



Attitudes of homoeopathic physicians towards vaccination

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Abstract

Vaccinations are one of the most effective preventive procedures in modern medicine. However, earlier studies have indicated that homoeopathic physicians do not recommend or apply vaccinations as frequently as their allopathic colleagues. Few studies have been undertaken to clarify this question and most of these have not distinguished between medically and non-medically qualified homoeopathic practitioners. Therefore, misunderstandings have arisen concerning this question. In the study presented only medically qualified colleagues were included. In the course of this study, 219 medically qualified homoeopathic and 281 non-homoeopathic physicians in Germany (response rate 30.4%) returned a questionnaire about the application and recommendation of 17 different vaccinations in their practices. The answers show that the responding homoeopathic physicians do not generally refuse vaccines but rather view them with a specific hierarchy. The ‘classical’ vaccines against tetanus, diphtheria and poliomyelitis are applied to nearly the same degree as by non-homoeopathic colleagues. Vaccines against childhood diseases, risk group vaccinations and vaccinations judged as ineffective are applied and accepted with more restraint by homoeopathic physicians. © 2001 Elsevier Science Ltd. All rights reserved.

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1. Introduction

Although vaccinations are recommended widely and accepted as one of the most effective preventive procedures in modern medicine certain groups of physicians are not using and recommending them accordingly [1–3]. This applies especially to homoeopathic physicians. According to the literature, homoeopathic physicians are reluctant to recommend and administer vaccinations [4]. Results from a survey in England confirm these findings: The reason given most frequently by parents for not having their children vaccinated was ‘homoeopathy’ with 21% of the answers [5]. However, homoeopathic physicians claim that only non-medically qualified practitioners have controversial opinions on vaccinations [6]. Homoeopathic physicians

themselves would recommend and administer vaccinations appropriately according to the allopathic standard [7–9].

In addition to these contradictory findings, all previous studies have concentrated only on homoeopaths’ general attitudes and opinions towards vaccinations. No attempt has been made to study the application and attitudes towards different vaccinations in detail. The aim of the present study is to assess homoeopathic physicians’ attitudes and policies concerning vaccinations in Germany.

2. Material and method

It should be noted that in Germany as well as in other countries homoeopathy can also be practised by non-medically qualified practitioners. This group has no regulated mandatory training. However, the application of vaccinations is restricted to medically qualified

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physicians. Therefore our study includes only the latter group.

We used a newly developed semi-standardised questionnaire concerning socio-demographic data as well as structural data on the use of homoeopathy, application and acceptance of vaccinations and recognised side-effects.

The questions concerning the problem of vaccinations were the same as used in the course of a study performed in Freiburg and Black Forest county in 1991/1992 ($n = 155$) [18]. A pre-test was done among a small group of physicians.

Because every physician in Germany is permitted to practise homoeopathy, we restrict our study on those homoeopathic physicians who have been trained and awarded the title 'Homoeopathie' which is granted by the General Medical Council in Germany [10].

Addresses of homoeopathic physicians were provided by the 'Deutscher Zentralverein Homoeopathischer Aerzte', the Society of Homoeopathic Physicians of Germany. In order to obtain a control group, data from a non-homoeopathic group of physicians were also gathered; the 'Aerztekammer', the General Medical Council in Germany, provided the addresses. In three regions of Germany, all homoeopathic general practitioners registered at the Society of Homoeopathic Physicians of Germany were addressed. Homoeopathic paediatricians were addressed in the whole of Germany as their number is low. All non-homoeopathic general practitioners and paediatricians registered at the 'Aerztekammer' were addressed in two cities with their surrounding areas. The questionnaire was sent to a total of 1673 general practitioners and paediatricians in Germany, comprising 627 homoeopathic and 1046 non-homoeopathic physicians as controls. The survey was conducted in August 1996 [11]. A reminder was posted to the whole sample after 1 month. Statistical methods applied were: uni- and bivariate techniques, factor analysis, analysis of variance and regression analysis to investigate associations between variables.

3. Results

3.1. Socio-demographic and structural data

Two hundred and nineteen of the homoeopathic and 281 of the non-homoeopathic physicians returned the questionnaire and thus we met our aim of achieving a sample size of $n = 500$ answers (response rate 30.4%). Both groups were asked if they practised homoeopathy. Twelve (2.8%) of the allopathic physicians had no official title as a 'homoeopath' but applied homoeopathy in more than 50% of their time in their practice. They were included in the homoeopathic group. A comparison of age, gender, year of medical registration,

years in practice and number of patients in a period of three months (according to specialisation, i.e. general practitioners and paediatricians) did not indicate significant differences between homoeopaths and controls. Table 1 shows that the distribution of age groups in the control group of this study represents a good match with the age groups of physicians in Germany. Furthermore, a comparison of gender of the control group and of physicians in Germany did not reveal significant differences. In this respect, the study is representative [12]. In general, no data on age distribution and gender was attainable for homoeopathic physicians. Further control of a possible selection bias in the sample was not possible as no data were available.

The homoeopathic group has a higher proportion of private practices (35.1%) than the control group (4.4%). Also, the distribution of the medical specialisation (general practitioners vs. paediatricians) is different: homoeopaths have a higher proportion of general practitioners (68 vs. 55% in controls) and a lower proportion of paediatricians (26 vs. 40% in controls). The proportion of physicians without any specialisation is 6% in both groups. In the homoeopathic group a wider heterogeneity among patients is found: homoeopathic general practitioners have a higher proportion of children (< 16 years) in their practices (24.8 vs. 12.2% in controls) whereas homoeopathic paediatricians work with a higher percentage of adults (14.7 vs. 7.5% in controls).

3.2. Application of vaccinations

We asked in the questionnaire about the application of 17 different single and combination vaccines (except 'travel vaccines') in the physician's practice. Immunisations against tetanus, diphtheria, poliomyelitis (0–17 years of age), measles (0–17 years of age), mumps (0–17 years of age), German measles (0–17 years of age), pertussis (0–17 years of age), hepatitis B (0–17 years of age) and Hib are offered universally in Germany. Immunisations against tuberculosis (till 1998),

Table 1

Age of physicians in the study (homoeopaths and controls) and of physicians in Germany [12]

Age (years)	% of physicians in age group		
	Germany ($n = 112\ 660$)	Controls ($n = 281$)	Homoeopaths ($n = 219$)
<40	15.9	14.3	16.9
40–49	39.3	40.2	48.8
50–59	33.6	34.6	21.4
>60	11.2	10.9	12.9

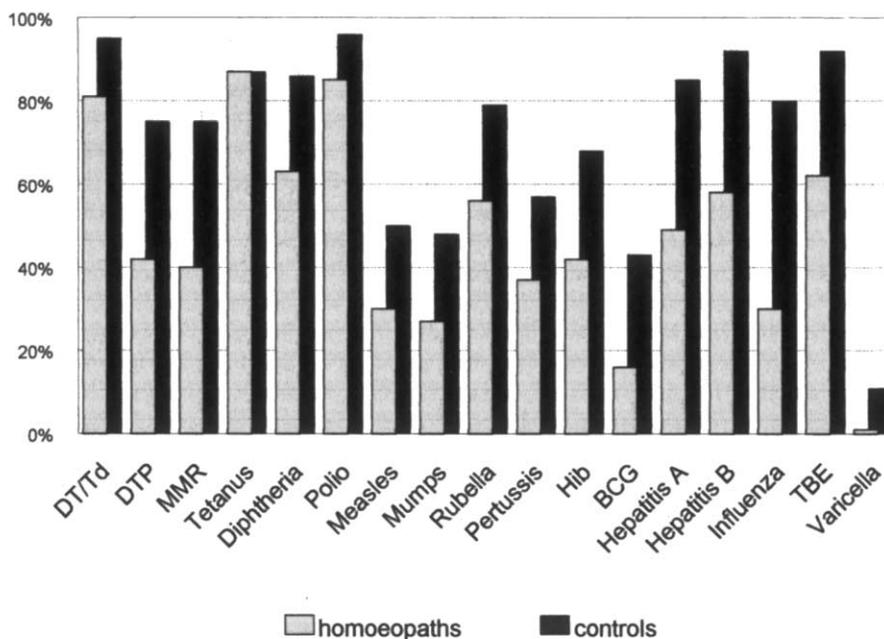


Fig. 1. Application of vaccinations by homoeopaths and by controls (general practitioners and paediatricians) ($n = 479$ max., missing cases $n = 21$ max).

hepatitis A, influenza, *S. pneumoniae*, *N. meningitidis* (in case of epidemics), tick-borne encephalitis, measles (> 17 years), mumps (> 17 years), German measles (> 17 years), pertussis (> 17 years), hepatitis B (> 17 years), poliomyelitis (> 17 years), and chicken pox are provided selectively for risk groups. In Fig. 1 the percentages of homoeopaths administering these vaccinations are compared to the control group. No significant difference in the acceptance of tetanus vaccination is found whereas active immunisations against all other infectious diseases are at a lower percentage for homoeopathic physicians. All these differences are highly significant ($P < 0.001$). But, an evaluation of this significant effect for the parameters 'type of practice' and 'specialisation' leads to the following results:

(1) Physicians in private practices do generally vaccinate less than physicians in panel practices independent of their specialisation. As the percentage of private practices is clearly higher in the homoeopathic group, the relation seen between homoeopathy and the acceptance of vaccination is biased. When statistically controlling for the type of practice these differences clearly diminish.

(2) The evaluation of the parameter 'type of specialisation' indicates additional bias. Paediatricians do generally vaccinate more than any other group of physicians. As the rate of paediatricians in the homoeopathic group is lower, the impression that homoeopaths vaccinate less, is biased. Both of these biases lead to an overestimation of the difference between the two groups of physicians.

In Fig. 2 the values are corrected for these biases: The differences are clearly smaller when comparing groups with identical parameters for these two marks, for instance the subgroups of paediatricians with panel practices in homoeopathic physicians and in controls.

Multiple logistic regression analysis of the factors 'type of practice', 'type of specialisation' and 'group of physicians' on the application of vaccines reveals a genuine reducing effect of the factor 'homoeopath' on the following vaccinations: DTP, MMR, diphtheria, BCG, hepatitis A and B, influenza, tick-borne encephalitis and varicella vaccinations. All these differences are significant with a value of at least $P < 0.05$. Differences concerning other vaccinations disappear in the multivariate model.

3.3. Refusal of vaccines

Both groups were asked which vaccines they thought were unnecessary, either for children and/or adults in general, or for risk groups (Fig. 3). Refusal rates range between 0 and 65 %. Not all vaccines are equally accepted. Vaccinations against tetanus, diphtheria and poliomyelitis are well accepted by almost all homoeopathic and non-homoeopathic physicians whereas the vaccination against varicella is partly refused by both groups. All other vaccines are less accepted by homoeopaths (average of refusal about 40%), all differences being significant with at least $P < 0.01$.

Factor analysis of these answers reveals that the vaccines we enquired about can be divided into four

groups: (1) active immunisations against the ‘classical childhood diseases’ (measles, mumps, German measles, pertussis, chicken pox), (2) vaccinations which are or were originally meant for risk groups (Hib, hepatitis A and B, influenza, tick-borne encephalitis), (3) ineffective vaccinations (BCG), (4) active immunisations against rare but often fatal diseases, i.e. tetanus, diphtheria and poliomyelitis. Vaccinations in the last group are mostly accepted by both groups of physicians whereas vaccinations of the other three groups are used with more restraint among homoeopathic physicians.

4. Discussion

To date, only few studies have evaluated the attitude of homoeopathic practitioners towards vaccinations. These previous studies focused on the question whether homoeopaths in general (i.e. medically and non-medically qualified homoeopathic practitioners) do vaccinate and whether vaccinations are recommended by homoeopathic medical councils.

Three studies have evaluated the attitudes of homoeopaths concerning vaccination. One small study in Australia included 29 homoeopaths listed in the telephone directory in Sydney. Six homoeopaths returned the questionnaire but only two of them were medically qualified practitioners. Vaccination practices varied widely. Reasons were seen in the individual approach of homoeopathic medicine and the absence of a statutory body regulating them. Only the medically qualified

homoeopaths recommended conventional vaccination [13]. The second study from UK ($n = 23$) seems to confirm the assumption that homoeopaths feel sceptical towards vaccinations: all non-medically qualified homoeopaths refused vaccinations ($n = 13/13$, i.e. 100%) but only 30% of the medically qualified homoeopathic physicians ($n = 3/10$) did so [14]. The third study from Austria points out that only 23% ($n = 27/117$) of homoeopathic physicians support vaccinations as a preventive measure [15]. It must be noted that the aim of the latter survey was to evaluate their homoeopathic procedures and their structure of practices, i.e. not to evaluate on attitudes towards vaccination specifically.

We designed our study to avoid the shortcomings of these studies where no distinction between medically and non-medically qualified practitioners was made which led to inconsistent results [16,17]. As the sample size and response rate of previous studies was low, we aimed to achieve a higher number of respondents and a higher response rate. The response rate of 30.4% is comparable to an earlier investigation about immunisations in the same areas of Germany [18]. Analysis performed to control for possible selection biases including the parameters age, gender, year of medical registration and years in practice revealed no systematic selection effects in the sample. As the response rate is low we cannot exclude that other factors have influenced the willingness to participate in the study.

Attitudes towards vaccinations should not be investigated on a broad basis but be focused on specific immunisations. Our study evaluated the attitudes to-

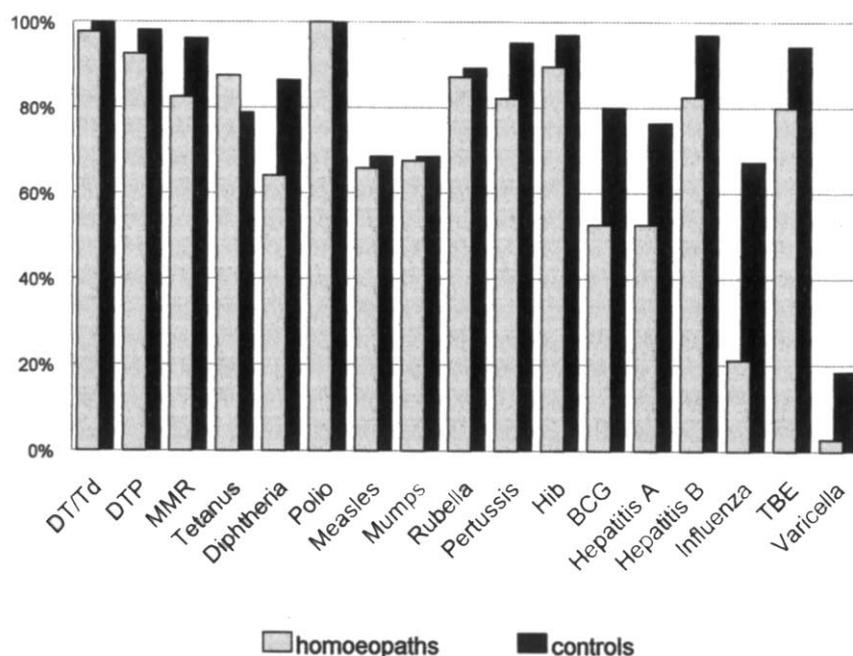


Fig. 2. Application of vaccinations by homoeopaths and by controls (subgroup of paediatricians in panel practices) ($n = 146$ max., missing cases $n = 7$ max).

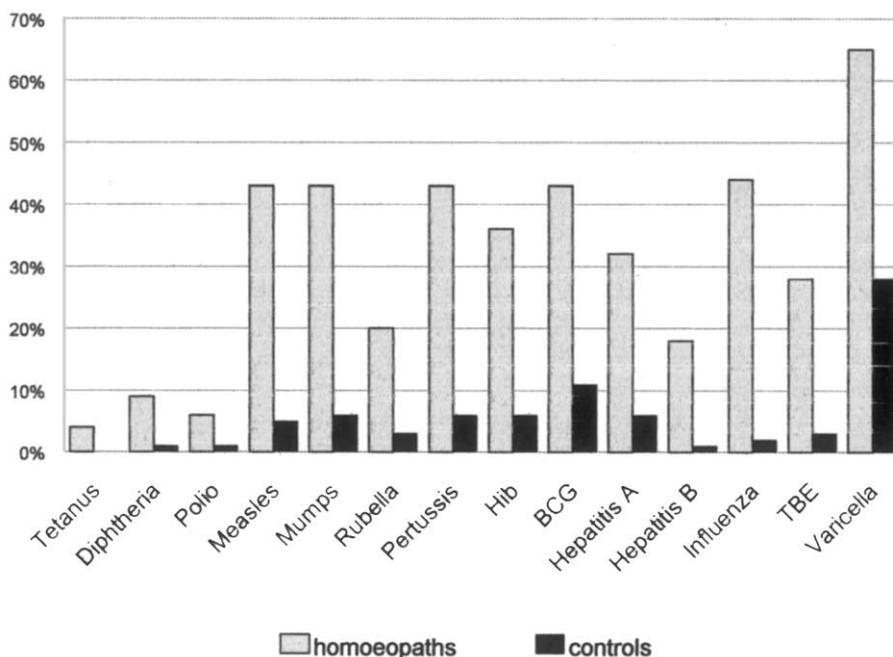


Fig. 3. Refusal of vaccinations by homoeopaths and by controls. Percentage answering: not necessary for any group (adults, children, risk groups) ($n = 500$).

wards 17 different vaccinations. We considered as critical not only to obtain the opinion of the physicians' on vaccinations but also to determine which vaccinations are actually administered in daily practice. Moreover, our aim was not to find out the physicians' accordance to the national immunisation schedule but to investigate if a certain pattern of acceptance of different vaccinations is prevalent.

The practices of homoeopathic and non-homoeopathic physicians differ in their structure. The differences in application of vaccinations presented in Fig. 1 reflect the 'crude' differences as found in our sample concerning almost all of the vaccinations. After adjusting for the structural differences it becomes clear that differences become smaller and that homoeopathic physicians refuse only certain vaccinations: they practice a specific hierarchy of vaccines and do not object to vaccinations in general.

There are few official statements on vaccinations by homoeopathic representative organisations. The 'Deutscher Zentralverein homoeopathischer Aerzte' (DZVhAe), the Society of Homoeopathic Physicians of Germany, has made no official statement on vaccination policy, yet. Only the Society of Homoeopaths, the organisation of non-medically qualified practitioners in England, has made a critical statement with concerns about the long-term safety of vaccines [3]. In 1991, D.S. Spence, President of the Faculty of Homoeopathy in England recommended the use of conventional vaccina-

tions as long as there were no medical contraindications. Like many other medically qualified homoeopaths he compared vaccinations with the homoeopathic principle, i.e. 'the giving of like for like' [19]. Hahnemann (1755–1843), the founder of homoeopathy, viewed smallpox vaccination as a clear demonstration of the law of similars [7]. Hahnemann said in 1842: 'this seems to be the reason for this beneficial remarkable fact namely that since the general distribution of Jenner's Cow Pox vaccination, human smallpox never again appeared as epidemically or virulently as 40–50 years before when one city visited lost at least one-half and often three-quarters of its children by death of this miserable pestilence' [20].

In order to avoid future misunderstandings in regard to the attitudes and views of homoeopathic physicians towards vaccination we think that an official statement concerning this matter should be considered by the German Society of Homoeopathic Physicians. This would impose the need to be open-minded about vaccinations knowing from this study that a different acceptance and application of vaccinations is prevalent in homoeopathic physicians.

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References

- [1] Halper J, Berger LR. Naturopaths and childhood immunisations: heterodoxy among the unorthodox. *Pedia* 1981;68:407–10.
- [2] Colley F, Haas M. Attitudes on immunisation: a survey of american chiropractors. *J Manip Physiol Ther* 1994;17:584–90.
- [3] Carlyon J. The society of homoeopaths has no official policy on vaccination. *BMJ* 1995;310:939–40.
- [4] Ernst E. The attitude against immunisation within some branches of complementary medicine. *Eur J Pediatr* 1997;156:513–5.
- [5] Simpson N, Lenton S, Randall R. Parental refusal to have children immunised: extent and reasons. *BMJ* 1995;310:227.
- [6] English J. The issue of immunisation. *Br Homoeopathic J* 1992;81:161–3.
- [7] Fisher P. Enough nonsense on immunisation. *Br Homoeopathic J* 1990;79:198–200.
- [8] Isbell W. Immunisation and homoeopathy. *NZ Med J* 1991;104:237.
- [9] Burgess M. Homoeopathy and vaccination. *Lancet* 1994;344:1168.
- [10] Landesärztekammer Baden-Wuerttemberg. Weiterbildungsordnung (WBO) der Landesärztekammer Baden-Wuerttemberg vom 17. März 1995. *Aerztebl Baden-Wuerttemb* 1995;4:11–159.
- [11] Lehrke P. Impfkonzepete in der Homoeopathie. MD thesis, Albert-Ludwigs-University Freiburg, Germany, 1999. Stuttgart: Hippokrates 1998.
- [12] Thust W. Aertzliche Versorgung in Deutschland. *Dtsch Aerztebl* 1997;94(19):3–19 Supplement.
- [13] Sulfaro F, Fasher B, Burgess MA. Homoeopathic vaccination. What does it mean? *Med J Aust* 1994;161:305–7.
- [14] Ernst E, White AR. Homoeopathy and immunisation. *Br J Gen Prac* 1995;45:629–30.
- [15] Haidvogel M, Rasky E, Freidl D, Stronegger WJ. Ergebnisse der Fragebogenaktion ueber die Arbeitsweise homoeopathisch taetiger Aerztinnen und Aerzte in Oesterreich. *Homoeopathie in Oesterreich* 1995;6(3):16–8.
- [16] Ernst E. Homoeopaths and chiropractors are sceptical about immunisation. *BMJ* 1995;311:811.
- [17] Ernst E. The attitude against immunisation within some branches of complementary medicine. *Eur J Pediatr* 1997;156:513–5.
- [18] Hofmann F, Schuh F, Michaelis M, Stoessel U. Zur Akzeptanz von Schutzimpfungen bei Ärzten und in der Allgemeinbevölkerung. *Gesundh-Wes* 1994;56:371–6.
- [19] Hindle RC. Immunisation and homoeopathy. *NZ Med J* 1991;104:171.
- [20] Hahnemann S. *Organon of medicine*, 6th ed. New Delhi: B. Jain Publishers, 1991:130.