Steve Tully
South Australian Health and Community Services Complaints Commissioner

June 2014

Vaccinations and children's health

Parents living in some near-city communities have recently contacted me, concerned that their doctors have refused the ongoing treatment of their children because those children have not received the recommended childhood vaccinations.

In my role as Health and Community Services Complaints Commissioner I must consider if there is validity to these parents' complaints, which come from people among the approximately two per cent of parents who do not participate in the state-sponsored children's immunisation program. While I understand that these parents would like me to provide an opinion on their rights to refuse vaccination (as would members of the medical and education communities), this is not my role. Rather, I must assess what can be regarded as fair and reasonable action on the part of the doctors, in light of the latest scientific evidence related to vaccinations, their effects and their role in the health of the community at large.

Whether or not vaccinations pose a risk to children's health and, especially, whether they can cause autism, is an issue that has divided Western communities for many years. A research paper published in1998 in the leading medical journal, *The Lancet*, appeared to link vaccinations with autism. Mounting evidence since then has refuted that research and the journal has since retracted the publication. However we still have hundreds of people in this state who believe strongly that vaccinations endanger their children – not only in the risk of 'contracting' autism, but other side effects as well.

These parents tell me that they have made these decisions in the best interests of their children – and do not expect to be denied ongoing medical care as a result.
On the other hand, we have doctors and other medical professionals who say that while they would never refuse to treat someone who is very sick, they choose not to accept unimmunised children as regular patients for 'the common good' – that they are protecting the health of the general community, and specifically those community members who may visit their surgeries. They suggest parents who refuse to vaccinate their children are not only endangering the health of other occupants of their waiting rooms, but also contributing to the loss of 'herd immunity'.

'Herd immunity' is the immunity to a disease built within a society when an overwhelming proportion is vaccinated against it. Due to high levels of vaccination in Australia the children are no longer under threat from the scourges of diphtheria, polio, measles, and other childhood diseases. The World Health Organization (WHO) estimates that, each year, 2.5 million children around the world die of diseases that vaccines can prevent, and that vaccines do prevent the deaths of another two million. Doctors say the decisions of parents to stop vaccinating their children, coming at a time when there is increased travel to countries where some of these diseases still exist - and where anti-vaccination campaigns

against polio, in particular, are now seeing increased numbers of the crippling disease –are eroding this immunity.

As Commissioner, I must look at the evidence related to immunisation, and determine whether generally accepted standards would suggest that immunisation is beneficial to our society – so that medical practitioners are indeed acting in the best interests of their patients in not exposing them to children who have not been immunised.

While no vaccine is 100 per cent safe, or 100 per cent effective, most parents support vaccination, as there is clear evidence the benefit from vaccination far outweighs the risk from the vaccine.

The 2009 publication *State of the world's vaccines and immunization,* supported and produced by WHO, UNICEF and World Bank, states that "immunisation is one of the most powerful and cost-effective of all health interventions … It prevents debilitating illness and disability, and saves millions of lives every year".

The crux of the matter, then, is whether existing evidence indicates that immunisation does have the dangerous side effects some parents believe.

Those who suggest vaccinations may be linked to autism cite research related to factors: one connected with the measles, mumps, and rubella (MMR) vaccine; the other involving vaccines containing the chemical preservative thiomersal (also known as thimerosal), which contains a form of mercury.

Andrew Wakefield's 1998 paper in the Lancet was one that suggested autism was linked to MMR vaccination. When numerous other studies failed to replicate the findings an investigation was launched; Wakefield was discredited due to fraudulent practice.

As a result, leading health groups including WHO, Australia's National Centre of Immunisation Research & Surveillance (NCIRS) the (American) Institute of Medicine, the United States' Center for Disease Control (CDC) and the American Academy of Pediatrics all have come out to say there remains no evidence to suggest a causal link between vaccines and autism.

Then there's thiomersal, which at one time was used in a lot of vaccines – so many that questions were raised about the cumulative effect of the mercury in the thiomersal contained in the vaccines. But again, studies since have shown that children who received vaccines with thiomersal are not more likely to have been diagnosed with autism spectrum disorder than those that weren't vaccinated or received less thiomersal from vaccines.

And as the NSW Health Care Complaints Commissioner points out in his ruling against the Australian Vaccination-skeptics Network (AVN), there is no thiomersal in any of the vaccines on the current National Immunisation Program for young children.

It should be noted that members of organisations such as the AVN do not limit their protests against vaccination to those usually given to children. Others they suggest have potentially dangerous side effects or are ineffective include the pertussis vaccine to prevent whooping

cough, the Gardasil vaccine to prevent cervical cancer, and Anti-D injections for pregnant women whose immune systems may try and reject their unborn fetuses.

In April 2014 the NSW Health Care Complaints Commissioner ruled that the AVN provides misleading information that is ‘incorrect, inaccurately represented or taken out of context’. This ranges from an AVN claim that Gardasil contains only four of the 100 strains of HPV (the proven cause of cervical cancer) and its use is a ‘shot in the dark’ – while evidence shows Gardasil protects against the four HPV strains that are responsible for 70-80 per cent of cases of cervical cancer.

I should note one particular case that has caused concern and questions from parents who might in general support vaccination. This is the CSL Fluvax vaccine that in 2010 caused convulsions in about 100 Australian children. In 2012, it was discovered that particular characteristics of the virus make-up of that year’s strain prompted the response in those young children. The Therapeutic Goods Administration has approved its 2014 influenza vaccine for people aged 10 and over, and recommended that for children aged five to nine, only those deemed to be at-risk receive the vaccine. Those aged less than five must not receive the vaccine.

I emphasise that this is a specific case with a specific cause. In general, increasing numbers of studies reinforce the prevailing view that vaccinations do not cause autism. With this science and evidence as a foundation, and considering also the overwhelming proof of vaccinations’ efficacy against lethal or crippling diseases, I must support the current vaccination program.

It is also my assessment that, based on this science and evidence, doctors who refuse to accept unimmunised children as patients of their practice are acting in the best interests of their patient cohort and the surrounding communities. Requesting that their child patients be vaccinated before coming into their rooms is but an extension of the request to wear a mask if you believe you have the flu or another contagious illness, or the requirement that you use anti-bacterial wash before entering a surgery.

While I understand that this may cause difficulty for some parents, I would suggest that perhaps those parents reexamine the science of immunisation, or seek alternative health practitioners.

In the meantime, I can only suggest parents consider the WHO recommendation, as expressed in its theme for 2014 World Immunisation Week: know, check, protect. Know which vaccines you and your children need. Check that you’re all up-to-date. And receive any vaccines you need to protect yourselves and others.