use of women who are HPV positive should be monitored.

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Sir—Victor Moreno and colleagues<sup>1</sup> report a relative risk of 4.03 (95% CI 2.09–8.02) for cervical cancer in women who tested positive for cervical infection with HPV and had used oral contraceptives for 10 years or longer compared with HPV-seropositive women who had never used them.

Only one previous group of investigators has reported results on the risk of cervical cancer associated with long-term use of oral contraceptives in HPV-positive women.<sup>2</sup> The relative risk was 1.5 (0.8-2.9) associated with 8 or more years' use compared with never users. We report results in 221 white

	Cases (n=221)	Controls (n=393)	Risk ratio (95%Cl)*
Duratio	n of use		
Seropos	sitive for H	PV	
0	4	8	1.00 (0.1-7.8)
1–4	16	18	1.74 (0.8-3.8)
5–9	12	15	0.76 (0.3-2.1)
≥10	11	4	3.92 (1.1-14.1)
All women†			
0	12	49	1.00 (0.5-2.1)
1–4	73	159	1.63 (1.2-2.2)
5–9	76	117	1.86 (1.3-2.6)
≥10	60	68	2.83 (1.9-4.2)
Seronegative for HPV			
0	8	41	1.00 (0.4-2.2)
1–4	57	141	1.61 (1.2-2.2)
5–9	64	102	2.13 (1.5–3.1)
≥10	49	64	2.76 (1.8-4.2)

Stratified by age-groups (<30, 30–34, 35–39, 40–44 years), number of sexual partners (0–1,  $\geq$ 2), smoking (ever/never), and number of previous normal smears (0,  $\geq$ 1). \*Calculated as floating absoluted risk with floating Cl. †Adjusted for HPV seropositivity status.

Risk of cervical cancer according to duration of oral contraceptive use

women aged 20–44 years with biopsyconfirmed invasive cervical cancer diagnosed between 1984 and 1988, and 393 control women without cancer (selected from lists of patients of the same general practitioners as the cases).<sup>3</sup>

Serum was tested for antibodies to HPV 16-E7 and 18-E7 with ELISA to synthetic peptide. Information on oral contraceptive use and other risk factors for cervical cancer was collected by interview. We calculated risk ratios associated with use of oral contraceptives as floating absolute risks,<sup>4</sup> with corresponding 95% floated CI (FCI). All analyses were stratified by age, number of sexual partners, smoking, and number of previous normal smears.

Among controls, risk of seropositivity to HPV 16-E7, HPV 18-E7, or both did not increase with duration of oral contraceptive use. The risk ratios were 0.61 (95% FCI 0.4-2.2) for 1-4 years' use, 0.74 (0.4-1.0) for 5-9 years' and 0.25 (0.1 - 0.7)use. for  $\geq 10$  years' use, compared with never use (1.0, 0.4-2.2). Among HPV seropositive women, 91% of cases and 82% of controls had ever used oral contraceptives. Median duration of use was 6 years and 5 years, respectively, for cases and controls. The point estimate of the risk ratio for cervical cancer in HPV seropositive women who had used oral contraceptives for 10 or more years compared with never users was 3.92 (table). Although the prevalence of detected HPV is lower with serology than it is with tissue-based PCR DNA detection, if oral contraceptive use does not affect the test sensitivity, this should not affect the estimates of the risk in HPV-positive women.

When data for all women were analysed and the estimates of the risk ratios were adjusted for HPV status, risk of cervical cancer also increased significantly with duration of oral contraceptive use (table).

In support of Moreno and colleagues we noted that, in women who have evidence of infection with HPV, long duration of oral contraceptive use is associated with an increased risk of cervical cancer compared with neverusers. Our and Moreno and colleagues' point estimates were similar and, although the point estimate in the study by Deacon and colleagues<sup>2</sup> was lower, the three risks did not significantly differ (p=0.11).

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## Community postnatal care and women's health

Sir—Christine MacArthur and colleagues (Feb 2, p 378)<sup>1</sup> report on postpartum mental care up to 3–4 months after delivery. Maternal care is sufficient during pregnancy and after delivery for the first month. However, little medical attention is received more than 3 months post partum.

Psychological and various physical disorders develop in the postpartum period, especially after 3 months. For example, postpartum thyroid dysfunction develops from 3 to 8 months post partum in 5-10% of women in the general population.<sup>2</sup> Moreover, other diseases also frequently occur during the postgravid period,<sup>3</sup> although most of them are not correctly recognised. Thus community postnatal care up to 3 months post partum is not sufficient to take care of postpartum women.

We propose that a worldwide postnatal health-care system be precisely planned by special medical doctors, with midwives and nurses, who are familiar with postgravid disorders.

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