A submission on the Public Health (Childcare Vaccination) and Other Legislation Amendment Bill 2015

Vaccinating 95% of only children does NOT create herd immunity

'The objective of this Bill is to promote immunisation'. (Page 3 of the Bill)

'When 95% of the population is immunised, herd immunity prevents transmission of highly contagious conditions such as measles.' (Page 2 of the Bill)

Do you believe that if 95% of children were vaccinated Australia would achieve herd immunity? Many people do and they are mistaken. They misinterpret statements such as *'When 95% of the population is immunised, herd immunity prevents transmission of highly contagious conditions such as measles.'* to mean that if 95% of only children are vaccinated, herd immunity will be achieved. Vaccinating 95% of children would achieve herd immunity if the vaccines given to children protected them until they die of old age (and they don't) or if the diseases only affected children (and they don't). Here are a few facts that demonstrate that herd immunity cannot be achieved by vaccinating *only* children.

- Our human 'herd' consists of people from one minute old to 110 years old.
- All the contagious diseases children are vaccinated against can be caught by adults.
- Booster shots are given to people some years after they receive their initial course of vaccine doses to maintain vaccine protection because vaccines provide only short-term protection.
- When a person is overdue for a booster shot they have no vaccine protection and can catch the disease just as easily as an unvaccinated person.
- Adults in Australia are not advised to get regular booster shots until they die against all the contagious diseases children are vaccinated against. The only contagious disease that children are vaccinated against which all adults are advised to have regular booster shots until they die is diphtheria. (Regular booster shots against some other diseases are recommended to some categories of adults, eg hepatitis b, pertussis, tetanus.)

Let's say that today approximately 30% of the Australian human herd are children who are fully vaccinated. That leaves 70% of our human herd without vaccine protection: adults who do not get booster shots and adults and children who have never been vaccinated. The contagious diseases children are vaccinated against can easily spread through our human herd when 70% of the herd has no vaccine protection. Adults who don't get booster shots are sneezing, shaking hands, sharing plates, kissing etc and are just as able to spread diseases as unvaccinated children, yet we do not have epidemics of these diseases.

How does the Australian public benefit when only children, around 30% of our human herd, has vaccine protection while the remaining 70% has no vaccine protection? If fewer children followed the childhood vaccination schedule it would result in 25% or 20% or 15% of our human herd having vaccine protection instead of 30%. With 70% of Australians having no vaccine protection we do not have epidemics. If fewer children were vaccinated, I believe that this would not change. (Obviously there is no need to increase vaccination rates in adults because even with the very low rates of vaccination in adults we have now we see no epidemics of disease.)

This Bill proposes UNLAWFULL discrimination against children

This Bill states that that it is lawful to discriminate against unvaccinated children to protect public health.

'The Anti-Discrimination Act 1991 also provides a broad exemption for actions which are reasonably necessary to protect public health and the aim of the Bill is to protect children and people who work at approved education and care services from vaccine-preventable conditions. Accordingly, the Bill will not lead to unlawful discrimination.' (Page 7)

This Bill proposes preventing children with no vaccine protection from using education services. No one can argue that this is '*reasonably necessary to protect public health'* because the children who attend these services and the adults who work in them will not be protected from 'vaccine-preventable' diseases by locking out unvaccinated children when parents of vaccinated children have no vaccine protection so can carry diseases and can enter these education services whenever they want to. To deny entry to educational services to people younger than eighteen who have no vaccine protection while allowing people older than eighteen who have no vaccine protection to enter them, is unlawful discrimination based on age. (And don't forget that vaccinated children are *in theory* already protected from diseases through being vaccinated.)

As you know in all other States where similar legislation has been introduced parents of unvaccinated children only have to sign a form and their children can access any education centre, so the other States don't discriminate against unvaccinated children this Bill will.

Here's another way of looking at it. Have you had a flu shot this year? When did you last have a diphtheria shot? If you are a woman of child bearing age when did you last have a rubella shot? If you are over fifty when did you last have a tetanus shot? Of course it is none of my business, but the Department of Health recommends these vaccines for adults. Would you support a Bill if it led to adults incurring financial penalties, or if they live in Queensland if it meant that adults couldn't go to their local pub, gym or cinema, if they weren't up-to-date with the vaccinations that the Department of Health recommends for adults? Are adults' rights to decide which drugs they take different to those of parents' rights to decide which drugs their children take?

You surely trust your general practice doctor, as you should, because all doctors follow a legally binding Code of Conduct (issued by the Medical Board of Australia) which instructs them on their obligations to you: *'not exploiting patients' vulnerability or lack of medical knowledge when providing or recommending treatment or services'* and with respect to conflicts of interest: *'when these interests compromise, or might reasonably be perceived by an independent observer to compromise, the doctor's primary duty to the patient, doctors must recognise and resolve this conflict in the best interest of the patient'*. **Why not show this letter with your GP and ask him/her why so many doctors recommend that children follow the entire childhood vaccination schedule?** To enable you to have an informed discussion, here are a few more important facts that illustrate that vaccines, like all drugs, have limitations as well as benefits.

- **Vaccines protect people only against specific strains of a disease**. For example the 'pneumococcal 13' vaccine is designed to protect you against 13 of the 90 known strains of pneumococcal bacteria and haemophilus influenza b ('Hib') vaccine is designed to protect you against 'b' strains of the virus, but not a, c, d, e, f or non-capsulated strains.
- **If you are vaccinated you are only protected against the specific strains that the vaccine is designed to protect you against, you can still catch and pass on any of the other strains of the disease**. In Australia we hear a lot about pertussis (whooping cough) outbreaks. Recently scientists analysed pertussis cases in Australia and found that 84% of the people with laboratory confirmed pertussis were infected with strains of the virus that are not covered by the current vaccine. (R.Lan et al 'New pertussis strain responsible for Australian epidemic', Journal: Medical Observer, 2012.)
- **Some diseases are known to cause more complications in children than in adults, eg pertussis, rotavirus, other diseases are known to cause more complication in adults than in children, eg chickenpox, mumps, rubella**. So people who are vaccinated when they are children against chickenpox, mumps and rubella, are protected when the disease is likely to cause them *least* harm and unprotected when the disease is likely to cause them *most* harm if they don't have regular booster shots when they are adults.
- **Vaccines don't work perfectly in everyone**. Just as some people 'do not respond' to chemotherapy drugs, just as some pain relievers 'work' for some people but not for others, some people do not respond to vaccines. Some of these people, the poor responders, may catch the disease after being vaccinated and develop all the typical symptoms of the disease just like an unvaccinated person. Other people after being vaccinated, the average responders, may catch the disease after being vaccinated and may not develop all the typical symptoms but may still be able to pass the disease on to other people.

If they don't get all the typical symptoms they may not realise they have the disease and would not quarantine themselves. ('Herd Immunity – myth or reality?' Dr Tetyana Obukhanych, greenmedinfo.com)

- **Some vaccines, such as the pertussis vaccine, reduce the severity of symptoms but don't prevent people from catching and passing on the disease**. So if close relatives of a newborn baby get vaccinated against pertussis they can catch pertussis and pass it on to the newborn baby without even realising they have caught pertussis because they don't have severe symptoms. (J.Warfel et al 'Acellular pertussis vaccines protect against disease but fail to prevent infection and transmission in a nonhuman primate model' Journal: Proceedings of the National Academy of Science, 2013.)

Background to the claim *'the benefits of vaccination outweigh the risks'*

If people tell you the benefits of following the childhood vaccination schedule outweigh the risks here are two facts for you to consider if you want to have an informed discussion.

- Around ***forty*** doses of vaccine, all of which contain ingredients which are known to be toxic, all of which are designed to have a lasting effect on a child's immune system, are recommended for Australian children by the time they are four years old.
- The Department of Health can't claim that the benefits of a child having 40-odd doses of vaccines by the time he/she is four years old outweigh the risks because no one has ever assessed the risks of taking so many doses.

Every patient has a legal right to give *'informed consent'* which means healthcare providers must tell patients what '*a reasonable person'* would want to know before patients are asked if they will accept the recommended procedure. This legal right applies just as much to vaccines as it does to surgery. Do you think that a reasonable person would want to know that the combined effect of the 40 doses of vaccine recommended for children has never been assessed? Do you think that all doctors and nurses explain this to parents when they recommend they follow the childhood vaccination schedule? Parents of children who have been harmed by vaccines have good grounds for suing doctors, nurses and healthcare providers for their failure to obtain informed consent if this fact was not explained to the parents before they accepted the vaccines for their children.

For decades scientists and doctors have called for a 'retrospective cohort study' to compare the health of fully vaccinated and unvaccinated children. It isn't an obscure idea and properly done it would give a definitive answer to a logical question: does giving 40 doses of vaccines cause serious harm to a significant number of children such as auto-immune disease, food allergies or autism? A retrospective cohort study would involve selecting several hundred pairs of children, say between 10 and 15 year olds. Each pair would be identical in location, race, socio-economic status, birth weight, etc. The only point of difference between the two paired children would be that one child is fully vaccinated, the other is unvaccinated. There are no ethical difficulties. No child would be denied vaccines in order to participate. Unvaccinated children have already gone without vaccines because their parents decided that they wouldn't have them. No child would be harmed by participating. All the researchers would have to do would be to compare the health records of each pair of children to find out whether there is a statistically significant difference in the number of doctor diagnosed medical, neurological and behavioural conditions between the vaccinated and unvaccinated children.

This type of study to assess the true impact of giving multiple vaccines to children has never been done anywhere in the world. If the medical experts paid to run and to advise the Department of Health are confident that the benefits of giving children 40 doses of vaccine in four years (only America recommends more) outweigh the risks why don't they commissioned a retrospective cohort study to reassure the public and raise vaccination rates? It would cost the Department a tiny fraction of the annual vaccination budget which is well over 100 million dollars. In Australia it would be very easy to do because the vaccination records of every child have been kept by the government since 1996 and every child has access to a similar level of health care. Even if 90% of children are fully vaccinated enough unvaccinated children could easily be found to participate in this type of study.

Is it better to do the study knowing that you may discover that thousands of children have suffered serious, lifelong harm by following the childhood vaccination schedule or is it better to not do the study knowing that thousands more children may suffer serious, lifelong harm by following the childhood vaccination schedule? Would voters in your electorate want you to do something about this? You could introduce a Private Members Bill which would require the Queensland Department of Health to commission a retrospective cohort study. (American Congressman Bill Posey and Congresswoman Carolyn Maloney recently co-sponsored Bills to do just that, proposing a 'Vaccine Safety Study Act'. They could guide you on the detail.)

If you think there is really no need to question the safety of vaccines, did you know that the health of Australian children has deteriorated dramatically in recent decades and that the rate of increase in auto-immune diseases, food allergies and autism in children has been so fast that they must all be caused by something we are doing to our children (an 'environmental' cause)? There are thousands of credible scientific reports that link vaccines to a huge range of health and mental health conditions. Do an internet search on 'vaccines' and 'injury' and you'll find many websites which will refer you to more reports by scientists published by respected peer-reviewed journals than you could ever imagine which indicate that having 40 doses of vaccine causes some children serious, life-long harm.

Background to the claim *'individual children benefit from individual vaccines'*

If people tell you individual children benefit from being protected against individual diseases and government should do all it can to protect children even if their parents don't want them to be protected, here are some facts for you to consider if you want to have an informed discussion. Parents who understand there is no *public* benefit if 95% of children follow the childhood vaccination schedule while adults aren't vaccinated, weigh up the benefits and risks of each vaccine individually and think it reasonable to refuse a vaccine if the likelihood of an unvaccinated child catching the disease, and being harmed by it, is very low.

- The Department of Health recommends that all children have the polio vaccine. The only adults who are recommended polio booster shots are those who may be at risk of exposure such as lab workers, so 99.9% of adults in Australia have no vaccine protection against polio. (By recommending booster shots to some adults the Department is acknowledging that the protective effects of the vaccine given to childrens wear off.) There hasn't been a case of polio in Australia (or America) for over thirty years. You have to eat the faeces of an infected person to catch polio. 99% of people who catch polio suffer no harm or only mild symptoms. How likely is it that an Australian child who doesn't travel overseas will catch polio and be harmed?
- There have been eight cases of diphtheria in Australia over the last ten years. It can be a deadly disease for people at any age. All adults are recommended booster shots every ten years, but most adults don't have them. (Do you?) An unvaccinated child is no more likely to catch diphtheria than an adult who doesn't get booster shots.
- Tetanus is not contagious so there could never be a *public* health benefit from vaccinating people against tetanus. Children are not at greater risk of developing tetanus than adults yet the vaccine is recommended for every child. The tetanus bacterium only produces its toxin in very poorly oxygenated tissue, the elderly and diabetics are at greatest risk, booster shots are recommended for adults over fifty. You can get a tetanus prone wound at any age and Australians have access to excellent medical treatment. Wounds can be cleaned and stitched and a wound that bleeds freely will not develop tetanus because the blood brings oxygen to the tissue. If an unvaccinated person gets a tetanus prone wound such as a burn or crush wound they can be given 'tetanus immunoglobulin' (not the vaccine) which counteracts the toxin. Why do so many doctors and the Department of Health urge parents to vaccinate their children against a condition that isn't contagious that children rarely develop? You could ask the Department how many vaccinated and unvaccinated children have developed tetanus in the last twenty years (my guess only a few) and how many children haven't been vaccinated against tetanus during this period. You could ask the Department if it has any evidence that unvaccinated children in developed countries where children have access to good medical care get tetanus. (Newborn babies in developing countries can die of tetanus due to very poor hygiene and infected

umbilical cords, which has no relevance to Australia.) This vaccine has not been tested to modern standards, it is just assumed that it works: *'The medical establishment chooses to turn a blind eye to the lack of solid scientific evidence to substantiate our faith in the tetanus shot'.* (T. Obukhanych, 'Tetanus shot: how do we know that it works?' vaccinationcouncil.org 2014.) This vaccine is known to occasionally cause very severe side effects. You could ask the Department how many children are known to have suffered severe side effects to the tetanus vaccine in the last twenty years.

Background to the claim *'we need to protect the vulnerable'*

If people tell you what is written in the Bill: *'herd immunity, while protecting those who are already immunised, also protects those who are not, including the most vulnerable and at-risk groups'* they are saying that it is a parents duty to society to have their children vaccinated to protect babies too young to be vaccinated, children with a medical '*contraindication'* to vaccination, people who are '*immunosupressed*' and people who don't *'adequately respond to'* vaccination. Here are a few more facts for you to consider if you want to have an informed discussion.

- People who are 'immunosuppressed' (eg on chemotherapy) are vulnerable to *thousands* of bacteria and viruses, against most of which there are no vaccines. If 95% of children are vaccinated against a dozen diseases immunosupressed people would be less likely to catch one of these dozen diseases from a child, but they would still be able to catch one of these dozen diseases from all the adults they come into contact with who haven't had booster shots.
- Children with a medical 'contraindication' to vaccination would be those with a rare medical condition which leave them with a vulnerable immune system and those in the not so rare situation in which their first vaccine doses have caused them serious harm. Is it a good idea to put every child at risk of serious harm by having vaccines to protect the children who have already suffered serious harm from vaccines? And of course these children with medical contraindications are still at risk of catching all these diseases from adults who don't have booster shots.
- One day old babies are considered old enough to be vaccinated against what is primarily a sexually transmitted disease, hepatitis b, so they start babies on vaccines pretty young. However babies under six months old aren't given a pertussis vaccine, (is it considered too toxic for their young bodies?). If parents, grandparents and older siblings follow Department of Health recommendations on 'cocooning' babies by being vaccinated against pertussis these people can still catch pertussis and they may not get the typical symptoms but may still be able to pass on the disease to the baby. AND the vaccine currently available in Australia doesn't protect people from the strain of the pertussis virus that has been causing most cases in recent years.
- Protecting people who *'don't adequately respond to'* vaccination means because a drug does not work in many people more people should take it.

Background to the claim *'we have serious outbreaks of vaccine preventable diseases'*

If people quote statistics cases ask for enough detail to enable you to discuss them in a meaningful context. The Bill states: *'Between 2010 and 2014, Queensland Health received 6,500 notifications of vaccine-preventable conditions in childcare-aged children (0-4 years).'* What the Bill doesn't mentioned is how many of these children were vaccinated against the disease they contracted or in the case of pertussis in young babies, were surrounded by family members who were vaccinated against the disease, and how many were unvaccinated. Queensland Health could easily have provided those facts. What the Bill also doesn't mention is how many of these children suffered no harm from the diseases and instead gained the benefit of life-long immunity from having had the disease. It's a fact that many of these diseases, eg chickenpox, measles, mumps, rubella, don't typically cause healthy children serious harm. Statistics presented without context can be very misleading.

We regularly see media reports about individuals who have suffered serious harm from a vaccine preventable disease. What these reports often fail to mention is that people who suffer serious harm from vaccine preventable diseases often already have multiple serious health problems.

We see alarming statements in media reports and official publications such as one in the Bill: *'When immunisation rates are not maintained, vaccine-preventable conditions such as measles or rotavirus can spread rapidly, with potentially devastating consequences.'* What the Bill doesn't mention is that high vaccination rates in our human herd against measles and rotavirus are ***not*** being maintained right now because most adults don't get booster shots against measles and no adults are advised to get even one shot against rotavirus and yet these diseases ***are not*** spreading rapidly, there are ***no*** devastating consequences.

Background to the claim *'without high levels of vaccination diseases would return, a pandemic could occur'*

If people tell you that vaccines have eradicated diseases and we must maintain high levels of vaccinations or else pandemics will reoccur you have to go back to the beginning. For example, polio has been eradicated in Australia despite the fact that we have never had high levels of vaccination in our human herd. At no time have all adults been required to have the vaccine, so at no time has more than 30% of our human herd had vaccine protection against polio. Adults can catch polio just as easily as children. As you have to eat the faeces of an infected person to catch polio effective sewage treatment and clean water supplies protect us all. All the diseases that over 100 years ago caused epidemics were largely under control long before vaccines were introduced. (There are many scientists, doctors and historians who prove this, eg Dr S.Humphries and R.Bystrianyk 'Dissolving illusions: disease, vaccines and the forgotten history'.) The claim that polio injured lots of children in Australia generations ago is not a reason for vaccinating children in Australia today.

Every few years the media warns us of a possible pandemic and reassures us that scientists are working on a new vaccine that will save us. Most recently the threat was the ebola virus. I heard the Federal Health Minister Peter Dutton explain in October 2014 (on Radio National AM, in an interview with Fran Kelly) that the ebola virus is transmitted through exchange of body fluids. (Therefore, there was never a risk of a pandemic, because it is just like hepatitis b, you have to exchange blood, saliva, semen, vaginal fluid etc with an infected person to catch the ebola virus.) There was a crisis in some African countries, Peter Dutton explained, because in those countries it is traditional for relatives of people who have died to wash the dead body and *"consume the wash water"*. Did the ABC immediately start explaining to their audience that there is no risk of a pandemic because in most countries people don't practise such unhygienic funeral rites? Not that I heard. I was delighted to hear a Federal Health Minister share key facts with the Australian public to quell fears of a pandemic. I hadn't come across those facts before he mentioned them. It was months before I started seeing media reports which acknowledged those facts, which was long after the pandemic had failed to develop.

There are questions all parents need answers to: *How likely is it that we or our children will catch the disease if we are not vaccinated? What will happen to us if we do catch the disease? Do the vaccines work? What is the likelihood that the vaccines will harm us?*

Parents who understand there is no public health justification for complying with the childhood vaccination schedule decide on a case by case basis which vaccines to accept for their children. They don't want their children to take drugs which carry the risk of harmful side effects unless they feel it is necessary. Here are a few more facts to help you understand why some parents may choose to refuse some vaccines.

Chickenpox. It is typically a mild disease in childhood and causes more serious complications in adults.(1) Predicted consequences of mass vaccination of children against chickenpox were that it would shift the age at which people get chickenpox from childhood to adulthood AND increase the number of adults who develop shingles, a far more serious disease.(1) The number of shingles cases in adults has risen in Australia and the USA since the introduction of the chickenpox vaccine, eg in Australia from 1,180 in 2006 to 5,468 in 2014.(2) The medical experts in the UK understood this would happen (this prediction wasn't printed only in an obscure scientific paper missed by experts) and the UK government did not introduce the chickenpox vaccine, the number of adults suffering shingles in the UK has not risen.

Diphtheria. It is a rare disease that can harm to people at any age. Only eight cases have been reported in Australia in the last ten years (2) despite the fact that few adults have protection against it because few get booster shots (recommended every ten years). There have been very few outbreaks in developed countries in recent decades. *'Socioeconomic factors played an important role in a Swedish epidemic between 1984 and 1986, which mainly affected users of drugs and alcohol. An epidemic of diphtheria that occurred in the US in the early 1970s mainly affected adults who were heavy alcohol users from low socioeconomic groups.'*(3)

Flu (influenza). Around 200 viruses cause flu like symptoms. The Cochrane Collaboration (scientists from 130 countries working together free from commercial sponsorship and other conflicts of interest) evaluated all the available data on flu vaccines and estimated that only 10% of known flu viruses are covered by the vaccines. They also reported: '*Vaccination (against flu) shows no appreciable effect on working days lost or hospitalisation'.*(4) So if you get an annual flu shot it will protect you against approximately 10% of the viruses that cause flu-like symptoms and you are not likely to take fewer days off work or reduce the risk of going to hospital. (You'd also get a dose of mercury because it is used in flu vaccines that are sold in multi-dose vials.) To find out how a simple flu shot can cause lifelong harm do an internet search on 'Saba Button'. It appears that the vaccine manufacturer, the Western Australian State government and the Federal government all contributed to a $10 million compensation payment for Saba. If you read Kelly and Kelley ('Evidence based policies for the control of influenza', Medical Journal of Australia 2013) you will find out that the flu vaccine was licensed in Australia for use in babies of six months old despite the fact that it was known at the time that no clinical trials had been done in children and it was known at the time that children can react differently from adults to vaccines. You will find out that clinical trials of the vaccine were carried out in children for the first time ***three years after*** the vaccine was approved for use in children (in 2005-6) and the results of this study were published ***seven years after*** the vaccine was approved for use in children (in 2009). You will find out that this study revealed there was a marked difference in the risk of fever in children depending on the annual formulation of the vaccine (the manufacturers are allowed to vary the formulation of flu vaccines every year). In 2009/10 there were 6,290 adverse reactions to this vaccine in children under seven years old reported to the Australian government including thousands of cases of seizure and four deaths.

Hepatitis b. It is transmitted by exchange of body fluids, blood, semen etc. Adults considered at risk include healthcare workers, prostitutes, people who have anal sex and people who share injection needles. A child is only considered at risk only if a primary carer or sibling has the virus. Babies can be get hepatitis b from their mothers during child birth, pregnant women are routinely tested for the virus and are informed if they have it. Around five children are diagnosed with hepatitis b in Australia every year. How long the protective effect lasts when the vaccine is given to babies is not known, it is possible that they will have worn off before the baby grows up and is old enough to engage in high risk activities. (The US Center for Disease Control has written: '*Among vaccinated cohorts who initiated Hepatitis B vaccination at birth, long-term follow-up studies are ongoing to determine the duration of vaccine-induced immunity.'*)

Human papilloma virus. Approximately 150 strains of HPV virus have been identified. They are spread through direct skin-to-skin contact during vaginal, anal and oral sex. Cervical cancer is already controlled if women get regular pap smear tests which are 100% safe. ***'****Seven countries approved the (HPV) vaccine and established related immunization programs exceptionally quickly even though there still exist many uncertainties as to the vaccine's long-term effectiveness, cost-effectiveness and safety.'*(5) The manufacturers were not obliged to prove that the vaccine prevents cervical cancer. Instead the vaccine was demonstrated to prevent 'pre-cancerous lesions' and was developed to protect against only a few of the 150 strains of the virus. Around 70% of pre-cancerous lesions naturally disappear within three years anyway.(6) In Australia the 'independent' committee of experts that first assessed the vaccine decided not to put it on the pharmaceutical benefits scheme. This decision was overruled by Prime Minister Howard. Tony Abbott was Health Minister when this vaccine was assessed. At the time he said: *"**I won't be rushing out to get my daughters vaccinated (against Human Papilloma Virus), maybe that's because I'm a cruel, callow, callous, heartless bastard but, look, I won't be**"*. I wonder whether now, with the benefit of hindsight, Tony Abbott thinks he made the right decision on behalf of his daughters back when he was Health Minister. The Japanese government last year withdrew its recommendation for the HPV vaccine because of an unacceptably high rate of very serious side

effects. Last year Dr. Dalbergue, a Merck employed doctor in France, said in an interview (Journal: Santé Principe) about Merck's HPV vaccine Gardasil *'I predict that Gardasil will become the greatest medical scandal of all times because at some point in time the evidence will add up to prove that this vaccine, technical and scientific feat that it may be, has absolutely no effect on cervical cancer and that all the very many adverse effects which destroy lives and even kill, serve no other purpose than to generate profit for the manufacturer.'*

Invasive bacterial disease caused by haemophilus influenza b (Hib), pneumococcal and meningococcal bacteria. Hundreds of strains of bacteria can exist in the human body for decades without causing harm. For as yet unknown reasons these bacteria can suddenly invade body parts in which they are not usually found and they then cause harm. This can happen to people of any age. The vaccines protect against only a few specific strains. For example, the Hib vaccine protects against b strains of haemophilus influenza, but not a, c, d, e, f or non-capsulated strains. The pneumococcal 13 vaccine protects against 13 of the 90 known strains of pneumococcal bacteria. (Streptococcus bacteria, against which there are no vaccines, can also cause invasive bacterial disease.) *'The vaccines have been found to reduce incidence of invasive disease due to the targeted strains. But other strains have emerged as significant causes of invasive bacterial disease, for example Hia has caused increasing numbers of cases of severe infection in young children with a high fatality rate over the 10 years to 2013.'(7)* According to the European Centre for Disease Prevention and Control, in both 2010 and 2011 the highest notification rate for haemophilus influenza invasive disease among infants were for non-capsulated strains, also not covered by the Hib vaccine. So it appears that when conditions occur in a vaccinated person that enable bacteria to cause invasive disease many other strains of bacteria that are present can take the place of the few strains removed by vaccines.

Measles. It is usually a mild disease but can cause complications at any age. In a recent outbreak in France (22,000 reported cases) 11% had complications (including pneumonia, ear infections, hepatitis, pancreatitis and diarrhoea), 10 people died, of whom 7 were 'immuno-deficient' through having a medical condition, most who died were over 30 years old.(8) Researchers predicted that introduction of the measles vaccine would eventually lead to large outbreaks of measles (9) and stated: '*We predict that after a long disease-free period, the introduction of infection will lead to far larger epidemics'*(10.) Measles outbreaks regularly occur in highly vaccinated populations, Dr. Poland, Professor of Medicine and leader of Mayo Clinic's Vaccine Research Group, stated: '*measles outbreaks also occur even among highly vaccinated populations because of primary and secondary vaccine failure, which results in gradually larger pools of susceptible persons and outbreaks once measles is introduced. This leads to a paradoxical situation whereby* ***measles in highly immunized societies occurs primarily among those previously immunized.****'*(11) Vitamin A has been used to reduce rates of complications, one study reported that giving large doses of vitamin A to patients hospitalised with measles reduced the death rate by 60% overall and by 90% in infants.(12) There is also evidence that indicates that having measles protects a person from allergic illnesses and autoimmune and degenerative diseases later in life.(13)

Mumps. It is usually a mild disease, more complications can occur in adulthood than in childhood: men can become sterile, foetuses of pregnant women can be harmed. If children receive this vaccine they become vulnerable to mumps when they reach adulthood, the period of greatest vulnerability, because the vaccine's protective effects wear off. Outbreaks occur in young adults which demonstrates that the protective effects of the vaccine given to children wears off.(14)

Pertussis (whooping cough). Young infants are particularly vulnerable to this disease. The vaccine protects people only against specific strains. In Australia large outbreaks have occurred in recent years in which 84% of cases have been caused by strains not covered by the vaccine.(15) The same has occurred in other countries, eg the Netherlands.(16) Outbreaks of pertussis occur in the USA and researchers investigating one outbreak found the highest level of disease was in fully vaccinated 8-12 year olds. Unvaccinated and undervaccinated children did not contribute significantly to the outbreak. They estimated that the vaccine's protective effect wears off after only 3 years.(17) Infants who get pertussis are often infected by older siblings, parents or caregivers. A recent study in which baboons were deliberately infected with pertussis found that recently vaccinated individuals can carry the bacteria and infect others while not developing symptoms.(18) So recommending that

close relatives of newborn babies be vaccinated against pertussis could lead them to unknowingly infect the baby.

Polio. Australia and the USA have been free of polio for over 30 years despite the fact that few adults have vaccine protection (booster shots are only recommended for 'at risk' adults, eg lab workers who could handle infected samples). As the disease is transmitted by the faecal-oral route good water purification and sewage treatment protects us all.

Rotavirus. Rotavirus is one of many viruses and bacteria that cause gastroenteritis. A complication of any bout of gastroenteritis that affects young children is dehydration. If parents are taught simple methods to prevent dehydration in children and are taught to recognise the symptoms of dehydration, children would be protected from gastroenteritis induced dehydration regardless of the bacteria or virus involved.

Rubella. It is a mild disease, it can cause harm to foetuses so women of childbearing age are recommended the vaccine. The Cochrane Collaboration has not been able to identify any research that assesses the effectiveness of the rubella component of the MMR vaccine (19) so we have to just assume it works, there is no evidence. The primary benefit of vaccinating children must be that they won't infect pregnant women who have refused to have the vaccine and who can still catch rubella from adults who are not required to have booster shots.

Tetanus. As mentioned, it is not a contagious disease. It is unlikely to occur in children who have a healthy blood supply because tetanus bacteria only produce toxins in tissue that is anaerobic. For this reason elderly people and diabetics are at greatest risk. The vaccine has not been tested to modern standards: *'The medical establishment chooses to turn a blind eye to the lack of solid scientific evidence to substantiate our faith in the tetanus shot'.*(20) There is no public health justification for vaccinating children against a disease which is not contagious.

Finally

Vaccines, like all drugs, have benefits, limitations and side effects. There is no public health benefit from vaccinating only children when adults don't get regular booster shots. Patients should be given all the important facts before being asked whether or not they wish to take these drugs. Patients should be free to decide which of these drugs they wish to accept and which they do not wish to accept without being coerced by governments.

References

(1) P.Welsby, 'Chickenpox, chickenpox vaccination, and shingles' Postgraduate Medical Journal, 2006. **AND** Goldman & King 'Review of the United States universal varicella vaccination program: Herpes zoster incidence rates, cost-effectiveness, and vaccine efficacy based primarily on the Antelope Valley Varicella Active Surveillance Project data', Journal Vaccine, 2012
(2) Australian National Notifiable Diseases Surveillance System: number of notified cases of 'vaccine preventable diseases' in Australia
(3) Eurosurveillance, 'Why do adults contract diphtheria?' 1997
(4) The Cochrane Collaboration, V.Demicheli et al, 'Vaccines to prevent influenza in healthy adults' 2014
(5) M.Haas et al, 'Drugs sex money and power: an HPV vaccine case study', Health Policy Journal, 2009
(6) Tomljenovic L et al, 'Human papillomavirus (HPV) vaccines as an option for preventing cervical malignancies: (how) effective and safe?' Journal: Current Pharmaceutical Design, 2013
(7) M.Ulanova, 'Global Epidemiology of Invasive Haemophilus influenza Type a Disease: Do We Need a New Vaccine?' Journal of Vaccines, 2013
(8) D.Antona et al. 'Measles Elimination Efforts and 2008–2011 Outbreak, France' US CDC Journal: Emerging Infectious Diseases, 2013
(9) Dr David Levy, 'The future of measles in highly immunized populations: a modelling approach' American Journal of Epidemiology, 1984
(10) J.Heffernan and M.Keeling, 'Implications of vaccination and waning immunity' Journal Proceedings of the Royal Society, 2009

(11) Dr Poland Editorial 'The re-emergence of measles in developed countries: Time to develop the next-generation measles vaccines?' Journal Vaccine, 2012
(12) W.Wafaie et al 'Vitamin A supplementation and child mortality: a meta-analysis' Journal of the American Medical Association, 1993
(13) Rosenlund et al 'Allergic disease and atopic sensitization in children in relation to measles vaccination and measles infection.' Journal: Paediatrics, 2009
(14) USA Today, Feb 8, 2015 'Mumps outbreak in Idaho (University of Idaho) spreads to Washington state'
(15) R.Lan et al 'New pertussis strain responsible for Australian epidemic', Journal: Medical Observer, 2012
(16) Mooi et al. 'Polymorphism in the Bordetella pertussis Virulence Factors P.69/Pertactin and Pertussis Toxin in The Netherlands: Temporal Trends and Evidence for Vaccine-Driven Evolution Journal Infection and Immunity 1998
(17) Witt et al. 'Unexpected limited durability of immunity following acellular pertussis vaccination in pre-adolescents in a North America outbreak' Journal of Clinical Infectious Diseases, 2012
(18) J.Warfel et al 'Acellular pertussis vaccines protect against disease but fail to prevent infection and transmission in a nonhuman primate model' Journal: Proceedings of the National Academy of Science, 2013
(19) V.Demicheli et al, 'Using the combined vaccine for protection of children against measles, mumps and rubella' Cochrane Collaboration 2012
(20) T.Obukhanych, Immunologist, 'Tetanus shot: how do we know that it works?' vaccinationcouncil.org 2014