Calls by alternative medicine practitioners for vaccinated vs unvaccinated studies is not supported by evidence

We were dismayed to read the letter by Turville and Golden disputing the meta-analysis by Taylor and colleagues for a number of reasons including the use of undescribed methodologies, the proposal of an unethical and intrinsically biased research approach, and undeclared conflicts of interest.

Turville and Golden present a table (Table 1) in which they give their opinion of a “conclusion that is justified”, however they never define the methodology for how these conclusions were reached. The authors also declare that there were “no apparent differences” between the two study groups for eight out of ten studies examined. However for six of these studies there was, appropriately (often highly) powered, statistical analysis which demonstrated no differences. The use of the term “apparent” could be reasonably viewed as prejudicial and unduly biased. Additionally the conclusion used to describe the paper by Verstraeten [1] states, “... in children vaccinated with vaccines including the MMR vaccine and vaccines excluding the MMR vaccine” is demonstrably incorrect. Verstraeten [1] only examined vaccinations given in the first year of life which does not include MMR, in fact MMR is not even mentioned in the paper.

Turville and Golden claim that a vaccinated vs fully unvaccinated study is required to examine a possible association between vaccination and autism. In response, Eslick [2] highlighted why such a study is not feasible for both ethical reasons and because there are demographic differences between the two cohorts which would bias any analysis.

However it is worth noting that an observational study between a vaccinated and fully unvaccinated population has been published [3]. Schmitz examined 13,453 children of which 94 were fully unvaccinated (0.7%). They determined that there were no differences in the prevalence of asthma or eczema but there was a significantly higher rate of vaccine preventable diseases in the unvaccinated. That only 0.7% of children were fully unvaccinated in this controlled study, as opposed to self-reporting surveys, casts doubt on Turville and Golden’s unsupported claim that 4% of Australian children are fully unvaccinated.

In addition to this demographic-based bias the type of primary health practitioner involved in a child’s care introduces a confounder as it may affect the likelihood of an autism spectrum diagnosis. There is anecdotal evidence that in areas of Australia with low vaccination rates, such as the Northern Rivers of New South Wales, a higher proportion of people use an alternative medicine practitioner such as a homeopath, chiropractor, herbalist or Traditional Chinese Medicine practitioner as their primary health practitioner [4]. This correlation is supported by data from other areas of Australia which indicate that complementary medicine use correlates with inadequate vaccination [5].

Alternative practitioners (without appropriate neuropsychological training) lack the qualifications or experience to diagnose a child with autism spectrum disorders or similar conditions of developmental delay. As a result, it is probable that any studies of people who utilize these practitioners to the exclusion of appropriately qualified psychologists or medical practitioners, would have an under reporting of ASD conditions and hence introduce a major confounding effect into any analysis.

Finally, we were also concerned that Golden did not declare a conflict of interest in that his qualifications are in homeopathy and that he both promotes and sells homeopathic vaccination (homeoprophylaxis) products as an alternative to vaccination.

Conflict of interest

The authors have no conflict of interest

References

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