

## Modus Operandi of Homoeopathy

There surrounds ample debate over whether Homoeopathy works or not. One way to deal with the scepticism is to make people familiar with the extensive scientific research and lab investigations being carried out in this field. It should be clear that this research is not carried out as a necessity to conclude upon a working principle of homoeopathic medicines or how miniscule doses of medicine are used in practice. Research is carried out to augment and enhance the use of homoeopathic medicines. Some of these researches with explicit results have been published and made available to the public in order to generate an interest in homeopathic healing principles and also to enlighten readers on how to evaluate homeopathic research. However, it can be rather confusing for readers to refer to research analysis as some studies show that homeopathy works and some say that it doesn't. To rid readers of this confusion, a very recent development in research is used, called a "meta-analysis," which is a systematic review of a research that evaluates the overall results of experiments instead of single studies.

The following literature has been referred from **Consumer's Guide to Homeopathy**, Tarcher/Putnam.

In 1991, three professors of medicine from the Netherlands, none of them homoeopaths, performed a meta-analysis of 25 years of clinical studies using homeopathic medicines and published their results in the *British Medical Journal*. This meta-analysis covered 107 controlled trials, of which 81 showed that homeopathic medicines were effective, 24 showed they were ineffective, and 2 were inconclusive. The professors concluded, "The amount of positive results came as a surprise to us." With this knowledge, the researchers of the meta-analysis on homeopathy concluded, "The evidence presented in this review would probably be sufficient for establishing homeopathy as a regular treatment for certain indications."

There are different types of homeopathic clinical research, some of which provide research on individualization of remedies; some of which give a commonly prescribed remedy to all patients with similar ailment, and some of which give a combination of homeopathic remedies to people with a similar condition. These form good research material; however there are certain issues that researchers have to be aware of in order to obtain the best objective results.

For instance, if a study shows that there was no difference between those patients given a remedy and those given a placebo, the study does not disprove homeopathy; it simply proves that this one remedy is not effective in treating every person

suffering from that ailment and he might most probably need a remedy based on his individualised study.

Some people are under the mistaken impression that homeopathic studies are impossibly complicated due to the need to individualize each remedy for the subjects. This is however not true as evidenced by a clinical trial done on subjects with asthma. Researchers at the University of Glasgow used conventional allergy testing to discover which substances these asthma patients were most allergic to which once was determined, the subjects were randomized into treatment and placebo groups. Those patients chosen for treatment were given the 30c potency of the substance to which they were most allergic (the most common substance was house dust mite). The researchers called this unique method of individualizing remedies "homeopathic immunotherapy" (homeopathic medicines are usually prescribed based on the patient's idiosyncratic symptoms, not on laboratory analysis or diagnostic categories). Subjects in this experiment were evaluated by both homeopathic and conventional physicians.

This study showed that 82% of the patients given a homeopathic medicine improved, while only 38% of patients given a placebo experienced a similar degree of relief. Along with this recent asthma study, the authors performed a meta-analysis, reviewing all the data from three studies they performed on allergic conditions, which totalled 202 subjects. The researchers found a similar pattern in the three studies. Improvement began within the first week and continued through to the end of the trial four weeks later. The results of this meta-analysis were so substantial ( $P=0.0004$ ) that the authors concluded that either homeopathic medicines work or controlled clinical trials do not. Because modern science is based on controlled clinical trials, it is a more likely conclusion that homeopathic medicines are effective.

As valuable as clinical studies are, laboratory researches too are equally important to conclude responses from homeopathic treatment. Lab researches show biological activity of homeopathic medicines that cannot be explained as a placebo response, a common accusation of sceptics. Laboratory researches also shed some light on the mechanism of action of homeopathic medicines.

Where clinical research determines improvement in the health of a person, laboratory research measures changes in biological systems like cells, tissues and organs.

It is true that homeopaths are not entirely certain of the working principle of homeopathic medicines, but there are present numerous persuasive and convincing theories about their mechanism of action. Besides, to be entirely honest, there are

contemporary modern medicines, including aspirin and certain antibiotics, whose mode of action is not completely known. Yet, practitioners of modern medicine do not hesitate to prescribe these medicines that they have incomplete knowledge of.

For centuries now, the most common subject of scepticism towards homeopathy has been the exceedingly small doses of medicines being used in the treatment and cure of patients. Sceptics of homeopathy have asserted that there is "nothing" in the medicines because there are no molecules left in the highly diluted solutions. However, new research published in the prestigious *Annals of the New York Academy of Sciences* (1999) suggests that there may be something active in homeopathic medicines after all. In the article 'The Thermodynamics of Extremely Diluted Solutions - New Scientific Evidence for Homeopathic Micro doses by Dana Ullman, he mentions an experiment by Two Italian professors of chemistry, Vittorio Elia and Marcella Niccoli. They measured the amount of heat emanating from plain double-distilled water and compared that with double-distilled water in which a substance was placed. Both the control water and the treated water underwent consecutive dilution between one to thirty times, with vigorous shaking in-between each dilution, which represents the common pharmacological method in which homeopathic medicines are made.

The researchers conducted over 500 experiments, approximately half of which were made with double-distilled water that was mixed with a specific acid and base substance and half were in the control group of only double-distilled water. The researchers found that 92% of the test solutions with the added acid or base substance had higher than expected heat emanating from them (sodium chloride was one of the salt substances and a type of vinegar was one of the acid substances tested).

Dr. Vittorio Elia, the lead researcher, asserted, "We are setting the basis for a new science: the physics-chemistry of homeopathic water. These results make for a strong support to the hypothesis of the existence of a memory of water."

"This study confirms that there is something there in homeopathic water," affirmed Dana Ullman. "It should now be known that physicians and scientists who assume that there is nothing in homeopathic medicines are showing their own ignorance of the scientific literature."

It is common perception that, in treating a disease, the higher or more potent the dose, the quicker, or better the cure. This common misconception has not only been proved incorrect but the opposite of this has been proved right. It was seen in a series of experiments and research that rather than a drug simply having increased effects as its dose becomes larger, exceedingly small doses of a drug will have the opposite effects of large doses. For instance, it is known that normal medical doses of atropine acts on the parasympathetic nerves, blocking it and causing mucous membranes to dry up, while exceedingly small doses of atropine cause increased

secretions to mucous membranes. This pharmacological principle was concurrently discovered in the 1870s by two separate researchers, Hugo Schulz, a conventional scientist, and Rudolf Arndt, a psychiatrist and homeopath. Initially, this principle was called the Arndt-Schulz 'law', law being defined as a sequence of events that has been observed to occur with unvarying uniformity under the same conditions. More specifically, these researchers discovered that weak stimuli accelerate physiological activity, medium stimuli inhibit physiological activity, and strong stimuli halt physiological activity. For example, very weak concentrations of iodine, bromine, mercuric chloride, and arsenious acid will stimulate yeast growth, medium doses of these substances will inhibit yeast growth, and large doses will kill the yeast. In the recent past there has been a surge of experiments confirming and reconfirming this general principle. Unfortunately though, these experiments have been carried out by non-homoeopaths or those with little knowledge of homoeopathy, hence there isn't any indisputable evidence to prove this principle with respect to homeopathic principles.

Despite the now strong evidence that homeopathic medicines promote biological activity and clinical efficacy, there is still great resistance to them. Recently, the *Lancet* published the research on the homeopathic treatment of asthma. In a press release announcing this research, they emphasized that although homeopathic medicines may provide some benefit to people with asthma, conventional medicines offer greater benefit.

This statement is bizarre firstly because the study didn't compare homeopathic and conventional medicine; it only compared homeopathic medicine with a placebo and secondly, the *Lancet* refused to openly acknowledge that homeopathic medicines may work after all.

It is given in the *Journal of the French Academy of Sciences* 'evidence of the bias that "defenders of science" have against homeopathy is their refusal to publish or even comment on the increasing body of research accruing to homeopathic medicine. Science is supposed to be objective, though both physicists and psychologists teach us that objectivity is impossible. Science's long-term antagonism to homeopathy is slowly breaking down but not without significant reaction, fear, anxiety, and sometimes downright attack against homeopaths.

Change is the basis of science. We seek to explore new territories to build mankind a better present and future. However, change is difficult, and significant change is even more difficult. Even though science advances from new knowledge, it tends to be unwilling to accept perspectives and knowledge that do not fit contemporary concepts and scientific theories.