

score. Our virtual abandonment of preoperative arteriography has brought savings in time, money, and patient discomfort, while our limb salvage rate has remained steady at over 90%. Though non-invasive scoring cannot provide an anatomical picture, in conjunction with insonation of the pedal arch it does seem to indicate the correct site for distal anastomosis of the graft, and in practice this is all that is required. Provided that the surgical team is prepared to undertake bypass to all levels in the leg, non-invasive scoring can be the sole preoperative strategic investigation in most patients needing femorodistal bypass. We consider that the method merits wider assessment.

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# Medicine and the Media

## Public knowledge of AIDS and the DHSS advertisement campaign

S MILLS, M J CAMPBELL, W E WATERS

A RECENT editorial claimed that the Department of Health and Social Security's advertising campaign to increase knowledge about the acquired immune deficiency syndrome (AIDS) had had little impact.<sup>1</sup> The director of information at the DHSS, however, has called this claim subjective and has himself claimed that the advertisements provided useful new information about AIDS.<sup>2</sup> We evaluated these claims by means of a questionnaire distributed before and after the campaign.

The first set of questionnaires about AIDS, together with a covering letter and a stamped addressed envelope, were posted in Southampton in February 1986, and similar questionnaires were posted in June 1986. The recipients of each questionnaire were chosen by a 1:500 systematic sample from the Southampton electoral roll, with a random, and different, starting name each time. In each case 300 questionnaires were posted, and the eventual response rates were 64% for the first survey and 66% for the second. In March and April the DHSS launched a publicity campaign, which appeared in all the major daily and Sunday newspapers. The

table compares the replies given before and after the campaign. Answers to question 1 were judged correct as long as the subject mentioned immune deficiency. In question 9 the ranges given were 0-99, 100-499, 500-999, 1000-1999, and 2000 or more cases (correct answer about 400). Questions 2-8, 10, and 11 were answered true, false, or don't know (questions 1-8 were answered explicitly by the DHSS advertisement). Answers were scored 1 for a correct answer, 0 for a don't know or missing answer, and -1 for an incorrect answer. The mean score before the advertising campaign was 5.31, and that afterwards was 5.16, the difference being 0.15 (95% confidence interval -0.30, 0.60). The results thus indicate, if anything, a decrease in the level of public knowledge about AIDS. From the answers to individual questions there seems to be a slight increase in those who do not know what the initials AIDS stand for, and slightly fewer believe that AIDS is caused by a virus. In reply to the questions not covered by the DHSS advertisement more people answered don't know in the second survey when asked how many cases of AIDS there have been in this country, and more people in the second survey did not know whether women were at much less risk than men of catching AIDS.

In the second survey 31% claimed to have seen the DHSS advertisements. We also asked whether they had seen a poster campaign about AIDS run by Southampton City Council, which was in fact non-existent, and only 7.5% admitted to having seen this. Of the 157 people who had not seen the council campaign, 31% had seen the DHSS advertisement. Of those who regularly read newspapers before the campaign, 46% (of 161) thought that the newspaper was a reliable source of information about AIDS,

South Academic Block, Southampton General Hospital, Southampton SO9 4XY

S MILLS, medical student  
M J CAMPBELL, PHD, lecturer in medical statistics  
W E WATERS, FFCM, professor of community medicine

Correspondence to: Dr Campbell.

Percentage of correct, incorrect, and uncertain or missing replies to questionnaire before and after DHSS campaign

Question	Reply before campaign			Reply after campaign			$\chi^2$	Significance
	Correct	Incorrect	Don't know/missing	Correct	Incorrect	Don't know/missing		
1 What do the initials AIDS stand for?	33	19	48	34	7	59	12.8	p=0.002*
2 AIDS is caused by a virus	66	12	22	62	17	21	1.9	p=0.39
3 There is a cure for AIDS	83	2	15	84	2	14	0.06	p=0.99
4 There is a vaccine against AIDS	73	5	21	66	10	23	3.6	p=0.17
5 The infection may be caught from blood and blood products	93	1	6	93	0	7	0.4	p=0.82
6 All blood donations are tested for AIDS	86	0	13	88	0	12	0.2†	p=0.90
7 The infection is readily caught by sharing washing, eating, and drinking utensils	67	10	24	64	14	23	1.14	p=0.50
8 The infection may be transmitted by sharing needles and syringes	94	2	5	89	1	10	3.5	p=0.17
9 How many cases of AIDS have there been in Britain up to now?‡	39	47	14	28	49	24	8.5	p=0.014*
10 The infection seems to be transmitted principally by sexual intercourse between male homosexuals‡	86	6	8	83	9	8	1.5	p=0.47
11 Women are at much less risk of catching AIDS‡	42	38	20	35	34	31	5.4	p=0.07*

\*Significant at level stated. †1 df. ‡Not covered by DHSS campaign.

whereas after the campaign 40% (out of 162) thought so ( $\chi^2=0.11$ ,  $p>0.5$ ).

The DHSS advertising campaign has a reported budget of £2.5m, and its main intention is to inform the public that any promiscuous person, not just homosexuals, is at risk from AIDS and of how to reduce the risks of contracting sexually transmitted AIDS.

The Gallup organisation has conducted regular face to face interviews to determine public attitudes to AIDS.<sup>3</sup> Its results are broadly in agreement with ours—for example, before the campaign 56% of the subjects that they interviewed knew that people could not get AIDS by drinking from the same glass as an AIDS sufferer, whereas afterwards the figure was 58%. A total of 25% in the Gallup survey could recall having seen the DHSS advertisement when it was shown to them.

Our questionnaire was originally designed for a fourth year medical student project, without knowledge of the content of the DHSS adverts, and did not cover all the information provided in the advert. In view of the questions we asked and the response rate, which is not atypical for a postal questionnaire, the public seems to have been reasonably well informed about AIDS before the DHSS campaign. The campaign, however, seems to have had little effect

on the public's knowledge of AIDS, and the increased publicity may have caused some confusion about the principal cause of AIDS, the number of cases of AIDS in Britain, and whether women are at much less risk from AIDS than men. The fact that only 31% of those who replied could recall having seen the DHSS advertisements must be set against the fact that more selective methods are likely to be more expensive. Most AIDS victims up to now have been homosexuals or haemophiliacs,<sup>4</sup> and perhaps people in general do not think that they are particularly at risk and so do not heed public health campaigns. Perhaps only when non-homosexuals are convinced that they are increasingly at risk will they notice and bother to read public advertisements.

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## Should intrauterine contraceptive devices be fitted to a nulliparous woman?

The short answer to this deceptively simple question is "ideally, no." Most of the complications that have been linked with this method have the potential to impair future fertility, either directly (pelvic infection, ectopic pregnancy) or indirectly—for example, in situ pregnancy followed by septic abortion.<sup>1</sup> Pelvic infection, the most serious of these complications, is much commoner in young and nulliparous women<sup>2</sup> and the tragedy of tubal infertility—which is definitely commoner in nulliparous women who have used intrauterine contraceptive devices<sup>3</sup>—is all the greater if there are as yet no children.

There are no data suggesting that the uterus becomes more resistant to infection with increasing age or parity. It is believed that most infections are primarily caused by sexually transmitted organisms, and in our society these are acquired more frequently by the young. Indeed, the arguments against the method are weaker for nulliparae above age 30 in a faithful relationship. The intrauterine contraceptive device is not blameless, however, the threads possibly increasing the likelihood of infection—and it may promote secondary invaders and increase the severity of attacks.<sup>1</sup> Among the alternatives all progestogen containing contraceptives show some degree of protecting the upper genital tract from infection. So the time has surely come for injectables such as depot medroxyprogesterone acetate to be offered to young nulliparae in preference to an intrauterine contraceptive device since they share the latter's advantages for compliance where motivation or memory are poor. If an intrauterine device is nevertheless chosen there is no epidemiological proof that excising the threads reduces the risk and it certainly leads to problems with subsequent management. The same is not true of another recommendation, now regularly made by the Margaret Pyke Centre, which is to use adjunctive spermicides on a regular long term basis

(since spermicides tend also to be "germicides"). But the latter are not popular among prospective clients. Hence there is an urgent need for devices whose intrinsic design would reduce this risk of infection. A likely candidate is the levonorgestrel releasing intrauterine contraceptive device,<sup>1</sup> which is already marketed in Scandinavia, and when more widely available this may well become the device of choice.—J GUILLEBAUD, senior lecturer in gynaecology, London.

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## Do the antithrombotic, antibiotic, and other medicinal properties of garlic disappear when garlic is boiled or fried?

Garlic contains essential oils with antibacterial, antifungal, and anti-thrombotic effects. Garlic extracts inhibit platelet aggregation by reducing thromboxane synthesis and of the constituents of garlic oil that do this, methyl allyl trisulphide is the most potent. The antibacterial and antifungal properties are due to diallyl disulphide. Both these are volatile substances and would be lost on heating.—LINDA BEELEY, consultant clinical pharmacologist, Birmingham.

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