To the Editor of the Veterinary Record

Dear Editor,

The IAVH is disappointed with how our colleagues try to influence the position of the RCVS in relation to homeopathy (Comparison of veterinary drugs and veterinary homeopathy: part 1; Veterinary Record, August 5, 2017 and part 2; Veterinary Record, August 23, 2017). The many errors and omissions in this paper suggest that it was not reviewed by anyone qualified in veterinary homeopathy.

Remarkably, the authors' critical approach is mainly based on theoretical arguments why homeopathy cannot possibly work. We recognise this approach. It is based on the a priori perceived implausibility of any conceivable mechanism of action, also called plausibility bias (1). This impedes any thorough, unbiased assessment of the clinical evidence. Plausibility bias can even lead to violations of scientific standards of research analysis, as shown by the Australian NHMRC review report that concluded that homeopathy is not effective (2).

A mainstream scientist, Robert Hahn, Professor of anaesthesia and intensive care, concludes: "Clinical trials of homeopathic remedies show that they are most often superior to placebo. Researchers claiming the opposite rely on extensive invalidation of studies, adoption of virtual data, or on inappropriate statistical methods" (3). His conclusion is endorsed by André Wambersie, emeritus professor of Radiotherapy and Radioprotection (4). The fact that unbiased scientists such as these are supportive of homeopathy suggests that the conclusions of the review authors are based on plausibility bias.

Success of homeopathic treatment is based on individualisation. Mathie et al.(5) showed in their meta-analysis of RCTs of individualised homeopathy (in humans), evidence for a specific treatment effect of individualised medicines which is based on RCTs identified as reliable evidence using the established Cochrane risk of bias assessment tool.

Although the precise mode of action of homeopathic medicines cannot yet be explained, fundamental research on animals (e.g. frogs, rats, mice), plants (e.g. wheat, duck weed, peas) and cells (e.g. basophilic leucocytes) has demonstrated that highly diluted homeopathic preparations are able to cause biological effects. We must assume that the placebo effect does not play a role here. In a systematic review and meta-analysis of fundamental research into the effects of highly diluted homeopathic preparations 67 invitro experiments in 75 publications were assessed according to specific quality criteria. The majority of these experiments demonstrated effects of highly diluted homeopathic preparations and in almost three quarters of all repeated studies the findings were positive. Also experiments having a high methodological standard demonstrated a clear effect of highly diluted homeopathic preparations (6).

Regarding veterinary homeopathy, the meta-analysis by Mathie and Clausen (7) showed that overall there is a positive trend for the evidence on veterinary homeopathy and that the evidence is robust upon sensitivity analysis, although high-quality evidence comprises only 2 trials. One study provides an example of how homeopathy can be of great importance. In a randomized, placebo controlled, double-blind study (8) for the homeopathic treatment of diarrhoea in piglets caused by the bacterium Escherichia coli (E. coli) it was demonstrated that the homoeopathically treated group had significantly fewer piglets with E. coli diarrhoea.

In June 2017, the EU Commission adopted the new European One Health Action Plan against Antimicrobial Resistance (AMR), which maintains that the use of antibiotics in animals should be minimized as much as possible and highlights the **need for alternatives** to antibiotics. The Commission stated that research into the development of new antimicrobials and alternative products for humans and animals will be supported (9). All potentially effective measures, including homeopathy, must be explored and deployed if we are to overcome the global threat of AMR.

We strongly believe that the benefit to patients, and our desire and ability to increase our medical tools, should drive the debate in these matters. That also includes an unbiased assessment of any scientific research. Our understanding is that complementary medicine, including homeopathy, has a great potential to contribute to better health of humans and animals. That is exactly the reason why WHO urges member states to include traditional and complementary medicine in their national health policies and systems (10).

We sincerely hope you will consider these facts and references in your further publications.

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- (3) HAHN, R. G. (2013) Homeopathy: meta-analyses of pooled clinical data. Forschende Komplementaermedizin 20, 376-381 https://www.karger.com/Article/Pdf/355916
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(9) EUROPEAN COMMISSION (2017) A European One Health Action Plan against Antimicrobial Resistance (AMR)

https://ec.europa.eu/health/amr/sites/amr/files/amr_action_plan_2017_en.pdf

(10) WORLD HEALTH ORGANISATION WHO (2013) Traditional Medicine Strategy: 2014-2023

http://www.who.int/medicines/areas/traditional/en/

Yours sincerely,

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