

inquest on her granddaughter and claimed that she had been raped on some open ground. Another was a disabled girl who had fallen out with her disabled boyfriend and alleged that an unknown person had raped her. In a third case a girl who had taken an overdose alleged that her stepfather had raped her, but this was not true. The girl has made many such allegations to police forces all over the country. It may well be that the stepfather had raped her in the past but the presenting story was untrue.

At present the only way that the police can deal with these problems is to assume that a serious arrestable offence has been committed and put in motion a serious crime investigation. This is often not what the woman wants at all. Often she is making a cry for help.

Just as Balint showed that a patient may present to a doctor with an "offer" which may not be the real problem, so the woman presenting to the police with a complaint of rape may have other problems than that with which she presents. She knows that she will be listened to and taken seriously in the police station but may find herself involved in an investigation from which she cannot easily withdraw.

How much better it would be if all victims of sexual assault could be seen in a properly staffed unit, which would include specially trained police officers, who would be involved from the outset if a criminal investigation was necessary, but where the needs of the woman could be identified and satisfied? Not only would this be of much more help to the woman concerned but it would save a great deal of police time (and money) in those cases where a prosecution was not appropriate.

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Pneumococcal bacteraemia

SIR,—The paper by Dr W R Gransden and colleagues (16 February, p 505) prompts us to report the serotypes of *Streptococcus pneumoniae* isolated in the west of Scotland. For the last three years we have serotyped pneumococci submitted from several laboratories in this area. The serotype distribution of 177 isolates from blood cultures and cerebrospinal fluid is shown in the table.

The Danish nomenclature, which is now almost universally accepted, recognises 83 serotypes of *Str pneumoniae* made up from 27 monotypes and 19 groups. Individual groups consist of two to four types which are serologically related. Information on the distribution of monotypes and serotypes within serogroups causing serious infection is used to decide the composition of pneumococcal vaccines. However, it is not known whether immunisation with one or two antigens within a serogroup provides protection for all pneumococcal serotypes within that group. Furthermore, the distribution of serotypes causing serious infection varies with time and place. Therefore, to predict the potential protection afforded by a vaccine of defined composition we need recent precise epidemiological data on serotype distribution.

It can be calculated from the table that the potential protection afforded by the 14 valent vaccine (now discontinued) is 87% if a subgroup antigen is taken as conferring protection against the whole group. If, however, the types within groups are not assumed to confer protection against the other types within the group,

Composition of pneumococcal serotypes in two polyvalent vaccines compared with the distribution of serotypes isolated from serious pneumococcal infection in west of Scotland

14 Valent vaccine	23 Valent vaccine	No of strains from serious infection
1	1	18
2	2	0
3	3	18
4	4	13
	5	0
6A	6B	8
	7F	8
7F	7F	13
8	8	14
9N	9N	7
	9V	4
	10a	0
	11A	2
12F	12F	10
14	14	17
	15B	1
	17F	1
18C	18C	5
19F	19F	8
	19A	2
	20	2
	22F	3
23F	23F	4
25	23F	0
	33F	3

Serotypes not included in either vaccine = 16 (five strains were members of serogroups which were represented in both vaccine formulas).

the potential efficiency falls to 76%. The corresponding figures for the 23 valent vaccine are 94% and 86%.

We thank Dr J Henrichsen (Statens Serum-institut, Copenhagen) for subgrouping and laboratory staff in the west of Scotland for sending us their isolates.

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SIR,—Dr W R Gransden and his colleagues describe the pneumococcal vaccine as a "useful and underused prophylactic agent" (16 February, p 505). Satisfactory evidence of the vaccine's usefulness outwith gold mines and the New Guinean jungle has, alas, proved almost as elusive as the Holy Grail.¹ As their paper amply confirms, serious pneumococcal infection in the developed world is largely an affliction of the old and the sick. Yet, even in the over 60s, its annual incidence is only about 25 per 100 000.² This means that a prospective randomised study of sufficient power to detect any realistic protective effect of the vaccine would need to recruit around 500 000 patients—an impossible undertaking.² Two ingenious forms of retrospective analysis have been used, both with acknowledged weaknesses.³ Both conclude that the vaccine probably does work in the otherwise healthy elderly, but probably not in patients at high risk—who do not respond well to the vaccine, just as they cannot to the pneumococcus itself. Consequently, vaccinating relatively healthy elderly people is probably of little value because few of them would become infected anyway; and neither is vaccinating high risk elderly patients because for them the vaccine is unlikely to work. A stronger argument can be made, however, for giving the vaccine before an elective splenectomy and to patients with sickle cell anaemia.

At first sight, it is alarming that pneumococcal bacteraemia should still kill more than one third of its elderly victims. However, careful study of each fatal case very often reveals that

the infection brought a hopeless struggle mercifully to an end.⁴ The pneumococcus need not always be condemned as a malefactor.

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A Bill that should be stopped

SIR,—In his leading article Dr D L J Freed comments that Stillmark's conscience was "troubled by the suffering of the animals in his experiments," and so he chose to work in vitro (23 February, p 584). While one may not share Stillmark's scruples on this particular issue, surely the principle behind such a decision must still remain—that the end does not justify the means. The fact that all clinical research is subject to stringent controls is an illustration of this fact. It was disappointing, therefore, on reading your final leading article in the same issue (p 586) to note that you implicitly support the view that "though the human embryo is entitled to some measure of respect beyond that accorded to other animals, such respect cannot be absolute, and it must be weighed against the benefits of research." While not disputing that such research may be beneficial, I cannot accept that the possible beneficial end results justify such dubious means as experimenting on human embryos—the 13 day old embryo being no less human than the 15 day old embryo. Perhaps if other methods of research were used which did not involve human subjects we might find, as Stillmark did, unexpected beneficial results with widespread consequences.

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SIR,—The author of "A Bill that should be stopped" (23 February, p 586) presumes to tell doctors and philosophers that they ought to allay public anxiety about experimentation on human embryos. Unfortunately he/she feels unable to give his/her name and uses some dubious logic in support of his/her case. He/she seems to think that because an eminent theologian sees a place for experimentation on human embryos there can be no reasonable religious objection to the practice. He/she may not be aware that 2000 years ago some eminent theologians thought that it would be a good idea to crucify God. He/she supports the position that protection of the human embryo "cannot be absolute." The Declaration of Geneva, adopted by the General Assembly of the World Medical Association in 1948, called on doctors to pledge that they would "maintain the utmost respect for human life from the time of conception." (The BMA *Handbook of Medical Ethics* continues to contain this pledge with the amended phraseology "human life from its beginning" as amended by subsequent WMA Assemblies.)

It is sad that a leader in the *BMJ* takes an entirely different approach, without even