



February 16, 2021

Dear House Education Committee:

RE: Opposition HB 332 “AN ACT REVISING DEFINITIONS RELATED TO IMMUNIZATIONS 4 REQUIRED FOR SCHOOL ATTENDANCE...”

My name is Vicky Byrd, MSN, RN. I am a Montana Registered Nurse (RN) of 32 years and the CEO of the Montana Nurses Association (MNA). MNA is the recognized leader and advocate for the professional nurse in Montana. MNA is the nonprofit state professional nurses association representing the voice of nearly 18,000 Registered Nurses (RNs) in Montana including more than 1000 licensed as Advanced Practice Registered Nurses (APRNs). MNA is the recognized professional organization, which lobbies for nursing practice issues to protect the practice of professional nurses and also protect the public in all areas of health care. MNA promotes professional development, nursing practice, standards, and education; represents professional nurses; and provides nursing leadership in promoting high quality healthcare, safety, and overall public health.

MNA opposes Representative Hill’s HB 332 for the following reasons:

HB 332 expands the definition for immunizing agent to include an antigen introduced through homeoprophylaxis that stimulates immunity without inducing the disease itself. There are no homeopathy agents that stimulate immunity. Conclusion of the attached gold standard randomized controlled trial (RCT) titled: “A randomized, blinded, placebo-controlled trial comparing antibody responses to homeopathic and conventional vaccines in university students” by Loeb, Russell, Neupane et al. show evidence based data that “homeopathic vaccines **do not** evoke antibody responses and produce a response that is similar to placebo. In contrast, conventional vaccines provide a robust antibody response in the majority of those vaccinated” (p. 1). Randomized Controlled trials (RCT) are the gold standard for effectiveness research bringing validity and trustworthiness the results of this article

For clarification, I have provided the definitions of these healthcare terms. To define immunizing agents scientifically:

IMMUNIZING AGENTS

Preparations administered to produce immunity are called immunizing agents.

They are known as vaccines, toxoids, and antiserums. Both vaccines and toxoids cause the body to produce their own antibodies (bringing about active immunity), while antiserums produce passive immunity.

a. Vaccines



- Vaccines contain either weakened or killed microorganisms (such as viruses, bacteria, or rickettsia) that are administered for the prevention, improvement, or treatment of infectious diseases. Examples are typhoid, measles, poliomyelitis, and smallpox vaccines.
- b. Toxoids.
 - Toxoids contain suspensions of modified toxins that have lost their toxicity but which have maintained the properties of combining with antitoxins, or stimulating the formation of antitoxins. Examples are diphtheria and tetanus toxoids.
- c. Antiserums.
 - Antiserums are preparations of blood serum that already contain an antibody or antibodies. They are used when there is not time to wait for the body of the exposed or infected person to produce its own antibodies. Examples are tetanus, immune globulin, and rabies.

Conclusion: There are no homeopathy agents that stimulate immunity.

<https://brooksidepress.org/intramuscular/lessons/lesson-3-immunizations/3-02-immunizing-agents/#:~:text=preparations%20administered%20to%20produce%20immunity,while%20antiserums%20produce%20passive%20immunity.>

IMMUNITY

Immunity refers to the body's ability to prevent the invasion of pathogens. Pathogens are foreign disease-causing substances, such as bacteria and viruses, and people are exposed to them every day. Antigens are attached to the surface of pathogens and stimulate an immune response in the body. Or simply, any substance or organism that provokes an immune response (produces immunity) when introduced into the body.

- Unlike immunization using conventional vaccines, there is no reliable evidence to support the claimed protective effect of homeopathic immunization. Conventional medicines such as vaccines are thoroughly scrutinized, tested, evaluated, and followed up for their safety and effectiveness. Homeopathic preparations are not subjected to the same level of attention. Many homeopathic preparations have not undergone testing or approval through Food and Drug Administration which is standard practice for conventional vaccines.
- The data supporting the beneficial power of existing repertoire of vaccines is robust and homeopathic remedies come nowhere near this level of protection. Vaccines are rigorously tested substances that are put through randomized controlled trials in order to establish their efficacy, safety, and dose. Homeopathies have no such evidence backing them and the few studies that show possible benefit were not conducted with the same level of meticulousness and rigor, which contributes to public safety. (<https://www.healthline.com/health-news/fyi-theres-no-such-thing-as-a-homeopathic-vaccine-alternative-121015>)



VACCINATION and IMMUNIZATIONS

According to the World Health Organization (WHO), vaccination and immunization are related, although one essentially describes an action while the other describes the effect. By the WHO definition:

- Vaccination employs vaccines to stimulate the body's own immune system to protect the person against subsequent infection or disease.
- Immunization is the process whereby a person is made immune or resistant to an infectious disease, typically by the administration of a vaccine.

Immunization confers immunity. As such, a person can become immune to a disease when the body is exposed to the disease-causing organism (pathogen) and develops antibodies to fight it. The exposure can occur either through vaccination or natural infection.

With that said, the term immunization infers vaccination rather than natural infection.

(<https://www.who.int/>)

Vaccines are one of the most successful public health interventions of all time. Homeopathies are no substitute for vaccines. Millions of lives have been saved and substantial disability averted due to the advent of critical vaccines. MNA supports the evidence-based, scientifically tested vaccines to protect Montanan's children.

For these reasons, MNA opposes HB 332 and encourages the House Education Committee to VOTE NO until such time there is science based evidence to do so otherwise.

Respectfully,

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Attached below: Randomized Controlled Trial Vaccine



A randomized, blinded, placebo-controlled trial comparing antibody responses to homeopathic and conventional vaccines in university students

Mark Loeb 1, Margaret L Russell 2, Binod Neupane 3, Vitheya Thanabalan 4, Pardeep Singh 4, Jennifer Newton 4, Eleanor Pullenayegum 5

2018 Nov 19;36(48):7423-7429. doi: 10.1016/j.vaccine.2018.08.082. Epub 2018 Oct 21.
(PMID: 30352746 DOI: 10.1016/j.vaccine.2018.08.082)

Abstract

Background: Homeopathic vaccines are licensed in many countries but scientific data to support their use are sparse. The goal of this study was to compare the antibody response of homeopathic and conventional vaccines and placebo in young adults. We hypothesized that there would be no significant difference between homeopathic vaccines and placebo, while there would be a significant increase in antibodies in those received conventional vaccines.

Methods: A randomized blinded placebo-controlled trial was conducted where 150 university students who had received childhood vaccinations were assigned to diphtheria, pertussis, tetanus, mumps, measles homeopathic vaccine, placebo, or conventional diphtheria, pertussis, tetanus (Tdap) and mumps, measles, rubella (MMR) vaccines. The primary outcome was a \geq two-fold increase in antibodies from baseline following vaccination as measured by ELISA. Participants, investigators, study coordinator, data blood drawers, laboratory technician, and data analyst were blinded.

Results: None of the participants in either the homeopathic vaccine or the placebo group showed a \geq two-fold response to any of the antigens. In contrast, of those vaccinated with Tdap, 68% (33/48) had a \geq two-fold response to diphtheria, 83% (40/48) to pertussis toxoid, 88% (42/48) to tetanus, and 35% (17/48) of those vaccinated with MMR had a response to measles or mumps antigens ($p < 0.001$ for each comparison of conventional vaccine to homeopathic vaccine or to placebo). There was a significant increase in geometric mean titres of antibody from baseline for conventional vaccine antigens ($p < 0.001$ for each), but none for the response to homeopathic antigens or placebo.

Conclusions: Homeopathic vaccines do not evoke antibody responses and produce a response that is similar to placebo. In contrast, conventional vaccines provide a robust antibody response in the majority of those vaccinated.



Trial registry: NCT 02825368.

Keywords: Antibody; Homeopathic vaccine; Nosodes; Randomized controlled trial.

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Comment in

The Concept of 'Homeopathic Vaccines' Is Not Rational and Lacks Evidence: A Commentary on the Paper by Loeb et al, 2018.

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Homeopathy. 2019 Nov;108(4):298-299. doi: 10.1055/s-0039-1696969. Epub 2019 Sep 10.

PMID: 31505695 No abstract available.

Similar articles

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