Public opponents of vaccination: a case study

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Received 17 December 2002; accepted 26 June 2003

Abstract

Opposition to mass childhood vaccination is a world-wide phenomenon, particularly in industrialised countries. Unfounded claims about vaccination are perpetuated by parental lobby groups and individual spokespersons, some of whom have a medical or scientific background. This article focuses on one such spokesperson who has achieved particular notoriety. Dr. Viera Scheibner is a retired micropalaeontologist, without any formal training in health-related sciences, who tours the world claiming that vaccines are ineffective and dangerous and lead to a host of ills such as cancer and asthma. Professionals in public health or the clinical arena are from time to time called upon to publicly respond to her, or similar, claims disseminated during tours of Europe, North America or Australasia and in books and articles. Health professionals have expressed at how such spokespersons misrepresent the evidence on vaccine safety, resulting in the potential to undermine public confidence in immunisation. Media coverage, or proposed coverage, particularly of her more extreme claims, often makes health professionals engaged in immunisation feel obliged to respond. This paper describes Viera Scheibner’s approach, which follows a repetitious path and is representative of that taken by other public opponents of immunisation. We conclude by suggesting how health professionals might respond in the public arena.

Keywords: Vaccine safety; Controversy; Health communication

1. Public opponents of vaccination: a case study

In industrialised countries today, opposition to vaccination occurs through organised lobby groups of mainly parents or individual spokespersons whose medical or scientific background lends credibility to their claims. The most radical opponents of vaccination claim that all vaccines are unsafe and ineffective, tending to attribute all manner of modern ills to vaccination. To support their claims requires highly selective filtering of the findings of scientific and epidemiological studies of vaccine safety and effectiveness. Notwithstanding the need for vigilance regarding vaccine safety, the efforts of these individuals can lead some people to make uninformed decisions about immunisation. For example, evidence suggests that countries with active public opposition to whole cell pertussis vaccination programmes had a higher burden from that disease [1].

One vociferous opponent of vaccination is Dr. Viera Scheibner and she has made considerable efforts over the past decade to publicise her assertions about the dangers of vaccination. This paper describes her efforts as an example of a public opponent of vaccination. It then suggests how health workers might respond to public dissemination of some of her unfounded claims as a model for an appropriate approach to such challenges.

Viera Scheibner is Australia’s best known opponent of vaccination. Over the past decade, she has toured the world promoting her message that vaccines are ineffective and unsafe. Typically, her lecture tours are organised by local anti-vaccine lobby groups and advertised via fliers, public notices, and newspaper briefs. In this material, parents, the general public, and health professionals are invited to hear a “scientist and author” speak about vaccination [2]. Journalists from local newspapers can find her theories newsworthy enough to draw press coverage, subsequently sparking a letter writing war between indignant health professionals and people who passionately support her arguments.

Scheibner introduces herself as a retired Principal Research Scientist with the State Government of New South Wales (NSW), Australia, who has a doctorate in natural sciences. She has no formal health sciences training and has co-authored one article in the peer-reviewed medical research literature indexed on Medline between 1966 and June 2002 [3]. Her doctorate (RNDr) was in micropalaeontology and examined “Jurassic and Cretaceous foraminifera from the
Pieniny Klippen Belt in the Western Carpathians”. As Viera Scheibnerová, she worked as Assistant Professor in the Department of Geology at Comenius University in Bratislava from 1958 to 1968 [4]. She emigrated to Australia in 1968 and worked with the Department of Mineral Resources on the Geological Survey of NSW until 1987 [5]. She is now retired from paid employment, devoting much of her time to lecturing about the alleged dangers of vaccination.

By her own account, Dr. Scheibner’s interest in vaccines stemmed from 1985 when, testing an infant breathing monitor developed by her late husband, she observed periods of what she called “stressed breathing” in babies in the days following diphtheria, tetanus and whole cell pertussis (DTP) vaccination. Believing that she had found the cause of sudden infant death syndrome (SIDS), her attempts to alert the scientific community to her findings were met with resistance and disagreement. Thus, began her search for other examples of vaccines causing harm and a heartfelt crusade against the practice. By 1993, she claimed to have studied more than 30,000 pages of medical literature [6].

Other than the SIDS connection, Dr. Scheibner alleges that a host of other diseases and conditions, including AIDS, asthma, cancer, and Legionnaires disease, are caused by vaccines. At one stage “brain eating bugs” drew her attention [7]. She also claims smallpox has not been eliminated but has been re-classified as other pox viruses, thus proving that the vaccine failed to eliminate the disease [6].

A study of 4 years of Australian press coverage about vaccination reveals that her most frequently used arguments against vaccination centre around the experiences of Sweden and Japan [8].

Sweden stopped whooping cough vaccination in 1979. Not only did they have the second lowest infant mortality in the world, but whooping cough since has become a mild disease. After a spate of 37 cot deaths after DPT vaccinations, Japan moved the minimum vaccination age to 2 years in 1975, which resulted in a virtual disappearance of cot death [9].

It is noteworthy that Dr. Scheibner and other spokespersons focus particularly on conditions where complete control by immunisation has been most difficult to achieve (pertussis and measles), vaccines where allegations of adverse effects have been most strident (whole cell pertussis) and disorders whose causation and pathophysiology are at once frightening and ill-defined or multifactorial such as neurodevelopmental problems and Shaken Baby Syndrome. Her methods in public meetings revolve around the use of overhead transparencies where she highlights fine print in, or reinterprets tables and graphs from, published papers. She makes much of the claim that all her material comes from mainstream medical literature, often implying that medical practitioners have not paid sufficient attention to this information or are actively concealing it. The conceptual and factual details can be refuted but this often requires communication of epidemiological concepts or data interpretation not readily accessible to a lay audience. For instance, the above claims require detailed understanding of the history of pertussis immunisation in Sweden (which is now very well controlled by acellular vaccines) [10] and the epidemiology of SIDS in Japan. In the latter case, Scheibner rests her statement about the “disappearance of cot death” on data showing that no claims were lodged under the compensation scheme when the vaccination age was increased from 3 months to 2 years of age [11]. However, she fails to point out that a SIDS diagnosis is restricted to infants under 12 months [12]. SIDS had merely disappeared as an entity from the vaccination compensation system which was now compensating only for events occurring after 2 years, the new minimum age for vaccination (for a detailed rebuttal of the above claims see http://www.skeptics.com.au/journal/anti-immune.htm [13] and Scheibner’s response http://www.vaccination.inox.com/jsids.html [14]).

More recently, Scheibner has been alleging a link between vaccines and Shaken Baby Syndrome [15]. This has resulted in her corresponding with imprisoned fathers attempting to be cleared of criminal charges of their children’s deaths. The following introduces an article she wrote for Nexus, a magazine which declares itself as dedicated to UFOs, suppressed science, government cover-ups, and other conspiracy theories.

Recently, there has been quite an “epidemic” of the so-called “Shaken Baby Syndrome”. Parents, usually the fathers, or other caregivers such as nannies have increasingly been accused of shaking a baby to the point of causing permanent brain damage and death. Why? Is there an unprecedented increase in the number of people who commit infanticide or have an ambition to seriously hurt babies? Or is there something more sinister at play? [15].

The article expands on Scheibner’s belief that Shaken Baby Syndrome has been misdiagnosed in many cases. She asserts that vaccine-induced brain swelling and bleeding tendency, with associated haemorrhage is the true culprit. Although her theory is not supported by more detailed consideration of pathophysiology or well-conducted vaccine safety studies, the counter-arguments are again quite complex, requiring sophisticated understanding of the physiology of bleeding tendency and the interpretation of clinical trial data.

Scheibner claims to have been asked by lawyers acting for defendants in Shaken Baby cases to provide expert reports [15]. Chadwick and Parrish have called for “irresponsible expert testimony” to be excluded by judges in such cases [16].

In her book, “Vaccination: 100 years of orthodox research shows that vaccines represent a medical assault on the immune system,” Dr. Scheibner proposes homoeopathy as an alternative to vaccination [6]. Otherwise, her writings tend to maintain a focus on vaccines, with limited discussion of the consequences of vaccine preventable diseases. Measles,
for instance, is considered an, “important development mile-
stone in the life and maturing processes in children,” [17]
ignoring data that the acute effects of measles leads to death
in every 5–10,000 cases [18]. An unwillingness to acknowl-
edge even the slightest benefit from any vaccine may be
the Achilles Heel of Scheibner and at least some other pub-
lic opponents of vaccination. Supporters of vaccination can
contrast their uniform acknowledgement that vaccines are
neither 100% effective nor 100% safe, while emphasising
that very exacting standards of safety and effectiveness are
required for licence and that approaching 100% is a key
aim. It is difficult to explain away benefits of vaccines such
as the eradication of smallpox, the lack of wards full of para-
lytic polio patients in iron lungs or the virtual disappearance
of Haemophilus influenzae type b (Hib) meningitis [19]. The
latter is particularly powerful as it has occurred recently and
over such a short time period. Attempts to discount these de-
velopments as unrelated to vaccination require contortions
of logic which can stretch the credibility of even the most
devoted follower.

Not all the claims of vaccination opponents are completely
erroneous. For example, Dr. Scheibner is critical of doctors
for their reluctance to report adverse events after vaccination
[20]. There is no doubt that many share a desire for accurate
data on adverse events. Indeed, over-arching reference to
universal themes of child well-being, concerns over scientific
arrogance, and natural methods of preventing disease define
much of the appeal of public opponents [8].

Although a brief look at the arguments of Dr. Scheibner
and others [21] indicates that fanaticism is probably their
own worst enemy, such arguments can attract media atten-
tion and health workers will often lament these effects. In
the case of Dr. Scheibner, the ability to make herself and
her claims so widely known probably stems from being an
animated speaker, who may appear to those without a very
detailed knowledge of the literature (including health pro-
essionals) to have an encyclopaedic knowledge of vacci-
nation. Most importantly, a willingness to visit towns, no
matter how small, to speak about her beliefs represents an
example of strong grass roots activism. This can also stir
the resolve of local lobby groups to be more fervent in their
public opposition to vaccination. Partly because of the out-
rageousness of her claims, Scheibner’s visits often attract
a strong reaction from local health professionals. This can
perpetuate publicity and community discussion about them,
even seeming to lend her a “whistleblower” status.

2. The response dilemma

Clinicians and public health workers are often perplexed
as to how to deal with the perceived threat from, or repercus-
sions following, visits from Dr. Scheibner or similar spokes-
people. One concern is that a responding publicically might
unwittingly lend credibility to such claims, with some pre-
ferring to let fanaticism speak for itself. However, ignoring
such lobbyists poses its own risks. In the absence of expert
voices refuting the theories advanced, some parents may un-
critically accept the information. The local context will often
determine whether it is appropriate to respond. For health
workers who choose to do so, the following are suggestions
based on a broad range of literature about risk perception
and communication [22].

3. Suggestions for response

• Become familiar with the most common claims that vacci-
nation opponents put forward. Conduct an Internet search
and attend one of the meetings.
• Be available to speak to the media. Inform the journalist
about the qualifications and background of your local or
invited spokesperson. In the case of Vierra Scheibner, her
credentials may not be made explicit and the “Dr.” title can
imply medical training for audiences who may then regard
information with the authority they normally ascribe to
qualified health professionals.
• Acknowledge vaccines, like other medical interventions,
are not 100% safe and effective. Trust is important in
maintaining public confidence in vaccine programmes.
Over confidence in vaccine safety estimates that are later
shown to be incorrect erodes trust [22]. The potential
problems arising from over-confident safety reassurances
were starkly demonstrated at the height of the UK’s
Creutzfeld–Jacob Disease (CJD) affair. The then minister
for Agriculture attempted to show it was safe to eat beef
burgers by feeding one to his daughter. Later, when a
possible link between beef consumption and variant CJD
was recognised, the photo became inscribed in the pub-
lic consciousness as symbolising untrustworthy official
reassurances.
• Promote the importance of vaccine adverse events report-
and making these data publicly accessible [23].
• Avoid fact-for-fact debates, which tend to get lost in detail,
may overwhelm or bore audiences and appear reactive
[24].
• Respond to the emotions raised by the claims then reframe
the debate to centre on protecting children from diseases.
Controversies about vaccine safety tend to draw attention
from this ultimate goal.
• Listen to community concerns about vaccination and be
open and responsive to them [25,26]. Do not respond to
questioning of immunisation in an admonishing way. Such
responses tend to play into the medical arrogance frame
often set by vaccine opponents.
• Audiences with little familiarity with vaccination issues,
for example, new parents, may more readily accept as
mainstream, theories which are outlandish in scientific
terms. Draw attention to the overwhelming medical and
scientific support for vaccination.
• Have prominent community doctors and other credible
sources like infant health nurses from the community
reinforce the importance of immunisation and give their own accounts of caring for people with vaccine preventable diseases [8].

- Use visual images and stories of those affected to jog the community memory of the effects of diseases like polio.

A story or picture can be worth a thousand risk–benefit equations. For example, the following website contains a 1952 photo of a ward of polio sufferers in iron lungs: http://www.immunize.org/images/ca.d/ipcd1861/img0008.htm.

- In order to broaden the coalition of voices supportive of immunisation, obtain the support of other parent organisations like SIDS or autism support groups who do not support claims that these conditions are linked to immunisation [8].

With the rise of the anti-vaccination movement, reduced incidence of vaccine-preventable diseases, increased consumerism and interest in alternative therapies, public health workers will be increasingly compelled to respond to community concerns about vaccination [27]. This point has been highlighted by the attention given to the alleged link between measles–mumps–rubella (MMR) vaccine, inflammatory bowel disease and autism [28]. The above suggestions are based broadly on workshops and conclusions from existing research. However, there is a need to develop and test interventions that help people make considered and balanced decisions about vaccination.

Acknowledgements

The authors are grateful to Donna Mitchell, Simon Chapman, Sandy Leask and Mark Person for comments on earlier drafts. Competing interests: Julie Leask received funds sponsored by Wyeth and GlaxoSmithKline from 1997 to 1999 and 2000 to attend two conferences. Earlier drafts. Competing interests: Julie Leask received funds sponsored by Wyeth and GlaxoSmithKline from 1997 to 1999 and 2000 to attend two conferences.

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