FactSheet



Homoeopathy and vaccination

Summary

A number of people in Australia consider or use complementary and alternative medicines (commonly referred to as CAM). Complementary medicines are used in conjunction with conventional medicine while alternative medicines are used instead of conventional medicine. One form of CAM is homoeopathy, which uses highly diluted preparations that are thought to stimulate the body's own healing response to prevent and/or treat a wide range of illnesses. Some people consider homoeopathy (also spelt 'homeopathy') for their child's immunisation rather than conventional vaccination. However, unlike conventional vaccinations, there has been no rigorously tested research to demonstrate the safety or effectiveness of homoeopathic preparations in providing protection against childhood infectious diseases. In addition, there is no biologically plausible mechanism for how homoeopathy could work to prevent infectious diseases.

This fact sheet aims to discuss this issue further by answering these commonly asked questions:

- What is homoeopathy?
- <u>Is homoeopathy an alternative to conventional</u> <u>immunisation?</u>
- <u>How effective is homoeopathy in preventing infectious</u> <u>diseases?</u>
- Which is safer, homoeopathic preparations or conventional medicine, for immunising my child?
- What do homoeopathic organisations recommend?
- Can homoeopathic preparations be given to lessen the possible side effects of conventional vaccination?

What is homoeopathy?

Samuel Hahnemann (1755–1843), a German physician and chemist, was the founder of homoeopathy. The fundamental principle behind homoeopathy is that 'like cures like'.¹

Homoeopathic preparations in general are made using the processes known as 'potentiation' and 'succussion' meaning that the disease, tissue or plant extract (known as the nosode) is diluted in water a number of times with vigorous shaking between each dilution, to the point where none of the original material is contained within the preparation by the end of the process. It is believed that the process of succussion transfers the protective activity of the nosode into the diluting water. However, due to the extensive dilution of the nosode, it is unlikely that the final homoeopathic preparation contains a single molecule of the original material. While the amount of dilution can vary, the most common dilution factor is 10^{60} , which means the original material has been diluted many billions of times.

Many of the schedules to administer homoeopathy are complex, extend over a period of years with multiple doses and involve a significant financial cost, without any evidence of efficacy.

Several homoeopathic preparations are available and come in differing strengths and constituents. Each homoeopathic practitioner has a different approach to their preparations, and there is no centralised body to regulate the practice of homoeopathy in Australia. In general, homoeopathic preparations do not undergo the rigorous testing for safety and efficacy by the Therapeutic Goods Administration that other drugs do.

Is homoeopathy an alternative to conventional immunisation?

No. Although homoeopathic preparations and schedules have been developed claiming to prevent childhood infectious diseases such as pertussis (whooping cough), tetanus, diphtheria, measles, mumps and rubella (German measles), homoeopathic peak organisations still support the need for children to be vaccinated conventionally^{2,3} (also see <u>What do homoeopathic organisations</u> <u>recommend?</u>)

Homoeopathic preparations use nosodes, which are diluted to such an extent that no trace of the original nosode remains. Unlike immunisation using conventional vaccines, there is no reliable evidence to support the claimed protective effect of homoeopathic 'immunisation' (see <u>'How effective is homoeopathy in preventing</u> <u>infectious disease'</u>).

Homoeopathic 'immunisation' is not recognised for family tax benefits or rebates linked to immunisation status and does not fulfil any childcare or school entry vaccination requirements in Australia.

How effective is homoeopathy in preventing infectious diseases?

Some homoeopathic preparations for the treatment of certain health problems, such as childhood diarrhoea and hay fever, have been scientifically tested. However, no well-designed, well-reported and high quality research can be found that demonstrates the effectiveness of homoeopathic 'immunisations' for prevention or treatment of vaccine preventable diseases without a significant risk of bias.^{1,4,5}

This is in contrast to conventional immunisations which have been rigorously tested, and for which there are large amounts of high quality clinical and epidemiological data to support their efficacy in the prevention of certain childhood infectious diseases.

There are few studies in the published peer-reviewed literature that investigate the effectiveness of homoeopathic 'immunisation'.

- A recent Cochrane Intervention Review aimed to determine the efficacy of the homoeopathic preparation Oscillococcinum[®] in the prevention of influenza. This review reported no statistically significant difference between the effects of homoeopathic preparation and placebo in the prevention of influenza-like illness.⁶ The review also reported that the overall standard of reporting in the included studies was poor and contained unclear risk of bias.
- An ecological study has been published applying homoeopathic 'immunisation' to Leptospirosis epidemic control. A decrease in the disease was observed in a community who received the homoeopathic intervention, but due to the nature of ecological study design, which is inferior to other epidemiological study designs, whether this decrease is due to the intervention or other factors could not be established. The authors concluded that their study did not provide evidence to support the replacement of conventional disease prevention strategies with homoeopathic 'immunisation'.⁷

There are other studies published in various forms (though not peer-reviewed) which suggest homoeopathic preparations may provide protection against infectious diseases. However, they are of poor scientific quality, contain small sample sizes and provide limited scientific evidence.

Which is safer, homoeopathic preparations or conventional medicine, for immunising my child?

Conventional medicines such as vaccines are thoroughly scrutinised, tested, evaluated and followed up for their safety and effectiveness. Homoeopathic preparations are not subjected to the same level of attention. Many homoeopathic preparations have not undergone testing or approval through government regulatory bodies, such as the Australian Therapeutic Goods Administration or the United States Food and Drug Administration, which is standard practice for conventional vaccines.

What do homoeopathic organisations recommend?

Both the British Homeopathic Association and the Australian Register of Homoeopaths recommend that people should receive conventional immunisation and that homoeopathic preparations "should not be recommended as a substitute for [conventional] immunisation". Anecdotally, however, this is not the belief of all homoeopaths.^{8,9}

The Australian Homoeopathic Association has strict guidelines in place regarding the use of homoeopathic 'immunisation', including a compulsory consent form stating the treatment is not an immunisation, that no prophylactic treatment guarantees immunity from infectious disease, and that the evidence for the efficacy of homoeopathic 'immunisation' is limited.

Can homoeopathic preparations be given to lessen the possible side effects of conventional vaccination?

Conventional vaccination may cause minor side effects such as redness, swelling and pain at the injection site, which in most cases can be easily treated with paracetamol and other comfort measures. More serious side effects are rare. For further information refer to the 10th edition of *The Australian Immunisation Handbook*.¹⁰ There is no scientific evidence to demonstrate the effectiveness of homoeopathic remedies in preventing or lessening vaccine side effects.

Web-based resources

Australian Homoeopathic Association http://www.homeopathyoz.org/ (accessed 8 April 2014)

Better Health Channel. Fact sheet: Homeopathy. Department of Health Victoria. 2011.

http://www.betterhealth.vic.gov.au/bhcv2/bhcArticles.nsf/ pages/Homeopathy?OpenDocument (accessed 8 April 2014)

Better Health Channel. Fact sheet: Immunisation – facts and misconceptions. Department of Health Victoria. 2013.

http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/ pages/Immunisation common misconceptions?open (accessed 8 April 2014)

British Homeopathic Association. Homeopathy and immunisation [fact sheet]. 2013.

http://www.britishhomeopathic.org/wp-

<u>content/uploads/2013/05/immunisation_factsheet-2-1.pdf</u> (accessed 8 April 2014)

National Center for Complementary and Alternative Medicine, National Institutes of Health. Clinical trials. 2012. <u>http://nccam.nih.gov/research/clinicaltrials/</u> (accessed 8 April 2014)

US Food and Drug Administration. Department of Health and Human Services. Conditions under which homeopathic drugs may be marketed. March 1995. <u>http://www.fda.gov/ICECI/ComplianceManuals/Complia</u> <u>ncePolicyGuidanceManual/ucm074360.htm</u> (accessed 8 April 2014)

Scientific articles

- 1. Ernst E. A systematic review of systematic reviews of homeopathy. *British Journal of Clinical Pharmacology* 2002;54:577-82.
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- 7. Bracho G, Varela E, Fernández R, et al. Large-scale application of highly-diluted bacteria for Leptospirosis epidemic control. *Homeopathy* 2010;99:156-66.
- 8. Ernst E. 'First, do no harm' with complementary and alternative medicine. *Trends in Pharmacological Sciences* 2007;28:48-50.
- 9. Ernst E. Complementary and alternative medicine's opposition to measles immunisation continues. *Focus on Alternative and Complementary Therapies* 2011;16:110-4.
- Australian Technical Advisory Group on Immunisation. *The Australian immunisation handbook*. 10th ed. Canberra: Australian Government Department of Health and Ageing; 2013.