

# JOHN BALDING

## What do immunisation enquiries tell us?

Question 19 of the Health Related Behaviour Questionnaire, available from the Schools Health Education Unit, runs as follows:

Have you been vaccinated against  
 (a) Rubella (German measles)?  
 (b) Polio?  
 (c) Tetanus?

Respondents can select one of three categories of answer to each, namely *Yes*, *Don't know*, and *No*. This question was incorporated into the questionnaire at a stage when it was being evaluated by doctors and nurses, and, judging from Mark Charny's contribution to this issue of *Education and Health*, the medical view on the importance of immunisation is clear.

### Polio and tetanus

The accompanying table gives the responses from 3rd and 4th year pupils in a school in the north-east of England. It is worth noting at the outset that the distribution of responses to this question, from different schools, varies quite widely, and explanations for this might lie in the local prevailing conditions. Two ways in which the responses could be affected are:

- (a) The *medical* practice, through immunisation programmes and campaigns;

	Year	BOYS				GIRLS			
		No. know	Don't know	Yes	No.	No. know	Don't know	Yes	No.
Polio	3	17	37	46	(46)	10	42	48	(48)
	4	2	20	78	(50)	8	6	86	(49)
Rubella/Tetanus	3	15	30	55	(46)	12	44	44	(48)
	4	6	6	88	(49)	2	-	98	(50)
	3	40	31	29	(45)	4	2	94	(48)
	4	38	38	24	(47)	6	2	92	(50)

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*Responses to the question "Have you been vaccinated against rubella/polio/tetanus?" for a single school in the north of England. (Percentages).*

- (b) The *level of knowledge* of the pupils, arising from the emphasis that the school puts upon this aspect of health care.

In this particular example, the number of boys and girls who indicated that they did *not* know whether they had been vaccinated against these diseases is fairly low, overall, compared with other schools in the health-related behaviour survey. The marked difference in response between the 3rd and 4th years is noticeable, far more 4th-year pupils "knowing" that they have been vaccinated, with the girls being more positive than the boys. An intervention programme at the beginning of the 4th year would account for this, and would raise the following questions:

- (a) *Is this a regular feature of the school's life?*
- (b) *Is it at the best time?*

### Rubella

It will be noticed immediately that the "Yes" response from both 3rd-year and 4th-year girls is very high, over 90%. On the face of it, this should be comforting to health-care professionals, who might see this population as being above the national take-up of about 80%. However, bearing in mind that rubella vaccination is given only to girls, this conviction may be shaken upon seeing that about a quarter of all the boys are also respond-

ing "Yes", while a further third "Don't know"! Does this mean that the girls, too, are over-reporting? If so, why? If they were doubtful, we should expect to find a significant number of "Don't knows" here as well, but this is not the case; the response from both years is very positive.

We certainly cannot assume that girls always over-report. It is interesting to note the results given in Maria Rainford's article on page 36, in which only 52% of girls in one school (Blakelaw) responded "Yes" although the official take-up was 78%, while 92% in the other school (John Marlay) responded "Yes" compared with an official value of 84%. Are we being misled by the sample size, or is there a deeper reason? Unfortunately, it is not clear from the article just how the question "What immunisations/vaccinations have you received" was presented to the pupils. Were they given prompts? If so, were the prompts consistent in both samples? Does the very low figure for Blakelaw reflect more closely the likely memory of the average individual without reinforcement from teacher or questioner? Is the high John Marlay figure inflated by a desire to please or to escape censure, or does it reflect a real confusion?

What does seem to be clear is that the boys' and girls' knowledge of their own vaccination is unreliable. Does this matter?

The accompanying table, which presents the results from four Sheffield schools that have used the Health Related Behaviour Questionnaire, may be of interest. The mean figures correspond

	School	BOYS				GIRLS			
		No. know	Don't know	Yes	No.	No. know	Don't know	Yes	No.
	A	39.6	41.5	18.9	(53)	11.8	7.8	80.4	(51)
	B	41.0	28.2	30.8	(39)	7.5	7.5	84.9	(53)
	C	42.0	26.0	32.0	(50)	-	2.9	97.1	(69)
	D	39.5	25.6	34.9	(43)	4.0	-	96.0	(50)
	Mean	40.5	30.8	28.7	(185)	5.4	4.5	90.1	(223)

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*Responses to the question "Have you been vaccinated against rubella?" for four Sheffield schools. (Percentages).*

closely with those for the first school discussed in this article, but it will be noted that School A is the least positive for both boys and girls, with a high degree of uncertainty among the boys as to whether they have been immunised or not. The "No's" are practically constant at 40%; so we can say of all these schools that about 60% of the boys, compared with only about 5%–10% of the girls, are either totally misinformed or uncertain about the significance of this particular vaccination. There is, surely, little satisfaction for the health-care professional here!

### **Health education and immunisation**

Health education in schools can be related to this area of immunisation at two levels, if not more:

- (a) Developing an intellectual understanding of the mechanisms of becoming immune, and the needs of the community to be protected from a particular disease;
- (b) Transmitting a feeling of *wanting* to be vaccinated, so that the individual is willing to participate when the opportunity presents itself.

The concepts of immunity and epidemiology are often too complex for many students, and it can be quite difficult for the teacher to generate a desire to be immunised against a disease of which the pupil has no first-hand experience. But this is a common dimension to many aspects of health behaviour, particularly the persuasion to participate in sensible behaviour in response to statistical evidence — one such example was the "Clunk-Click" seatbelt campaign.

Seatbelt usage is now law. Will immunisation ever be? Perhaps the first step is to strive for an awareness in the individual of the vaccinations that he or she has had. I have to confess, however, that my own knowledge of what I have been vaccinated against, and how long ago it took place, is probably no better than that of the average young person I am measuring!