tion, some menstrual relief, and recurrence of the symptoms shortly after the period ceases? Were Dr Dalton to be really strict and confine the diagnosis of premenstrual syndrome to those women who experience symptoms only during the premenstrual week then the situation might be clearer. But were she to do this she would have to revise drastically downwards her estimate that 50% of actively menstruating women are premenstrual sufferers.²

The symptoms which go to make up the syndrome (tension, anxiety, headache, backache, irritability, depression) are not uncommon; indeed, a recent epidemiological study suggests that they are relatively ubiquitous in women in the age groups studied by Dr Dalton.^{3,4} An additional problem is that to find a woman who is absolutely free of such symptoms at times other than premenstruum can be quite difficult. In the circumstances Dr Dalton's distinction, while of possible theoretical importance, tends to break down in the clinical setting.

Dr Dalton once again reiterates her claim concerning the efficacy of progesterone in the treatment of premenstrual symptoms, despite the fact that two double-blind controlled trials^{5,6} have failed to establish its superiority over placebo. She claims a success rate of 83%; but it should be remembered that other workers have claimed similar rates of success in this condition using substances as diverse as meprobamate, bromocriptine, lithium, and pyridoxine.⁷ Double-blind studies of the efficacy of these substances, however, have also failed to establish their supremacy over placebo. Given that the placebo response rate in the premenstrual syndrome is itself reasonably high, this is a reason not for pessimism, merely for humility.

ANTHONY W CLARE

Institute of Psychiatry,
London SE5 6AF

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Health education to improve rubella immunisation in schools

SIR,—Recently I was a school doctor in a girls' comprehensive school of about 800 girls in the borough of Islington. I was shocked to discover that the uptake of rubella immunisation was only 68%. I decided to give a talk to the 150 11-year-olds on the same day as they were given their forms to take home for parental consent to immunisation for rubella. The talk was short—less than 10 minutes. I was gratified by the result—the increase was from 68% to 86%. I was therefore extremely interested in the article by Dr S A M Jones (6 September, p 649) and would agree from my limited experience that it is the children rather than their parents who should be approached about this.

There are four points that I would like to add to her conclusions. (1) The talk to the girls should be the same day as the forms are taken home for parental consent. This will mean the girls will go home full of enthusiasm and less likely to lose the forms. (2) The girls who have consent and are absent on the immunisation day should be immunised at a

medical session later in the term. (3) Girls who failed the previous year should be invited to attend the talk the next year and be given another form. (4) Teachers should be invited to the talk: firstly, to encourage the girls; and secondly, for their own benefit. In this school in two years 10 teachers were suitably impressed by the talk and came to have their blood tested for antibodies.

B M BARCROFT

London N6 5UB

Symptoms in middle life and the menopause

SIR,—I was surprised to read Mr J Wilbush's criticism (23 August, p 563) of the masterly survey of symptoms in middle life by Dr G T Bungay and others (19 July, p 181). He is disappointed by "their neglect of basic features of their subject matter." What basic features?

The menopause is a physiological event, like the menarche. It is not a disease and has no known pathology. Certain changes occur in laboratory tests such as vaginal cytology and follicle stimulating hormone (FSH) concentrations in serum, which reflect the changing balance between various endocrine glands, but these are only approximately related to symptomatology. They do not in themselves constitute a disease state and few doctors would be prepared to treat, for instance, a raised FSH concentration in the absence of menopausal symptoms. Symptoms are the basic feature of a menopausal syndrome.

"Symptoms vary with the situational factors obtaining at the meeting between patient and doctor." The transactional nature of the medical consultation has been widely recognised. Some women who regard hormone replacement therapy as desirable following its promotion in the lay press, knowing that it is often prescribed for flushes, may complain of flushes to a sympathetic doctor in order to put pressure on him to prescribe hormones. The doctor may be aware of this; but this does not mean that he can ignore the patient's symptoms, which are his chief guide to her clinical needs.

"What do these studies prove?" They show that both men and women in the Oxford area complain of such symptoms as headache, loss of interest in sex, frequency of micturition, low backache, difficulty in sleeping, and crawling and tingling sensations in the skin. They show that these symptoms are not particularly related to the menopause, although some of them have previously been described as "menopausal."¹ They confirm the association of vasomotor symptoms with the menopause,² and the premenopausal peak of minor mental symptoms described by other workers.³

W H Utian carried out a single-blind placebo controlled study of oestrogen therapy in menopausal patients and found that the only symptoms to respond to oestrogen better than placebo were those related to hot flushes and atrophic vaginitis.⁴ In a double-blind placebo controlled trial of conjugated equine oestrogens we found that only hot flushes and vaginal cytology showed a significant improvement on oestrogen compared with placebo. All the other symptoms tested (headache, insomnia, arthralgia, depression, etc), did not show a greater improvement on oestrogen than on placebo.⁵ In a further double-blind placebo controlled trial of piperazine oestrone sulphate in the treat-

ment of menopausal depression and flushing, we found that flushes responded significantly on oestrogen compared with placebo, but depression showed no greater improvement on oestrogen than on placebo, when measured by the Beck Depression Inventory.⁶

The prescription of hormone therapy for "menopausal" symptoms should be limited to those symptoms which have been shown to be menopausal and oestrogen-responsive by epidemiological surveys and controlled trials.

JEAN COOPE

Bollington Medical Centre,
Macclesfield, Cheshire SK10 5JL

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Progestogens before and after the menopause

SIR,—In your leading article on oestrogen-replacement therapy in old age (30 August, p 572) you refer to the evidence from Meade and his colleagues¹ that the progestogen component in combined oral contraceptives may be associated with the increased risk of arterial disease in pill users. It was unfortunate that similar evidence from the Royal College of General Practitioners' Oral Contraception Study² was in press at about the same time, so that neither paper was able to draw attention to the value of the confirmation of the observation from two independent data sets.

You rightly suggest the possibility that the addition of progestogen to an oestrogen regimen in climacteric women might also increase the risk of arterial disease. I have also expressed that view.³ I believe, however, it is important not to assume too readily that observations in premenopausal women can be applied to postmenopausal women, particularly when the treatment is somewhat different. A recent report by Weiss and Sayvetz⁴ identifies one mechanism that may be the same during the reproductive and postreproductive periods. They showed that oral contraceptive users have a reduced incidence of endometrial carcinoma when compared to non-users, and they attribute this benefit to the progestogen component, an effect which is well established in postmenopausal hormone therapy.

In our own data, eight cases of endometrial cancer have been reported. Six of these have occurred in the control subjects who have never used oral contraceptives, two in former users, and none in current users. The associated periods of observation are 129 593 person-years in the control group, 78 142 in the ex-user group, and 98 551 person-years in the current-user group.

Only one case (Vessey, personal communication) has been reported in the Oxford/FPA Study.⁵ This patient entered the study while using a diaphragm and had not used the pill at any time when endometrial cancer was diagnosed six years later. The associated periods of observation among women entering the study while using the pill, the diaphragm, and the intrauterine device are currently 73 382, 33 521, and 24 049 women-years respectively.

In both studies the subjects have predominantly used the combined oral contra-