

promote contraception through safer sex campaigns have undoubtedly been successful in increasing the proportion of teenagers who use condoms. Most people have assumed that increasing the use of contraception leads to a reduction in unplanned teenage pregnancies.⁴ Yet my analysis shows that this has not happened. A plausible explanation is that the main factor in unplanned teenage conceptions is contraceptive failure, not the lack of contraceptive knowledge and availability. The findings of Pearson and colleagues support this view.

A further question is whether increasing the availability of contraception leads to an increase in sexual activity. If this is the case—and the national survey of sexual behaviour reports a large increase over the past two decades in the proportion of teenagers who are sexually active—then it is not surprising that the rate of teenage conceptions continues to increase. The answer is not more contraception or emergency contraception but a change in attitude towards sexual behaviour.

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The needs of older women are just as great

EDITOR.—The contraceptive practices of, and reasons for contraceptive failure among 629 women attending an NHS unplanned pregnancy counselling clinic in Portsmouth were surveyed between September 1994 and February 1995. Our findings are similar to those of V A H Pearson and colleagues in Devon (table), although the mean age in our study was 25.2 years (range 14-40). Both these studies are in line with previous work showing a rising association between unplanned pregnancy and use of condoms.^{2,3}

	Devon ¹ (n=167)	Portsmouth (n=629)
Age range (years)	13-19	14-40
No with unplanned pregnancies	147	629
Used condoms at time of unplanned pregnancy	67/147 (46)	301/629 (48)
Knew why condom had failed	53/67 (79)	153/301 (51)
Using contraceptive pill at time of unplanned pregnancy	45/147 (31)	134/629 (21)
Knew why pill had failed	32/40* (80)	96/134 (72)
Patients for whom postcoital contraception was suitable		310/629 (49)
Patients who had heard of postcoital contraception	135/167 (81)	450/566† (80)
Patients who had used postcoital contraception	16/167 (10)	42/310 (14)

*Combined oral contraceptive only.
†Question not completed by all those who attended.

In our study the main reasons given by the 268 patients who were not using postcoital contraception were ignorance of the method (59 (22%)), the woman not thinking about it at the time of conception (72 (27%)), and the woman underestimating her fertility (86 (32%)). Our study included older women and shows that their needs are as great as those of teenagers. We also concluded that much more education of patients and the public is needed to increase use of postcoital contraception.

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Serum cholesterol concentrations in parasuicide

Depression may cause low cholesterol

EDITOR.—Massimo Gallerani and colleagues report low serum cholesterol concentrations in people who attempt suicide.¹ Their findings are consistent with those of our systematic review of the possible hazards of lowering serum cholesterol.² The question is whether the association arises because a low serum cholesterol concentration causes depression and so causes suicide or because a low serum cholesterol concentration is a consequence of depression since depressed people eat less on average and this will reduce their cholesterol concentration. The evidence indicates that the latter is the case.

Effective treatment of depression leads to an increase in serum cholesterol concentration.³ Recent large randomised trials of 3-hydroxy-3-methylglutaryl coenzyme A reductase inhibitors, which achieve large reductions (about 25%) in serum cholesterol, have established that lowering cholesterol does not lead to depression⁴ or increased mortality from accidents and suicide.^{4,5} Earlier trials, which lowered serum cholesterol by about 10%, are also reassuring.² Two trials gave rise to concern despite their results not being significant (11 v 4 and 9 v 5 deaths from accidents and suicide in the treated versus the control groups respectively), but the excess was concentrated in patients who did not take the cholesterol lowering drugs (so that cholesterol reduction cannot have caused it) and in patients with pre-existing psychiatric illness.⁶ In the remaining 25 trials in our review there was no excess mortality from accidents and suicide (78 deaths in treated patients v 77 in controls).²

Prospective observational studies support the conclusion that low cholesterol concentration does not cause suicide: there was no excess mortality in studies of working men, who, because they were in work, were less likely to have had serious psychiatric illness such as depression.² In studies of cohorts in the general community, which necessarily include people with illness on entry, the excess mortality was concentrated in the first six years of follow up, with no significant excess during years 7-20.²

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Scottish study does not replicate findings

EDITOR.—Massimo Gallerani and colleagues found lower cholesterol concentrations in subjects after parasuicide than in control subjects matched for age, sex, diabetes, hypertension, heterozygote β thalassaemia, drug misuse, and alcoholism.¹ These results suggest an association between low cholesterol concentrations and suicide. The control population—331 non-suicidal subjects—was recruited from a population attending a general hospital outpatient laboratory.

We have studied the proposed association between serum cholesterol concentration and parasuicide in our catchment area of Scotland (Tayside) and found no such association. We studied 216 healthy patients who had committed parasuicide (age range 25-54) and 286 healthy volunteers matched for age and sex who were not attending hospital for any reason and were receiving no drug treatments. All patients who had committed parasuicide who were receiving prescription drugs or had abnormal results of biochemical tests of liver or renal function were excluded. The patients who had committed parasuicide had a higher serum total cholesterol concentration than the controls (mean (SD) 5.68 (0.41) mmol/l v 5.41 (0.80) mmol/l; $P < 0.001$).

We suggest that a hospital outpatient population is not ideal for comparison with subjects who commit parasuicide, who until the parasuicide generally yield normal results on biochemical testing, have no concurrent medical condition requiring treatment, and are not receiving any drug treatment. The findings of Gallerani and colleagues may be misleading and do not seem to apply to the Scottish population.

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No association between low cholesterol and violent death

EDITOR.—The study by Massimo Gallerani and colleagues is the latest to investigate whether there is an association between low cholesterol concentration and violent events.¹ However, no causality has been shown, and the associations in different studies seem to be inconsistent. For example, in the Honolulu heart programme there was a direct relation: the higher the baseline serum cholesterol concentration the higher the risk of suicide during 23 years' follow up.² Gallerani and colleagues incorrectly cite the Helsinki businessmen study in the context of cholesterol and violence³: the higher incidence of violent events in the group treated multifactorially was not due to low serum cholesterol concentration or cholesterol lowering drugs.⁴ The results of the Scandinavian simvastatin survival study are a strong argument against a true association between cholesterol and violence: the study showed no difference in violent deaths or deaths due to suicide between the placebo and simvastatin groups despite a 35% reduction in serum low density lipoprotein cholesterol concentration for 5.5 years in the simvastatin group.⁵

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