## The Making of Myths

## By Hilary **Butler**

When the article called "Impact of anti-vaccine movements on pertussis control: the untold story" came out in 1998, I wrote a rebuttal, and sent it off to The Lancet. As tradition dictates, it didn't even warrant a reply letter, which probably would just have stated something like "the only opinons that matter are those of the WHO whether based on fact or not."

The title itself is wonderful – "...the untold story".

This article is not the full rebuttal of Gangarosa's article that I sent to The Lancet. It discusses certain premises, takes one key factual error (which is actually a critical premise of the article), and then combines this with other key errors of direct relevance to New Zealand parents. This will tell you some of the 'untold story' about so-called experts in New Zealand who refer to us as the "so-called pro-choice" lobby.

In writing "...the untold story", The Lancet did a literature search of English translations of contemporary news stories, peer reviewed publication documenting anti-vaccine movements, analysed country-specific incidence of whooping cough and vaccine usage, and books and other publications intended for lay audiences.

There were certain statements and premises in the article which are patently false, and yet create a "tone" irrelevant to the discussion. The technique used is typical. First you state a position: "the decrease in pertussis incidence resulting from vaccination" which tells everyone that we know vaccination did it, then you follow it by implying that two medical writers may have created the impression that pertussis was becoming milder and more scarce owing to medical and social development."

In other words, using his opinion, Gangarosa created the impression that these two authors were talking bunk, while refusing to talk about what the authors said, but let's just dismiss it as irrelevant. (BMJ 1069;2:1184 – 86, Strom J; and, Lancet 1977;I:234-37, Stewart GT.) The fact is that New Zealand Health Department statistics (and Australian government statistics) demonstrate clearly that immunisation has little to do with the decrease in disease incidence. In March this year, the Department of Pediatrics in Taipei (J Formos Med Assoc pgs 224-8) showed that young children, adolescents and adults remain at risk of pertussis and that booster shots after the intital four-shots should be considered to try to "block transmission of infection." Many, many studies world-wide show the same thing, yet "the club" still says the vaccine will prevent children from getting whooping cough.

Gangarosa then defines Passive and Active movements from his definitive perspective. Having been active in both, I know his definition is plain wrong. For instance "Parents concerned about vaccine safety did not feature prominently in passive movements" defined as Italy, former West Germany, Ireland and Australia. Really? Parents concerned about vaccine safety were the foundation stones of the movements in every one of these countries. Does Gangarosa think we don't communicate with one another or something?

So already we have two incorrect premises.

Next comes the discussion about USA where he said that the television programme Vaccine Roulette and the publication of a book called "A Shot in the Dark":

- 1. gave rise to a movement against whole-cell vaccines,
- 2. instigated several lawsuits against vaccine manufacturers,
- 3. substantially increased vaccine prices, and
- 4. caused some companies to stop production of the vaccines.

Now we're getting into some real sculpturing. Here are some facts:

- 1. Barbara Fischer's organisation was certainly the most high profile organisation, but was not the first movement against whole-cell vaccine. Several other parent organisations opposed to the whole cell vaccine came before her.
- 2. The arrival of "DPT A Shot in the Dark" and television programmes did <u>not</u> instigate lawsuits there had been scores of them years before Barbara Fischer even knew what the DPT vaccine was.
- 3. Her organisation did not substantially increase vaccine prices. The largest increase came when the Senate enacted a vaccine compensation program which was financed through an extra tax on the vaccine, which was passed on in the price structure to ensure that the people, through their taxes, paid the higher price anyway.
- 4. Last, but not least, the quoting of a CDC document to justify the comment "caused some companies to stop production of the vaccines." This is called "lying by omission". In order to try to make the "anti-vaccine" movement of the day look like villains, a few people decided it would be a good idea to start a rumour that a certain company hit by lawsuits had decided to stop marketing the DPT vaccine. That was true. Like all good rumours, the media made hay with it, and assumed that marketing was the same as manufacturing. Then the next rumour filtered through from the medical people, that it was feared that this would result in a nationwide shortage, which might result in whooping cough epidemics with poor little babies dying.

The media souped that up even further, but this had no basis in fact – it was a deliberate risk management decision, commonly called unsubstantiated emotional blackmail.

Because, while the company did indeed stop MARKETING the vaccine, they did not stop producing it. An agreement was made whereby another company would MARKET both vaccines under one label. The actual amount of vaccine manufactured in USA did not drop at all. The major pusher of this lie was tackled at an international conference about it, and his response (that he knew it wasn't true but was a useful illustration of what "might" happen) is a matter of public record. The trouble is, Gangarosa published a rumour as fact, and the public, who trust people like Gangarosa, wouldn't think to go and look and find the evidence. But it is all there, in the CDC records of manufacturers names and lot numbers, and correspondence surrounding that particular International conference.

Gangarosa's discussion of Sweden's statistics is interesting. He makes the statement "During 1980 – 83, annual incidence for children aged 0 – 4 years increased to 3370 per 100,000 with rates of serious complications approaching global rates." Don't these stats look impressive? You would think that this would be **so impressive** that everyone in Sweden would immediately fall over themselves to start vaccinating again. Not so. Because data in that form is misleading to say the least. You have to look at who the cases are, what the complications are, and if they were avoidable. None of that was done. Having corresponded with the Swedish "expert" on pertussis, Dr Victoria Romanos, for many years, and being in possession of all data so far published, a correct analysis re-inforces the very reasonable policy of Sweden in steadfastly continuing to refuse to use the whole-cell vaccine so happily jabbed into New Zealand children, because its risks outweighed the benefits. This has, of course, been a source of constant annoyance to WHO and it is little wonder Gangarosa chose to take a subtle swipe at Sweden.

Rapidly on the heels of Sweden, comes a thumbnail sketch about Japan, based on a key statement: "Pertussis coverage for infants fell from nearly 80% in 1974, to 10% in 1976." Looks terrible doesn't it. And of course the implication is that 80% were fully vaccinated, and that's why there wasn't much whooping cough around, and when it fell to 10%, that was the cause of the increase, wasn't it? So, let's look at this carefully. What is his analysis like of these statistics? The first logical step is to look up the reference, Lancet 1990; 336: 30-32, which I just happen to have. Funny. There are no figures of anything to do with vaccine rates in this article. Wonder where he got his information from? Having fully researched Japan, I have a pretty good idea where a similar percentage figure might be found. In JAMA March 13, 1987, Vol. 257, No 10....Drum roll....Page 1352. But the 80% figure only applies to one shot. Drum roll....And the drop to 10% applies to the three shot regime. Actually, in 1974, the coverage of DPT for three shots was 56%, but the trouble with this stat is that it doesn't fit Gangarosa's purpose or maths. But then, the average reader wouldn't know

that, or even consider he could possibly have made a mistake. And of course, antivaccination groups are the problem aren't they?

By this time, I have got somewhat tired of Gangarosa. I could bore you to tears with some more of his little nuances. So let's stop right there, and look at the implications of "little nuances" already mentioned in relation to New Zealand.

The first point is that any Health Department, or place that disseminates information, should strive for accuracy. They should also check out all references and raw data first hand, as we do. Various New Zealand organisations have, over the last two years, committed major gaffes, about which the public knows little, because fortunately for them, the media covers medical myths with rose-scented disinformation.

But some of these unknown gaffes affect you directly. Since we are discussing Gangarosa's article on whooping cough, let's look at a related one. Early 1999, Nikki Turner was quoted in several articles as saying that Sweden had found that 4% of hospitalised cases would have brain damage. Had it been a one-off, I would have thought that is was a media error, but it wasn't. Interesting. Thinking that I must have missed an important ground-breaking article, I faxed Victoria Romanos the newspaper articles, and asked what I had missed. Nothing, he said – the only article was in Pediatric Infectious Diseases 1987 in which it was said that 4% of whooping cough cases had "**neurological symptoms'**". I had that article, so I looked it up. Here, for your information are those cases of "Neurological symptoms":

Encephalitis (generalised)	11
First time convulsions (encephalitis excluded):	
Temperature <38°C	42
Temperature >38°C	20
Convulsions in patients with known epilepsy	11
Other e.g. ataxia, vertigo	6
Pneumonia	32
Cardiac symptoms	3
Assisted ventilation by respirator	11
Deaths	3

It would seem that with English being a second language we have some definition problems here. And the deaths were as follows: A baby, four weeks of age, who developed pneumonia with widespread lobar consolidation, and died in spite of antimicrobial treatment and intensive care with assisted ventilation. Two children (born at the time vaccination was still routine), 7 and 6 years of age "both suffered from physical handicaps caused by congenital disease on account of which they had not been immunised". One had Down's Syndrome and heart disease with pulmonary hypertension and died of cardiac failure; the second had myelomeningocele with ventriculo-peritoneal shunt, shunt dysfunction, and died of herniation of the medulla oblongata. (Since 1983, of the Swedish data I have, the majority of deaths have also been in children with similar substantial medical histories). The pre-existing histories of case studies were not specified.

I faxed the "neurological symptom" data you see here back to Dr Romanos, and asked how many of these children had permanent brain damage as a result of the above symptoms. In his reply he said that they did not know, because they did not look at what risk of permanent brain damage any surviving children had. I'm sure that if it was widespread, they would have had no choice!

But, the way these symptoms were reported in New Zealand, they were made to look like permanent brain damage.

Right now, parents are being subjected to similar gross misinformation. On Thursday May 25, 2000, the Herald told everyone that the counry is in the midst of a measles and whooping cough crisis. Oh really? The fact is that the majority of whooping cough cases, as per overseas, have been appropriately vaccinated, though not a word of that gets into the media. So exactly what is the crisis? And if there are measles cases somewhere, it doesn't say much for the mass vaccination programme of 36 months ago, does it? Where are their facts?

Last year, Nikki Turner wrote a letter to the Herald (October 7<sup>th</sup>) in which she stated that the world still managed to vaccinate enough children to eradicate smallpox while accepting conscientious objectors in New Zealand and elsewhere. Having studied smallpox very diligently, I know, and anyone else who has checked the fact knows, that that statement is absolutely laughable, but is typical of myths created and perpetuated by people with agendas.

The very next day in the Herald under "100 years ago" was a heading "Blame bicycle for decline in birth rate". The last paragraph reads:

"...the use of the bicycle as an irrational and unnatural exercise for women – that a woman who cycles does not, and cannot, bear children has become almost a byword among men. The cause is too well known to need discussion here."

And it was not long after this, that doctors became the major pushers of tobacco. It was so self-evident that bicycles make women sterile, and tobacco helps asthma. Just like it's self evident that small pox vaccination of children wiped out smallpox, and if your baby is vaccinated it won't get whooping cough.

[Vaccination] [Hilary Butler]