THE PROMOTION OF VACCINATION TO CHIROPRACTORS

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Abstract: The impact of vaccination on the health of the world's peoples is hard to exaggerate. With the exception of safe water, no other modality, not even anti-biotics, has had such a major effect on mortality reduction and population growth.

It is an extraordinary paradox that, despite abundant evidence of the success of vaccination, its necessity is still queried. Such query and even active attack against vaccination occurs from a number of groups one of which is a faction of the chiropractic profession.

Although vaccines are neither completely effective nor devoid of adverse effects, several decades of their use have established their excellent safety profiles and their highly favourable benefit-cost ratio.

This paper looks at a possible health promotion campaign to the chiropractic profession endorsing vaccination as a responsible and important health measure.

Index terms: Chiropractic, chiropractors, vaccination, immunisation, health promotion, illness prevention, public health.

INTRODUCTION

Vaccination is a deliberate attempt to protect humans against disease and while there are some who suggest such methods began with the Hindus in 1000 B.C. it was Edward Jenner's work with cowpox vaccination in the 1790's that is recognised as the first attempt to control an infectious disease by a deliberate inoculation.(1) Jenner's intention was to prevent smallpox by injecting material from a cowpox lesion thereby inducing a protective response to smallpox. His success and the deliberate public health measures that followed eventually led in 1977 to the effective eradication of smallpox from the planet.(2)

According to Plotkin and Plotkin (1) the impact of vaccination on the health of the world's peoples is hard to exaggerate. With the exception of safe water, no other modality, not even anti-biotics, has had such a major effect on mortality reduction and population growth.

UNICEF estimates that two million children are being saved each year at current rates of coverage and that three million more could survive annually with greater use of existing vaccines against measles, polio, whooping cough and tetanus.(3)

The urgency for continuing to raise vaccination coverage levels and focusing on controlling these target diseases is underlined by the continuing prevalence of these diseases and other vaccine preventable diseases in un-vaccinated subjects worldwide. An example is hepatitis B infection which on its own causes 1-2 million deaths annually.(4)

Although vaccines are neither completely effective nor devoid of adverse effects, several decades of their use have established their excellent safety profiles and their highly favourable benefit-cost ratio.(5)

THE PROBLEM

Considering the above, it is not surprising that Feery and Boughton (6) state that "It is an extraordinary paradox that, despite abundant evidence of the success of vaccination, its necessity is still queried". Such query and even active attack against vaccination occurs from a number of groups one of which is a faction of the chiropractic profession.(7)

Why should a health professional group such as chiropractic have within its ranks a faction which is outright anti-vaccination? The reasons arise from the very beginnings of the profession. In 1910 Daniel D.Palmer the founder of chiropractic had this to say about vaccinations "Vaccination and inoculation are pathological" .(8) Palmer went on to say that "... there is no doubt but that it (vaccination) is the biggest piece of quackery and criminal outrage ever foisted upon any civilised people".(9)

Eighty-four years later there are a handful of chiropractic fundamentalists who adhere to Palmer's persuasion on vaccination and his anti-drug dogma. Vaccines are seen as drugs by this group and therefore they have an ideological problem with them.(10)

The problem associated with this is that several of these "Palmer adherents" are particularly vocal both inside and outside the profession. By contrast, most of the profession appears to be generally uninterested in the vaccination question.

In my view this situation has had two major effects:
1. There has generally been only one side of the argument presented within the chiropractic profession and this has been by the anti-vaccination lobby. Because of this the profession is seen to be largely anti-vaccination.

2. The fundamentalists have promoted material to the profession which (in my view) is potentially detrimental to the public health.

3. There is no epidemiological data to show the extent of this problem, only the literature produced and distributed by the anti-vaccinationists within the chiropractic profession.(11)

A study to measure the impact of this literature and indeed the general beliefs of the chiropractors about vaccination should be undertaken prior to the launch of any campaign. The remainder of this paper makes the assumption that such a study would show the problem outlined above and as such warrants intervention in the form of a promotion program.

This paper looks at a possible health promotion campaign to the chiropractic profession endorsing vaccination as a responsible and important health measure. It does not set out to justify each and every vaccination nor tackle every objection of the minority groups who oppose vaccination. This may the subject of another paper.

PREVIOUS "INTERVENTION"

One paper by LeBoeuf (12) addressed the issue of chiropractors and their reservations regarding polio vaccination in an Australian chiropractic journal. The author looked at the issue of risks and benefits and concluded that chiropractors need to consider the evidence for and against such procedures. LeBoeuf also concluded that it was "easier and safer to (use) the vaccination process than to leave it to the chances of nature." This article was notable as the first "pro-vaccination" paper in the Australian chiropractic literature.

OBJECTIVES AND SUITABLE PROGRAMS

The objective of this paper is to propose a program of intervention which will actively promote vaccination to the chiropractic profession thereby strengthening or actually changing their attitude to one of support for this important public health measure.

A review of the literature reveals no health promotion or illness prevention interventions directed at members of the chiropractic profession which have been evaluated. Therefore, I have had to look at different models and choose an appropriate one from those used with other health professionals.

In my view the intervention(s) of choice should involve the "Health Belief Model".(13) Egger et al state that the "principal tenet of this model is the way in which an individual perceives the world and how these perceptions motivate his or her behaviour". The authors go on to say that within this model, action is dependent on three simultaneous occurrences: (my words in parentheses)

1. The existence of sufficient health concern and motivation (knowledge of vaccine preventable diseases).
2. The belief that one (the patient) is susceptible to a serious health problem.
3. The belief that doing something (advising the patient regarding vaccination) would reduce the perceived threat.

Chiropractors are individuals who perceive the health field from a distinct ideology. Accordingly, any action directed at changing or strengthening their opinion about a health issue such as vaccination must take account of their health beliefs and try where possible to work within that framework. This is a strong reason why the health belief model would suit chiropractors. This is not to say that chiropractors are not suitable for any other intervention, indeed my plan is to suggest a multi-faceted promotion plan using a mixture of interventions including some that have been used with general practitioners.(14)(15)(16)

Why should chiropractors concern themselves with vaccination at all? The concept of using "traditional healers" to promote public health measures and thereby contribute to the work of primary care has been suggested by Hoff,(17) and while chiropractors are not traditional healers in the third world sense they do represent an analogy in the western world health delivery paradigm. In my view chiropractors could make a more valuable contribution on a wider range of public health issues.

MODEL OF THE PROPOSED PROGRAM

The use of the "health belief model" should bring about the following:

1. Delivering and providing accurate knowledge of vaccine preventable diseases and countering any propaganda to the contrary.

2. Encouraging the belief that chiropractors’ patients are potentially susceptible to a serious health problem if left un-immunised.
3. Promoting the belief that advising the patient regarding vaccination where appropriate will reduce the perceived threat.

It would be unrealistic to believe that chiropractors would or should give all patients information on vaccination. There are simply too many worthwhile preventive health programs apart from vaccination where there is a greater synergy with the chiropractic profession eg regular exercise.

So, this program should encourage chiropractors to focus on appropriate patients in an opportunistic fashion such as:

a) those patients who raise the subject of vaccination.
b) where the chiropractor has a high index of suspicion that the patient is at risk and is not vaccinated eg a patient who hurts their spine in a fall but also incurs a laceration (? tetanus).
c) where a child attends for treatment with a parent.
d) patients about to travel to “high risk” countries.

IMPLEMENTATION OF METHODS

STEERING COMMITTEE

A committee of four to oversee and coordinate this program should be formed and consist of three chiropractors, two nominated by the Chiropractors Association of Australia (Victoria Branch) (CAA), one by the School of Chiropractic at RMIT and also a nominee of the Victorian Health and Community Services Department (HCSD).

The co-operation of the CAA is critical to the success of this program. Their imprimatur would strengthen the impact of the program with the profession as there may be significant suspicion of the HCSD acting on its own. Some chiropractors mistakenly equate the HCSD with organised political medicine groups such as the Australian Medical Association (AMA). The AMA is antagonistic to the chiropractic profession.(18)

Accordingly, in the first part of the program the CAA should be asked to co-operate and consider the introduction of a pro-vaccination policy into its manifesto. The request should come from the State Minister of Health at the request of the HCSD. There is of course no guarantee that the CAA would co-operate or indeed even endorse the idea of vaccination.

Further, the HCSD should approach RMIT for their co-operation in the project as changes to undergraduate education on vaccination may be necessary after review of the undergraduate program. Such a request would have to go through the normal course advisory committee stage and importantly would need to be be supported by a majority of the faculty. Once again there is no guarantee of this.

Funding for the project should be provided jointly by these three groups with the major percentage coming from the HCSD or alternatively by way of a grant from the Victorian Health Promotion Foundation.

PROCEDURE

1. The target group should be all registered chiropractors and undergraduate chiropractors in Victoria (approximately 800).

2. The program should be over one academic year.

3. The information dissemination should take the following form:

(a) Initially a single brochure should be circulated. This brochure should be well referenced and give a summary of the benefits of vaccination, highlighting the potential dangers of outbreaks of disease in Victoria, asking for the chiropractors’ assistance, emphasising the important contribution chiropractors already make to public health and offering further advice on request. I anticipate that this initial brochure will draw a response from the anti-vaccinationists. Their response would probably be in the form of a letter(s) in the Chiropractors Association Newsletter and may contain many distorted quotes which may be designed to instil fear and doubt in the minds of the chiropractors.

(b) The second part of the intervention should involve the distribution by mail of a resource kit which provides more specific and detailed information about individual vaccinations. This would provide the chiropractors with clearly understood epidemiological information about each vaccine and should also contain brochures for distribution to patients by the chiropractors.

Further, there should be included a positive acknowledgment and understanding of the drug minimisation philosophy of chiropractic and an explanation of the cost-benefit analysis of each vaccination. The kit should also contain a discussion of the issues and a rebuttal of the myths propagated by the anti-vaccinationists. I have identified these myths and issues from a video of a debate on
vaccination held at RMIT School of Chiropractic in 1993 (19) (see appendix 1). Each issue contained in this appendix can and should be addressed in the kit. Not all assertions by the anti-vaccinationists are total fabrication some require careful reply and in some instances admission that more could be done in the area of vaccination research and delivery. This section should not overwhelm the general positive information provided. Instead it should be a stand alone section of the kit which is particularly clear and well referenced. Further, the kit should detail the global importance and the overpowering evidence in favour of vaccination and on that basis ask for the help of chiropractors.

(c) The kit should be prepared in such a way that it is not likely to be discarded eg a ring binder or folder. I have given some thought to the use of a chiropractic educational facilitator to deliver and explain the kits. However, Cockburn et al (13) compared three approaches for marketing a quit smoking kit to general practitioners. They concluded that although the use of an educational facilitator to deliver and explain the kit usage was significantly more effective than delivery of the kit by mail or courier the intervention was not cost effective.

Because time is a consideration for chiropractors all written information dispatched should be brief, clear and get the message right.(20) Further, the utility of a quick transfer of information from chiropractor to patient should be emphasised.(15)

(d) Reminder cards to all chiropractors of the program should be sent on two further occasions over the remaining time of the program. Such reminders have been shown to be effective.(21)

**EVALUATION**

Process evaluation - Monitoring of the program should be conducted with attention to:

A. Impact evaluation:

A survey to measure attitudinal change should be undertaken using "before and after" questionnaires. Also knowledge acquisition and the kit's utility should be measured three months after the distribution.

B. Program evaluation:

Success should be measured by:

1. A significant improvement of knowledge about and a strengthening of attitudes in favour of vaccination.
2. Dissemination of the brochures to at risk individuals or their parents.
3. A change of the undergraduate chiropractic curriculum to include the benefits of vaccination.
4. The formation of a pro-vaccination policy by the Chiropractors Association of Australia.

If evaluation shows a successful outcome the program should be extended to the whole country.

**CONCLUSION**

This paper identifies a problem involving a faction of the chiropractic profession who are anti-vaccination. It proposes a health promotion program which is aimed at strengthening and changing the attitudes and actions of chiropractors to be pro-vaccination.

There are many public health measures which chiropractors could and should participate in. This particular program may provide an opportunity for chiropractors to further add to the public health of the community by participating in an important preventive area. If the program was successful it could be extended to all states and thought given to implementing a similar policy in osteopathic schools.

In my view chiropractors are ready to become meaningful partners in the promotion of public health to all Australians. The simple problem is they have never been asked to participate.
APPENDIX 1

The paraphrased arguments against vaccination identified from the video of a debate at RMIT on 6 October, 1993.(19)

1. Vaccination is an assault against the immune system, they are drugs/chemical cocktails containing many un-natural substances.
2. Pharmaceutical companies push drugs like vaccinations for the purpose of profit with bad consequences eg. thalidomide with devastating effects.
3. The fall in the incidence of the target diseases is due to better hygiene, water, nutrition and less overcrowding and anyway it occurred before the introduction of vaccination. Further, disease epidemics have always been the subject of fluctuations over centuries and vaccination coincides with a down sweep of the curve.
4. Most children experience a reaction to vaccines.
5. Vaccinations cause SID's, epilepsy, eczema and asthma.
6. There is no hard evidence that vaccination works.
7. Statistics cited in journals are often wrong therefore doubt should be caste over vaccination.
8. Vaccination causes seizures and death and such occurrences are not included in the research data.
9. There is an under-reporting of target diseases in the immunised population. That is to say that the vaccinations are less effective than thought.
10. There is no mandatory reporting of vaccine adverse effects.
11. Repeated vaccination worsens stress, causing gastric ulceration, susceptibility to infection, effects on cardiac and skeletal muscle such as tetany and flaccidity, inflammatory responses on the nervous system with EEG changes, insomnia, eating disorders, psychoses, Haemophilus influenzae B (HIB) and encephalitis.
12. Vaccines depress the defence system of the body and cause our own immune system to shrivel and break down.
13. Herd immunity does not exist.
14. Hepatitis B vaccine causes chronic fatigue syndrome.
15. There is no compensation for the adverse effects of vaccination.

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