



MMR Vaccine

Price
30p

On 30th August 2001, as concerns about the MMR vaccine began to grow rapidly, **The Independent** published the following article by **Jeremy Laurance**, entitled “**Don’t give in to this misguided crusade by middle-class parents**”. It gives the basic facts about MMR.

“What is it about MMR? Another survey, this time by the *Today* programme on Radio 4, has once again shown widespread public alarm about the triple vaccine against measles, mumps and rubella (German measles). Two-thirds of those polled, according to the BBC, think that parents should have the choice of three single vaccines for their children, if that is what they want.

Extraordinary, is it not, that Britain’s middle classes have whipped themselves into such a frenzy over MMR? Given all the threats to life and limb to which children are exposed - tobacco and roads are two that top my list - it is remarkable that parents are prepared to devote so much time to minimizing what is an already infinitesimally small risk from a single childhood vaccination. If they devoted half as much energy to stopping smoking and slowing traffic, think how much genuinely safer for children this country would be.

But I digress. For the real problem here is that the arguments against MMR are completely wrongheaded and frankly, daft. The effect is to increase the risk, both to the individual child and to the wider community. It is not too strong to say that the continued campaign against MMR threatens a public health disaster.

Let us take the issue of choice first, for this is what most exercises parents involved in this debate. Whatever the facts, it is said, it must be just that parents have the right to give their children them singly, even if ultimately that option is proved less safe. Parental choice is sacrosanct.

It is this, superficially laudable, sentiment which presumably explains the *Today* poll finding. But the argument is flawed. It is astonishing how many intelligent parents, who have spent hours carefully weighing the evidence for and against MMR, have neglected to do the same for the single vaccines that they favour.

They blithely assume that the single vaccines are the same as the component parts of the triple MMR vaccine, and that by having them singly they can avoid the theoretical “shock” (for which there is no evidence) all three at once delivers to a child’s developing immune system.

Unfortunately, the single vaccines are not the same. No safety review has ever been conducted of the single measles vaccine, which is not licensed in the UK. Many parents who have paid for the single mumps vaccine privately will have received the Urabe or Rubini strains

imported from the continent. The Urabe strain, which was included in the earlier version of the MMR vaccine, was withdrawn after it was linked with cases of aseptic meningitis. It was replaced, as a constituent of MMR, by the Jeryl Lynn strain in 1992. The Rubini strain has not been licensed in the UK since it’s effective in only 12 per cent of children.

Even if the single vaccines were equivalent, which they are not, giving three at intervals is inherently less safe than giving one. During the intervals between the separate vaccines, the child remains exposed to the risk of catching the illnesses against which it has not been vaccinated. Furthermore, some parents will inevitably fail to return for the second and third jabs, reducing the level of cover in the community. In Japan, the only country where single vaccines are recommended, regular measles outbreaks have occurred since the early 1990s, and between 1992 and 1997 there were 79 deaths.

MMR is much more widely used than the single vaccines and has consequently been more intensively studied. At least 500 million doses have been given worldwide, and continuous post-market surveillance has not revealed any significant risk. Four specific studies set up to examine the claims of a link with autism and bowel disease have failed to confirm them. Although cases of autism have risen dramatically in the last decade this is thought to be largely, if not wholly, because it is better detected.

This is still not enough to satisfy many parents. They are alarmed by the continuing publicity around MMR and they insist they must have the right to choose, even if that means making the wrong choice.

But this is a libertarian step too far and one that threatens the public good. We already accept restrictions on our right to choose, in the interests of protecting both personal and public safety. The clearest example is the ban on drink-driving. We accept it because we know the terrible consequences of the alternative - shattered bones and smashed lives. Nor is this only about the protection of others. Seatbelts and motorcycle helmets are also compulsory - the state’s attempt to protect us from ourselves.

A large part of the reason why the campaign against MMR has been able to gain momentum is that there is no equivalent of the roadside carnage that reminds us regularly of the danger of drink-driving. It is precisely because of the success of MMR that we no longer see in Britain the consequences of the diseases against which it protects.

Yet measles is a killer. Though most adults over 40 will remember it as a mild fever accompanied by a rash, it can lead to serious complications including encephalitis

An ALDES Briefing Note

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Comments are welcome and should be sent to the ALDES Secretary Richard Balmer at 79, Links Drive, Solihull B91 2DJ or email: richard_balmer@blueyonder.co.uk

(swelling of the brain) and death. Mumps can cause sterility, and rubella can result in birth defects if passed on to pregnant women. There have been no measles deaths in the UK since 1990, but in 1988, the year MMR was introduced, there were 76,000 cases and 14 deaths*.

There is one other argument that the anti-MMR lobby trots out. It is that confidence in MMR - thanks largely to their efforts - is falling. It must be better to allow parents single vaccines than to risk children having none.

It is true that the current position is bad, but it is not yet a disaster. Nationally, vaccination rates have dropped from 93% to 88% (and lower in some areas). During the whooping cough vaccine scare of the 1970s, vaccination rates fell below 50% (and it was followed by a series of epidemics). We are teetering on the edge of the abyss - but it is not yet time to jump into it. Unless vaccination rates fall dramatically, the Government must hold firm and work to rebuild confidence in MMR.

The worst feature of this saga is what it tells us about the nation's loss of confidence in science. The best scientific research shows that MMR is safe. That is what must govern Britain's policy. If ministers yield to the mob, even one composed of the chattering classes, it will be a black day for science, for health and for children."

Update

Since Jeremy Laurance's article was published, the take up of MMR has fallen further (to below 80% - much lower in some areas, though the fall seems to be tailing off). As scientists predicted, the first cases of measles have re-appeared. 145 cases were reported to the Health Protection Agency in the second quarter of 2003, up from 52 in the same quarter the previous year. Simultaneously cases of mumps rose from 84 to 467. Outbreaks continue to increase. The first UK fatality occurred in March 2006

It is natural that parents whose child falls seriously ill will look for a cause. Unhappily this can lead to the 2+2=5 syndrome where it is a short leap to link an illness with *any* apparent hazard such as a factory chimney, phone mast, traffic fumes, old tip - or in this case, a vaccine. The more times MMR is described as 'controversial' by the press and the more allegations printed, the more parents will choose to suspect MMR. It is widely, but *wrongly*, believed that there is never 'smoke without fire'. Suspicion, especially in today's febrile climate, is 'infectious'. It grows on itself.

Two key claims were made which threw the most intense suspicion on MMR. First that commonly 'signs of autism appeared a month or so after the MMR vaccination'. If this were so the proximity of the 2 events would obviously give weight to the link. The second was that the number of cases

* From 1968 - 1988 protection against measles came from a single vaccine in the 2nd year of life. Uptake never exceeded 76%. In the 10 years before MMR there were c. 1 million notified cases of measles and 160 deaths. In addition c. 5000 children had to be admitted to hospital with convulsions and between 200-1000 with encephalitis. An estimated 40 ended up with a fatal v-CJD like complication.

WHO statistics for 1998, show that measles accounted for an estimated 900,000 deaths worldwide

of autism had steadily increased since MMR was introduced.

A detailed study of case histories by researchers at the Royal Free Hospital reached two conclusions. First that a rise did occur but *flattened off* in 1992. The researchers had no doubt that the rise in autistic cases was due *solely* to a lowering of the threshold of behaviour which doctors diagnosed as autistic. In other words, formerly minor cases of autism were not recognised or recorded as such. Second they discovered that the proportion of parents reporting a one month link between the jab and the onset of autistic behaviour increased *only after* press speculation had raised this point. Other researchers pointed out that the first signs of autism tend to appear at the age the MMR jab is normally given. In other words the timing is mere coincidence.

The key figure was a Dr Wakefield. Though limited to a study of only 12 children he genuinely believed he had found a link between measles vaccine in the gut and bowel disease. Unusually the resulting scientific paper, published in 1998, was promoted at a full press conference. It may have been with the best intentions, but it was here that Dr Wakefield alarmed the world by *speculating* that there was a link between the bowel disease he had found and the brain disorder, autism, and hence a link between MMR and autism. Cases of autism were rising. Coming soon after the BSE debacle here, it seemed, was another apparent example of the government and scientific establishment getting it horribly wrong. It was a gift for both tabloid and broadsheet press. They created a climate of suspicion if not fear. Many parents spent £200+ for separate jabs - and worse protection for their children

The debate raged. Then, in February 2004, the Sunday Times reported that Dr Wakefield had been *paid* to see if a link between MMR and autism could be established but had failed to declare this. Immediately his objectivity was doubted and support fell. Then in March 2005 the Japanese, who had been using 3 separate jabs due to problem with an early version of MMR, reported that cases of autism had risen in that country too. That, coupled with a study which sought and failed to replicate Dr Wakefield's findings in an identical trial to his, reduced suspicion further and should ultimately bring the controversy to an end.

There are 3 key points to make. First the Government's scientific advisers (and ministers themselves) should receive credit for sticking to their guns. They believed MMR represented the 'gold standard' and that it would be ethically wrong to offer the more risky, 3 jab, option.

Second, science in the UK is well regulated. Despite BSE, government scientists are much more likely to be right than wrong.

Third, the lesson must be learnt that 'crying wolf' is not cost free. The press, pressure groups like Jabs and MPs like Julie Kirkbride must share the blame for every child who has fallen ill and the one death so far.

Research into what causes autism continues. Research in the Netherlands indicated links with alcoholism in the mother, other physical abnormalities, and genetic traits, though the sample size was small. Genetic susceptibility is being suggested in other studies too.