Public perception of immunisation. Communication equals coverage?

Prof. David Salisbury CB
FRCP FRCPCH FFPH FAMSci
New cancer vaccine will end routine smear tests

By Nigel Hawkes
Health Editor

CERVICAL cancer, which kills 300,000 women a year around the world, could be largely prevented by a vaccine, researchers have found.

The first big study of a cervical cancer vaccine has proved 100 per cent successful — a "stunning result", according to one specialist. The results offer hope that women may be

'Cancer is not the automatic death sentence it was. The trend is one of incremental but extraordinary progress'.

Leading article page 23

efficiency, even over a short time like two years, is a really good result."

Gardasil will be competing for a market potentially worth £2.2 billion a year with a rival product, Cervarix, from GlaxoSmithKline which has also shown excellent results in trials.

The results come from a Phase III multinational trial, one of the final pieces of evidence needed to make sure:

A REVOLUTIONARY vaccine could wipe out cervical cancer, it was revealed yesterday.

By EMMA MOSTON

Miracle vaccine available next year

The new drug called Gardasil could save the lives of 300,000 women a year worldwide and could mean an end to smear tests.

It works by blocking sexually-transmitted human papilloma virus (HPV), which causes the cancer.

Women who took part in the multinational trials included British girls aged 15 to 25 who have received three jabs over six months.

Others were given a single jab — and the results were almost as good, with just one case of cervical cancer.

Professor Peter Righy, chief executive of the Institute of Cancer Research, said: "The vaccine, marketed as Gardasil, could go on the market in the US before the end of the year..."

Britain is lagging behind Europe in failing to fast-track life-saving jabs, he said.

Nearly 3,000 people in the UK are diagnosed with cervical cancer each year, so it is encouraging to hear it may be possible to dramatically reduce this number.

The vaccine could go on the market in the US before the end of the year..."
Seven in ten girls are likely to be vaccinated against the human papillomavirus (HPV) when a £100m national UK vaccination programme comes into effect in the autumn, according to a fast tracked study published on bmj.com today.

The Manchester-based pilot study is the first to look at whether the vaccine will be accepted by enough parents to ensure the success of a national UK immunisation programme, and how easy it is to deliver such a programme to adolescent girls.

Many parents 'block cancer jab'

Nearly three in 10 parents failed to agree to their children receiving a new cervical cancer vaccine during a trial.

The jab, being rolled out in the UK this year, has proved controversial as it works by making girls immune to a sexually transmitted infection.

One in five parents did not return consent forms, while 8% sent a refusal letter, although few cited fears about promoting promiscuity.

Anti-cancer jab shunned

One in three girls refuses vaccine to guard against cervical virus

The vaccine works by making girls immune to strains of a STI

By Jenny Hope
Medical Correspondent

the vaccine is ineffective against
Girls expected to have cancer jab

Seven out of 10 girls could be vaccinated against the disease that causes cervical cancer, according to a pilot study looking at uptake. Girls

Parents 'refuse cancer jab for children'

By Kate Devlin, Medical Correspondent
Last Updated: 12:19AM BST 25/04/2008

One in three parents could refuse to allow their teenage daughters to receive a new cervical cancer jab amid fears about its long-term safety, a study suggests today.

1 in 5 parents refuse daughters' cervical cancer jab

Parents support sex-virus vaccine

Parents of seven out of ten girls are likely to back an offer of protection against the virus that causes cervical cancer, a
Understanding risk – numeracy.

'Third of UK postcodes' have slow broadband speeds

A third of homes in the UK have broadband speeds well below the national average, according to research from price comparison site uSwitch.
The role of the media in reporting on vaccination issues.

- Vaccination affects huge numbers of 'readers' or 'viewers'.
- It is 'political' since it is recommended by Governments.
- It plays victims against the establishment, and experts against experts.
- The science element gives it an aura of mystique.
- Communicable diseases are no longer feared - vaccines are now.
Scientists fear MMR link to autism

By SALLY BECK, Mail on Sunday

New American research shows that there could be a link between the controversial MMR triple vaccine and autism and bowel disease in children.

The study appears to confirm the findings of British doctor Andrew Wakefield, who caused a storm in 1998 by suggesting a possible link.

Now a team from the Wake Forest University School of Medicine in North Carolina are examining 275 children with regressive autism and bowel disease - and of the 82 tested so far, 70 prove positive for the measles virus.

Last night the team's leader, Dr Stephen Walker, said: 'Of the handful of results we have in so far, all are vaccine strain and none are wild measles.

'This research proves that in the gastrointestinal tract of a number of children who have been diagnosed with regressive autism, there is evidence of measles virus.

'What it means is that the study done earlier by Dr Wakefield and published in 1998 is correct. That study didn't draw any conclusions about specifically what it means to find measles virus in the gut, but the implication is it may be coming from the MMR vaccine. If that's the case, and this live virus is residing in the gastrointestinal tract of some children, and then they have GI inflammation and other problems, it may be related to the MMR.'
Wednesday, January 26, 2011

The Daily Mail (UK) continuing sorry contribution to fear, uncertainty, doubt, and vaccine fears

The article that won’t die: Sally Beck’s "Scientists fear MMR link to autism," published in the Daily Mail on May 28, 2006.

That’s right, 2006.

It gets worse. Two of the complainants in the Omnibus Autism Proceeding, the Cedilos and Hazelhursts, relied upon the unpublished Walker et al. research. Both the Special Masters in the hearings, and the presiding judge in the following Hazelhurst appeal, dismissed the evidentiary value of the Walker et al. study (exerpts from the hearings and the appeal are below). In other words, the Walker data have been examined and found unconvincing, because it was scientifically suspect.

The Walker study (never published) in no way validates Wakefield’s fraud. The MMR vaccine still does not cause autism.


Thanks to the Daily Mail’s perverse habit of not date-stamping articles and scrubbing comments, plus having a date-stamp above the header, a casual reader may not realize that the article is 4 and a half years old.

WINSTON-SALEM, N.C. – An American scientist whose research replicates a connection published in England in 2002 between the measles virus and bowel disease in autistic children strongly warns against making the “leap” to suggesting that the measles vaccine might actually cause autism.

“That is not what our research is showing,” said Stephen J. Walker, Ph.D., an assistant professor of physiology and pharmacology at Wake Forest University Baptist Medical
The new media environment -
Characteristics of vaccine reporting.

- Reference to 'Scientists ...' to establish credibility of rogue views.
- Lack of detail of appropriateness of expertise of 'scientists' – e.g. Dr Vera Schreibner, 'author of 100s of papers on vaccines', has a degree in micropalaentology.
- Reporting of findings as scientific truths, without acknowledgement of doubt.
- Failure to report negative findings that deny earlier false claims.
- Earlier unsubstantiated claims become reported as if accepted truth.
- Opinions of unqualified individuals with a mission are given equal or more prominence than relevant authorities.

ALL OF THESE ARE STANDARD PROCEDURE FOR ANTI-VACCINE GROUPS.
Kicking against the pricks: vaccine sceptics have a different social orientation

Jeroen Luyten1,2, Pieter Desmet3, Veronica Dorgali4,5, Niel Hens1,6 and Philippe Beutels1,7

http://eurpub.oxfordjournals.org/content/24/2/310.abstract

In any country, part of the population is sceptical about the utility of vaccination. To develop successful vaccination programmes, it is important to study and understand the defining characteristics of vaccine sceptics. Research till now mainly focused either on the underlying motives of vaccine refusal, or on socio-demographic differences between vaccine sceptics and non-sceptics. It remained till now unexplored whether both groups differ in terms of basic psychological dispositions.

**Methods:** We held a population survey in a representative sample of the population in Flanders, Belgium (N = 1050), in which we investigated whether respondents' attitude to vaccination was associated with their basic disposition toward other community members or society in general, as measured by the Triandis and Gelfand social orientation scale.

**Results:** We found that sceptics and non-sceptics have a different social orientation, even when several variables are controlled for. More specifically, vaccine sceptics scored significantly lower on both horizontal individualism and horizontal collectivism, indicating a lower disposition to see others as equals.

**Conclusion:** These findings need confirmation in the context of different countries. Such insights can be valuable to optimize the design of effective communication strategies on vaccination programmes.
‘Imagine this scenario: you’re covering a story on circumnavigating the globe so you interview a geographer to get their views, but for the sake of balance you also get a representative from the Flat Earth Society. Seems absurd right? Sure. But as a scientist, I see this kind of ridiculous “balance” happening all the time in stories concerning science and medicine. And it's not just bad because it insults my delicate scientifical sensibilities, research now tells us that it can actually be harmful’.

‘Let’s look at vaccination as an example. Assume that 99% of experts support the view that childhood vaccinations are overwhelmingly safe and effective, whilst 1% do not. Why then would the mainstream media run stories where a doctor or scientist offers a qualified, considered, researched, opinion and then turn to a wing nut who’s spent a couple of hours on Dr Google and has decided vaccines are bad, m’kay?

‘There’s a term to describe giving more time to opposing view points than the evidence actually supports – false balance’.
‘Whilst no one gets hurt if you ask a flying carpet salesman questions about commercial flight, the consequences of people not vaccinating are real and potentially tragic. With vaccination, there is not debate. The science is in and the benefits far outweigh the risks. No balance required’.
‘There’s evidence and then there’s bulldust. It's a journalists job to distinguish between them, not to sit on the fence and bleat balance, especially when people’s health is at risk.
The effect of falsely balanced reporting of the autism-vaccine controversy on vaccine safety perceptions and behavioral intentions.


we randomly assigned 320 undergraduate participants to read a news article presenting either claims both for/against an autism-vaccine link, link claims only, no-link claims only or non-health-related information.

Participants who read the balanced article were less certain that vaccines are safe, more likely to believe that experts were less certain that vaccines are safe, and less likely to have their future children vaccinated.

Results suggest that balancing conflicting views of the autism-vaccine controversy may lead readers to erroneously infer the state of expert knowledge regarding vaccine safety, and negatively impact vaccine intentions.
"Journalists aren’t employed to keep you healthy, or even informed: it is our job to sell readers to advertisers, to entertain you, and experience has taught us that we can do this very effectively with scare stories". (Ben Goldacre, The Guardian 16 Sept 2003)

"Health scares such as this protect no one, whatever the sanctimonious claims of the zealots behind them. The MMR panic is more likely to cause deaths from measles than it is to save a single child from autism. (Mark Henderson, The Times 20 Sept 2003)".
The public perspective – UK communication research.

- Once or twice a year, a market research company interviews 1,500 mothers of children <4yrs.
- We now have 33 waves of tracking research.
- The sample is geographically representative and reflects all population groups.
- Sampling can be adapted – for instance to uprate representation from ethnic groups.
- Core questions can be adapted to reflect new concerns.
- Cost is around £85,000 per wave.
- The information is used to inform our communication strategy.
What have parents told us?

- They want us to be clear.
- They want us to be consistent.
- They want us to give them the facts.
- They want us to be open.
- They want to access the information/resources available.
- They want an evidence based approach - and want to be able to find the evidence.
Sources used for information about immunisations for 0-2s & 3-4s (prompted)

Base: 2010 - parents of 0-2s (1142), parents of 3-4s (1007)

Based on all respondents
Internet access and use, 2011 survey

Base: Parents of 0-2s - 2010 (1142), previous years c.1000

Based on all respondents
Whether seen anything that might persuade them not to immunise

% Seen anything

Nov 00  Nov 01  Nov 02  Nov 03  Nov 04  Nov 05  Nov 06  Nov 07  Nov 08  Feb 10

17%  32%  33%  28%  23%  20%  14%  17%  14%  17%

Base: Parents of 0-2s - 2010 (835), previous years c.800

Based on all who recall seeing/hearing publicity
What information would have liked about immunisations for 0-2/3-4 year old (spontaneous)

- Side effects: 44% (43%)
- Information about diseases: 19% (14%)
- Purpose of immunisation: 16% (14%)
- More materials: 11% (15%)
- Mentions of swine flu: 4% (9%*)
- More/General information: 7% (7%)
- Timings/Schedule: 6% (11%*)
- Ingredients of vaccination: 5% (4%)
- Mentions of MMR: 5% (4%)
- Research behind immunisation: 5% (3%)
- Advantages of immunisation: 5% (5%)
- Evidence of safety: 4% (7%)

Base: 2010 - parents of 0-2s (415), parents of 3-4s (372)

Based on all who wanted more information

All mentions by at least 5% of either group
Awareness of immunisations

Base: 2010 - parents of 0-4s (1730)

Based on all respondents
Trust advice on immunisation given by...

Health professionals and the NHS remain the most trusted sources of advice on immunisation. Parents recognise that family and friends may not give them the most accurate information.

- **GP, HV or PN**: 92% agree
- **NHS**: 86% agree
- **Pharmacist**: 66% agree
- **Government**: 58% agree
- **Family/friends**: 49% agree
- **Media**: 21% agree

Base: 2010 - parents of 0-4s (1730)
Whether automatically had 0-2/3-4 immunised or weighed up the pros and cons

- **Automatically had when due**:
  - Nov-03: 57%
  - Nov-04: 61%
  - Nov-05: 68%
  - Nov-06: 70%
  - Nov-07: 73%
  - Nov-08: 72%
  - Feb-10: 75%

- **Weighed up pros and cons**:
  - Nov-03: 41%
  - Nov-04: 38%
  - Nov-05: 30%
  - Nov-06: 29%
  - Nov-07: 26%
  - Nov-08: 28%
  - Feb-10: 22%

*Base: Parents of 0-2s - 2010 (1142), previous years c.1000*

Unknown disease – raise awareness.

Greatly feared disease – manage expectations.
Awareness of the pneumococcal campaign

Going further to protect your child.

Meningitis
Blood poisoning
Pneumonia
Ear infections

Pneumococcal infection can cause the illness shown but young children are particularly susceptible to it. It is difficult to see the pneumococcal programme didn’t protect against it. The introduction of pneumococcal vaccine is another example of prevention being better than cure. The vaccine has been used successfully in America for the last five years and some children in the UK have also received the vaccine. Most children have a number of forms and they can all be caught by pneumococcal pneumonia. The additional vaccine will protect against the more serious sort of meningitis. The vaccine can be given in a single injection and will be given through freely of charge. The only minor problem for children under two years old. Meanwhile, you don’t need to do anything until your doctor contacts you. If you have any questions, ask your local surgery for a booklet or visit www.immunisation.nhs.uk
Main message taken from pneumococcal campaign (unprompted).

1. Get your child vaccinated/immunised: 33%
2. Mention of a new immunisation/vaccine: 19%
3. Protection against/prevention of diseases: 10%
4. Wait to be contacted: 9%
5. Available for children under 2: 8%
Diseases pneumococcal vaccine was thought to protect against (unprompted).

- Meningitis: 74%
- Blood poisoning/septicaemia: 58%
- Pneumonia: 52%
- Ear infections: 29%
- Don’t know: 11%
Perceived action to take for the pneumococcal vaccine (unprompted)

- Nothing/wait to be contacted: 72%
- Contact health visitor/surgery for more info: 11%
- Get more information from a leaflet: 8%
- Contact health visitor/surgery to make appt: 4%
- Visit immunisation website: 2%
Seasonal Flu campaign evaluation.

Since 2000 a flu immunisation campaign had been aired in preparation for the winter period.

In 2004 a new advertising campaign was launched which introduced the flu ‘virus’ as the central theme. This included TV, press ads, pharmacy bags, leaflets, bus and internet advertising.

The advertising campaign had three objectives:
- Remind and motivate people over the age of 65 to make appointments to get the flu jab in October - November
- Motivate people in at risk groups to get their flu jab
- Achieve uptake of at least 72% among those 65 years or older and 60% among the medically at-risk

The objective of the research was to evaluate whether the current campaign was still achieving good levels of awareness.
Press / Poster executions

IF YOU KNEW ABOUT FLU YOU’D GET THE JAB.

The flu is not a seasonal cold. It’s a completely different virus that attacks the immune system and leaves your body vulnerable to other illnesses like pneumonia and bronchitis. If you are 65 or over, or you suffer from certain chronic illnesses, you are especially at risk. Contact your local GP for this year’s free flu jab.

THERE’S A BIG DIFFERENCE BETWEEN A COLD AND THE FLU.

If people tell you they had the flu for a few days, chances are it was a cold. The flu is a lot more powerful and attacks your immune system, leaving you weak and vulnerable to other more serious illnesses. If you suffer from certain chronic illnesses or you are 65 or over, get your free flu jab. Contact your local GP.

IF YOU KNEW ABOUT FLU YOU’D GET THE JAB.

WHEREVER FLU GOES, PNEUMONIA AND BRONCHITIS MAY NOT BE FAR BEHIND.

The flu virus can make you vulnerable to something more serious. If you suffer from certain chronic illnesses or you are 65 or over, your immune system might not be strong enough to fight the flu virus. Contact your local GP for a free flu jab.

IF YOU KNEW ABOUT FLU YOU’D GET THE JAB.
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HPV vaccine: Attitudinal Research before introduction of vaccine.
Most participants were very positive - vaccination is an important parental responsibility.

- Mothers seemed more involved in health generally, few differences in parents’ views.

Perception that vaccination carries risks - assumed responsibility for protecting children against risk.

- ‘Protector role’ and MMR controversy meant they were more conscious of risks for children than for adults.

Concern that children were too young.

Parents
- Vaccine safety and potential for damaging girls’ future fertility
- A licence to engage in underage and unprotected sex
- Consent; parents were against the idea of their 11 – 12 year old children having the right to decide
- The majority supported the idea of a catch-up programme for thirteen to eighteen year olds

Girls
- Worried about the trauma of the injection
- Most girls were in favour of having the vaccination, and many felt that their parents would be supportive

Professionals
- In favour of the vaccine providing programme adequately resourced
The new HPV vaccine for 12- to 13-year-old, Year 8 girls, that protects against cervical cancer

The virus infects the entrance to the womb – the cervix

Cervical cancer occurs in the cervix (the entrance to the womb – see diagram below). It is caused by a virus called human papillomavirus or HPV. Cervical cancer can be very serious and around 1600 women die from it in the UK each year.

Cervical cancer

There are over 100 types of human papillomavirus but only 13 of them are known to cause cancer. The others cause conditions like genital warts (small fleshy lumps around the genital area) or are harmless. The virus is very common and you catch it by being sexually active with another person who already has the virus. Because it is so common, most people will get infected at some point in their lifetime. Most of the time, the virus does not cause cancer because it is killed off by the body's immune system, but not always – this is why the vaccine is so important.

HPV and how it spreads

The vaccine protects against the two types of the virus that cause most (over 70%) of the cases of cervical cancer. It does not protect you against all of the other types, so you will still need to have cervical screening tests when you are older.

by having the vaccination

You will reduce your risk of getting cervical cancer by over 70%.

having the vaccination

You need to have the vaccination before you start being sexually active. And, while most girls don’t start having sex before they are at least 16 orquire a bit earlier, it is recommended that you have the vaccine at 12 to 13 years of age to protect you as early as possible. Having the vaccine won't protect you against other sexually transmitted diseases like chlamydia and it won't stop you getting pregnant.

You will need three injections over several months to get the best protection. Like the vaccinations you had as a baby, some vaccines need to be given as three or more doses to work properly. The nurse will give you the vaccinations in your upper arm.

Your school or health authority will contact your parents when it is time for your vaccination.

Can my older sister have the vaccine too?

Yes, older school girls will be offered the vaccine over the next couple of years. See www.immunisation.nhs.uk/hpv for details.

Giving consent

You may be given a consent form that your parents should sign giving permission for you to have the vaccination. It’s important that you return the signed form before your vaccination is due.

If your parents are not sure that you should have the vaccine you should still return the form and speak to your nurse, doctor or other healthcare professional. Having the vaccination now will help protect you against the most common causes of cervical cancer for many years.

Side effects

The side effects of the vaccination are quite mild – usually just tingling and soreness at the arm that soon wears off. The vaccine meets the rigorous safety standards required for it to be used in the UK and other European countries.

Very rarely, some people have a reaction soon after the injection. This reaction may be a rash or itching that affects some or all of the body. The nurse will know how to treat this. It is not a reason not to have more injections for HPV or other diseases.

Even more rarely, some people can have a severe reaction soon after the immunisation which makes it difficult for them to breathe and may make them collapse. This is called an anaphylactic reaction. These are extremely rare and nurses are trained to deal with them. People recover completely with treatment, usually within a few hours.

Missed your appointment?

Speak to your nurse to arrange another one. It is important that you have all three doses.

Further information

You can get more information at www.immunisation.nhs.uk/hpv where you and your parents can also download a fact sheet and answer sheet that gives more detailed information on giving consent and the other topics covered in this leaflet, or you can ask the nurse for a copy. You can also phone NHS Direct's special HPV helpline on 0845 602 3303.

HPV - the big facts

HPV - the big facts

immunisation

NHS

Beating cervical cancer

The essential guide to the HPV vaccination for girls aged 12 to 13

This leaflet is about the new vaccination (injection) to help protect you against cervical cancer when you get older. If you want more information, check out www.immunisation.nhs.uk/hpv
Armed for life.

The HPV vaccine, which protects against cervical cancer, is now being offered to all girls in Year 8. This vaccine, along with the cervical screening programme, will help protect women for life.
Did the TV ad get any attention?

Youtube 717 comments, viewed over 68,000 times

- hu sings this song? pls tell me love it.
- How good is the beat to this song!! I love it, been in my head all week :P
- who sings this its amazing?? pleas please please please tell mee
- Everytime this advert is on i always crank up the volume!!
- i think this is a bit of a pisstake that only year 8 girls are getting it. what about the rest of the girls?
- the years above get it next year smart arse
**Statistics & Data**

Total Views: 68,416

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**Audiences**

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Map showing popular regions with color coding.
HPV Vaccine Uptake - Routine Cohort (12-13 Year Olds) 2008/09, 2009/10, 2010/11 & 2011/12 Comparison - Monthly Data
Public acceptability will be of increasing importance, irrespective of scientific virtues.

The media provide the interface between immunisation programmes and the public. We cannot assume that the media share our views and we must recognise their independence.

The public increasingly seek information on an active basis. The internet, where information is unregulated, contains much that is potentially wrong and harmful.

We must compete effectively and dedicate as much effort to communicating on vaccines as we do on providing them.