LETTER TO THE EDITOR

NHMRC report on homeopathy; mixing apples with oranges



Sir,

In March 2015 the National Health and Medical Research Council (NHMRC), Australia, released a report¹ on the evidence on the effectiveness of homeopathy for treating health conditions. This report examined the effectiveness of homeopathy based on:

- 1. An overview by an independent contractor, OptumInsight (Optum), of evidence from published systematic reviews.
- 2. An independent evaluation of information provided by homeopathy interest groups and the public.
- Consideration of clinical practice guidelines and government reports on homeopathy published in other countries.

NHMRC concluded that there was no reliable evidence from research in humans that homeopathy was effective for treating any of the range of health conditions considered. We believe that the assessment process overlooked some key facts about homeopathy and the NHMRC therefore failed to draw a legitimate conclusion:

1. In the background of its overview report, Optum described homeopathy as a system underpinned by the principle of 'similia similibus curantur' and 'potentisation' but, under 'description of the interventions examined', it had described two major homeopathic approaches to treatment, both of which were included in the overview. These two types of interventions were individualized homeopathy & clinical homeopathy. Did Optum care to check whether both types of interventions were comparable in respect to the basic principles of homeopathy and can they be grouped under a common review? Individualized homeopathy is based on the fundamental principles of 'similitude' and 'individualization'. The treatment is based on the total symptom picture of the patient with special emphasis on his/her more striking, singular (characteristic)² symptoms. Efficacy of individualized homeopathic treatment implies validity of the basic principles of homeopathy as well as efficacy of the homeopathic medicines prescribed for patients. In contrast to individualized homeopathy, clinical homeopathy is not based on the principle of 'similitude' and 'individualization' and the medicines are prescribed based on the presenting disease state rather than the totality of characteristic symptoms.

Considering the fact that the nature of homeopathic intervention and the distinction between them can affect the interpretation of research findings, Optum should have assessed the evidence of effectiveness separately for individualized and clinical homeopathy so that the results of the overview would have been both statistically and clinically significant. In its overview report Optum expressed its limitation of assessing evidence of effectiveness from studies based on individualized homeopathy by stating that this "increases the complexity of comparing outcomes and determining the efficacy of specific homeopathic regimens".¹ The ongoing systematic review programme on randomised controlled trials (RCTs) based on individualized homeopathy by Mathie *et al.*³ proves that such a study is not inconceivable.

2. For assessing the evidence of effectiveness in a homeopathic trial it is not enough to rely solely on its internal validity. It is also important to ascertain the model validity⁴ i.e. the extent to which the trial design and conduct agrees with the 'state of the art' practice for the intervention under investigation. The previous systematic reviews relied mainly on the internal validity of trials without due consideration of their model validity; the same omission is reflected in the Optum overview. For example the overview mentioned two disease conditions where primary studies with similar design and outcome measures showed opposite results. Two studies^{5,6} on Attention Deficit Hyperactive Disorder were based on individualized homeopathy. Both were level II studies with SIGN rating 'Good' and had the same outcome measure i.e. Conners' Global Index (parent-reported). But Frei et al. showed statistically significant results in favor of homeopathy whereas Jacobs et al. showed that placebo tended to be better than homeopathy. Similarly three Level II studies,^{7–9} each assigned a Jadad score of 5 by Altunc et al., were identified for the treatment of children with diarrhea. All three studies were similar in design and tested individualized homeopathy in acute childhood diarrhea. Two of those studies^{7,8} reported significant effects in favor of homeopathy but the third study⁹ found no significant differences between homeopathy and placebo for the same outcome measures. These examples clearly show that the inconsistency in the results cannot be explained entirely via the internal validity of studies. Though the above studies were based on individualized homeopathy, they were heterogeneous in terms of the implementation of homeopathic treatment which can explain the differences in their outcome. This is clearly evident from the overview report under Attention Deficit Hyperactive Disorder. In case of childhood diarrhea, the three studies, though performed by the same research group, differ in terms of administration of medicine. In

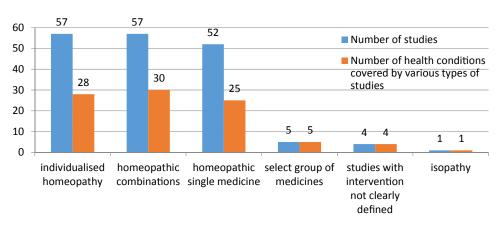


Figure 1 Categorization of studies considered in the overview report.

Jacobs $(2000)^7$ and Jacobs $(1994)^8$ a single dose of medicine was given after every unformed stool for 5 days whereas in Jacobs $(1993)^9$ two pills of medicine were given daily for 3 days or until improvement. Model validity helps to analyze this heterogeneity in intervention and how much the intervention is consistent with the homeopathic principles.

3. There was no statement from Optum about how many studies, out of the total 176 individual studies considered, were based on individualized homeopathy and how many studies employed clinical homeopathy, including homeopathic combination remedies, specific medicine, isopathy, or a limited range of medicines. We segregated all the studies based on various types of homeopathic interventions and the number of health conditions covered by them (Figure 1) from the evidence summary tables in the overview report. The data shows that studies based on individualized homeopathic combinations and homeopathic single medicines were comparable in respect to their total numbers, which was ideal for their separate assessment.

Overall the Optum overview did not overcome the methodological shortcomings present in most of the previous systematic reviews. The above mentioned facts were largely ignored by Optum before reaching their conclusion about the effectiveness of homeopathy. We strongly believe that, when assessing the level of evidence, the type of homeopathic intervention must also be graded on the basis of the extent to which it reflects the basic tenets of homeopathy.

References

1 National Health and Medical Research Council. NHMRC information paper: evidence on the effectiveness of homeopathy for treating health conditions. Canberra: National Health and Medical Research Council, 2015.

- 2 Hahnemann S. Organon of medicine. 6th edn. New Delhi: B. Jain Publishers, 1993, pp 217–218.
- 3 http://www.britishhomeopathic.org/our-systematic-reviewprogramme/.
- 4 Mathie RT, Roniger H, van Wassenhoven M, *et al.* Method for appraising model validity of randomised controlled trials of homeopathic treatment: multi-rater concordance study. *BMC Med Res Methodol* 2012; **12**: 49.
- 5 Frei H, Everts R, von Ammon K, *et al.* Homeopathic treatment of children with attention deficit hyperactivity disorder: a randomised double-blind, placebo- controlled crossover trial. *Eur J Pediatr* 2005; **164**(12): 758–767.
- 6 Jacobs J, Williams AL, Girard C, *et al.* Homeopathy for attentiondeficit/hyperactivity disorder: a pilot randomized-controlled trial. *J Altern Complement Med* 2005; **11**(5): 799–806.
- 7 Jacobs J, Jiménez LM, Malthouse S, *et al*. Homeopathic treatment of acute childhood diarrhoea: results from a clinical trial in Nepal. *J Altern Complement Med* 2000; 6(2): 131–139.
- 8 Jacobs J, Gloyd SS, Gale JL, Jiménez LM, Crothers D. Treatment of acute childhood diarrhoea with homeopathic medicine: a randomized clinical trial in Nicaragua. *Pediatrics* 1994; **93**(5): 719–725.
- 9 Jacobs J, Jiménez LM, Gloyd S, Carares FE, Gaitan MP, Crothers D. Homoeopathic treatment of acute childhood diarrhoea: a randomized clinical trial in Nicaragua. *Br Homoeopath J* 1993; 82(2): 83–86.

Mohit Mathur

Nehru Homoeopathic Medical College, N. Delhi, India E-mail: drmohitmathur@gmail.com

Vishwa Kumar Gupta

Central Council for Research in Homoeopathy, New Delhi, India

Indian Institute of Homoeopathic Physicians, India

Nehru Homoeopathic Medical College, N. Delhi, India E-mail: homeovkgupta@yahoo.com