life expectancy.¹⁻³ Some reports have included data from north east England.³ To our knowledge, however, no previous reports have assessed illness in diabetic patients in relation to social deprivation.

In conclusion, we advocate three courses of action: firstly, to support the alleviation of social and economic disadvantage; secondly, to offer an excellent service to our patients with diabetes, aiming at optimal glycaemic control in order to minimise the risk of complications; and, thirdly, to continue to persuade patients not to smoke.

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Childless women revisited

Gina Johnson for the South Bedfordshire Practitioners' Group

In 1985 we examined the general practice records of a group of women born in 1935 and 1950 to determine the prevalence of childlessness—both voluntary and due to infertility.¹ We reassessed the same variables seven years later in women born in 1950.

Subjects, methods, and results

In 1992 we identified all women born in 1950 from our nine practices with a combined list of 76100 patients. In each record we noted (a) consultations about infertility or subfertility; (b) whether at least one living child had been born; (c) evidence of voluntary childlessness—that is, current contraceptive usage, sterilisation of the woman or her partner, termination of pregnancy, or a written comment in the notes—and (d) whether she had been included in our previous study.

The childless women were divided into three groups: infertile, voluntarily childless, or unclassified. Using the χ^2 test, we compared the results with those for the women born in 1950 in our previous study.

We identified 474 women born in 1950, of whom 459 had complete records. Of these, 24 (5.2%) had consulted a doctor about infertility; five of them remained childless and were classified as infertile (1.1%). In total, 55 women (12%) had not had a live birth; 34 of them (7.4%) were classified as voluntarily childless.

There remained 16 unclassified women (3.5%). This group might contain, in any proportions, celibate women, women using non-prescribed contraception, and women who had been unsuccessful in conceiving but had not sought medical help. Assuming that the ratio of infertility to voluntary childlessness was the same in the unclassified and classified groups, the prevalences of 7.4% and 1.1% were multiplied by 55/39, giving estimates of 10.5% (48) for voluntary childlessness and 1.6% (seven) for infertility. With the same assumption, voluntary childlessness was estimated as 11.0% (68/617) and infertility 3.2% (20/617) in 1985 (95% confidence interval for comparison between studies 7.0% to 15.7% and 1.1% to 6.1% respectively; not significant).

There was no significant difference in any other variable between the two studies (proportion who saw a specialist about infertility 6.8% (42) in 1985 v 5.2% (24) in 1985 (3.7% to 10.7%); proportion who were childless 14.3% (88) v 12.0% (55) (9.8% to 19.4%); proportion who were voluntarily childless 9.2% (57) v 7.4% (34) (5.7% to 13.5%); proportion who were infertile 2.8% (17) v 1.1% (five) (0.9% to 5.4%); and

proportion who were unclassified 2.3% (14) v 3.5% (16) (0.7% to 4.8%).

Twenty seven women were identified as childless in 1985; three of them had since had a child. None of those whom we had classified as voluntarily childless in 1985 had subsequently borne a living child; there was no evidence that they were merely delaying child-bearing, except for one woman with a family history of Huntington's chorea who subsequently discovered that she was infertile.

Comment

Our second study confirms that many women born in 1950 are choosing to remain childless; unresolved primary infertility is uncommon.

A group in Oxford recently estimated that 3.4% of 683 women aged 25 to 44 had primary unresolved infertility.² This figure is probably too high as their subjects included many young women who might subsequently conceive. A study of 83 childless menopausal women in Aberdeen concluded that 3.5% had primary unresolved infertility and 7% were voluntarily childless.³ Our previous results suggest that women from this older generation are less likely to be childless by choice; also they did not have access to modern treatments for infertility.

Childlessness is increasing. Using statistics from the Office of Population Censuses and Surveys Jones estimated that of all women in England and Wales who were born in 1950, 42% were childless at 25 and 15% at 40 (figure).⁴ Of those born in 1965, 60% were childless at 25. How many of these women will remain so? The answer has important implications for British society.

Percentages of women born in 1945, 1950, 1955, 1960, and 1965 who were childless at successive ages (England and Wales).⁴ Reproduced with permission

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Value of radiological follow up of childhood pneumonia

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Children with community acquired pneumonia are recommended to have follow up chest radiography three to four weeks after discharge from hospital to confirm radiological resolution.¹ A recent reappraisal of the lifetime risk of diagnostic x ray exposure in children stressed the need to minimise it.² We were concerned that follow up films were unnecessary and have examined their usefulness.

Subjects, methods, and results

The chest radiographs of children with opacification consistent with pneumonic consolidation were identified by radiologists. Children with asthmatic attacks, compromised immunity, or pre-existing disease were excluded. Pneumonia was diagnosed based on a history of acute respiratory symptoms, fever, clinical findings, and suitable radiographic changes.

Inpatient management and radiological investigation of the children were left to the responsible clinician, who had the routine radiological opinion available. For the study all films were reviewed by ASH. An appointment was offered three to four weeks after discharge from hospital for clinical and radiological review. Defaulters were sent one further appointment.

Seventy seven consecutive children (median age 4 years, range 2 months-12 years) fulfilled the study criteria over two years. Sixty nine had typical clinical presentations of pneumonia, three had febrile convulsions, four abdominal pain, and one shoulder pain. Only nine children had microbiological diagnoses, and these were unrelated to specific clinical or radiological features.

A total of 111 chest radiographs were taken in the 77 children (one to six films per child). In 15 the initial chest radiograph showed bilobar pneumonia; eight had pleural effusions. Repeat inpatient chest radiographs were taken in 18 children, of whom 10 were recovering uneventfully from uncomplicated lobar pneumonia. One showed resolution nine days after presentation, while the others showed resolving or unchanged appearances. Of eight children who had repeat inpatient films for poor progress or worsening clinical condition, four had developed effusions.

Fifty two children received intravenous drugs (usually co-amoxiclav) and 25 oral drugs (mostly erythromycin or co-amoxiclav). Sixty nine recovered uneventfully and eight showed slow clinical response or initial deterioration. There was no relation between antibiotic used or organism isolated and outcome.

Five of the 77 children defaulted from follow up. The table shows the results of chest radiography at initial follow up. Fifty one of 59 children with no symptoms or signs had complete radiological resolution. In the remaining eight, the clinicians reported seven chest radiographs as normal and one as showing clinically unimportant changes; radiologists reported four films as clear and four as showing minor changes; and ASH reported resolving minor changes in eight. Interobserver variation in reporting chest radiographs may account for this finding.³ Thus if clinical resolution had occurred no significant radiological abnormalities persisted at follow up.

Clinical and radiological findings at first follow up visit

Clinical findings	No of children	Radiological findings		
		Resolved	Improved	Unchanged
Well—no symptoms or signs	59	51	8	
Symptoms but no signs	11	4	6	1*
Signs	2	1	1	

*Resolved at later review.

Of 13 children without complete clinical resolution at first follow up, five had radiological resolution. Seven of the eight with symptoms or signs and important findings on chest radiography at follow up had had effusions. All were followed up until complete resolution had occurred (maximum two further visits).

Comment

Radiological resolution of pneumonia is known to lag behind clinical resolution,⁴ but doctors repeat chest radiographs because of concern about missing persisting collapse or effusion. Our results suggested that in uncomplicated childhood pneumonia these concerns are unfounded and follow up radiographs are unnecessary. We also found repeat inpatient films were unhelpful if the child had improved clinically.

Our findings relate only to pneumonia in children. In adults a tumour partially obstructing a bronchus may become visible only after resolution of pneumonic changes and radiological follow up is therefore essential.

We conclude that, in the absence of pleural effusion, children with community acquired pneumonia who respond well to antibiotic treatment and are normal at follow up do not need further chest radiography.

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