs with NNTs of 20, 50 or 100, and NNHs of 3, 2 or 1. In the future patients will be better informed and they will want more from their doctor. They will want a medicine that is likely to cure them. CAM has a TV which is often 100 times higher than TV of drugs. For some clinical conditions like acute infections future medicine might still be an antibiotic drug, but for most clinical conditions the medicine that cures patients in the future is likely to be a non-drug medicine (CAM). Dean Ornish's highly effective and well-documented non-drug cure for coronary heart disorder is such a treatment of the future (11,12).

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Soren Ventegodt, MD, MMedSci, EU-MSc-CAM (1,2,3,4,5) and Joav Merrick, MD, MMedSci, DMSc (5,6,7,8)

1 Quality of Life Research Center, Copenhagen, Denmark; 2 Research Clinic for Holistic Medicine and 3 Nordic School of Holistic Medicine, Copenhagen, Denmark; 4 Scandinavian Foundation for Holistic Medicine, Sandvika, Norway; 5 Interuniversity College, Graz, Austria; 6 National Institute of Child Health and Human Development, 7 Office of the Medical Director, Division for Mental Retardation, Ministry of Social Affairs, Jerusalem, Israel and 8 Kentucky Children's Hospital, University of Kentucky, Lexington, United States

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