

References

1. Kores RC, Murphy WD. Predicting outcome of chronic pain treatment via a modified self efficacy scale. *J Behav Res Ther* 1990; **28**: 165-169.
2. Taylor AG, Lorentzen LJ. Psychological distress of chronic pain sufferers and spouses. *J Pain Symptom Management* 1990; **5**: 60-61.
3. Kinsman R. Multidimensional analysis of peak pain symptoms and experiences *J Psychother Psychosom* 1989; **51**: 101-112.

Estimating date of delivery

Sir,

We should like to answer Dowell and Astburys' criticisms (letters, January *Journal*, p.42) of our paper.¹ We do not accept their view that routine ultrasound scanning has been introduced into antenatal care before adequate assessment. While there may be no measurable improvement in outcome of pregnancies which continue beyond viability, routine ultrasound scanning is effective in detecting fetal abnormality.²

Dowell and Astbury agree with us that an accurate estimated date of delivery is important. They do not, however, believe that our conclusion, to use the scan estimated date of delivery in preference to the last menstrual period estimated date of delivery, is valid. They imply that our sample size was too small; we were at pains to explain how we ensured it was not. Our results are in line with several larger hospital-based series.³⁻⁵

It is alleged that our methodology was flawed in two ways. First, because we did not correct our last menstrual period data for cycle length. There is great variation in cycle length, not only between women but also from one cycle to the next in individual women. Approximately one third of all cycles in adult women depart by more than three days from the individual's mean cycle length.⁶ One study of women's menstrual charts showed that 28-day cycles occur no more than 16% of the time.⁷ Of the 106 women in our study 62 (58%) opted for 28 days as their commonest cycle length. Just as many women's given date of last menstrual period is inexact,⁶ uncharted cycle length information tends to be unreliable.

During recruitment we performed a preliminary analysis correcting for cycle length; it made no improvement to the accuracy of the last menstrual period estimated date of delivery. We have now reanalysed the complete dataset with a cycle length adjustment where applicable equal to the reported commonest cycle length minus 28 days. Overall, adjustment seems to have made the last menstrual period estimated date of delivery less

accurate, rather than more; for example, the mean error of the last menstrual period estimated date of delivery was 2.6 (standard deviation 10.3) days before adjustment, and 3.2 (SD 10.5) days after it. The scan was significantly ($P < 0.05$) more accurate than the adjusted last menstrual period estimated date of delivery when the error was between five and 10 days, compared with between five and seven days before adjustment. However, when the discrepancy between the scan and adjusted last menstrual period estimated date of delivery was 13 days or more, the performance of the last menstrual period was marginally better than before; nevertheless, the scan estimated date of delivery was consistently more accurate in at least 75% of cases when the discrepancy was eight days or more. Our data therefore indicate that cycle length adjustment is likely to be of no benefit in improving the accuracy of the last menstrual period estimated dates of delivery, and could make them less accurate.

Secondly, we are criticized because the radiographers were unblinded to the study and scans with a discrepancy of more than one week were repeated. Since the scan-based estimated dates of delivery were by definition calculated prospectively, the unblind nature of the scans would have no effect on their accuracy. Similarly, we can see no logic in the assertion that rescanning in cases of uncertainty would necessarily improve the accuracy of the scan estimated date of delivery. Some of the repeat scans would have been performed later than 24 weeks' gestation when it is well known⁶ that scans are less accurate in predicting the estimated date of delivery than earlier in pregnancy.

SAM ROWLANDS

Ivel Medical Centre
35-39 The Baulk
Biggleswade
Bedfordshire SG18 0PX

PATRICK ROYSTON

Department of Medical Physics
Royal Postgraduate Medical School
Hammersmith Hospital
Ducane Road
London W12 0NN

References

1. Rowlands S, Royston P. Estimated date of delivery from last menstrual period and ultrasound scan: which is more accurate? *Br J Gen Pract* 1993; **43**: 322-325.
2. Bucher H, Schmidt JG. Does routine ultrasound scanning improve outcome in pregnancy? Meta-analysis of various outcome measures. *BMJ* 1993; **307**: 13-17.
3. Grenner L, Persson P-H, Gennser G. Benefits of ultrasonic screening of a pregnant population. *Acta Obstet Gynecol Scand Suppl* 1978; **78**: 5-14.

4. Campbell S, Warsof SL, Little D, Cooper DJ. Routine ultrasound screening for the prediction of gestational age. *Obstet Gynecol* 1985; **65**: 613-620.
5. Waldenström U, Axelsson O, Nilsson S. A comparison of the ability of a sonographically measured biparietal diameter and the last menstrual period to predict the spontaneous onset of labor. *Obstet Gynecol* 1990; **76**: 336-338.
6. Geirsson RT. Ultrasound instead of last menstrual period as the basis of gestational age assignment. *Ultrasound Obstet Gynecol* 1991; **1**: 212-219.
7. Chiazzie L, Brayer FT, Macisco JJ, et al. The length and variability of the human menstrual cycle. *JAMA* 1968; **203**: 377-380.

Summative assessment

Sir,

Having recently passed the MRCGP examination a year after completing my trainee year, I am glad that circumstances led me to leave the examination preparation until after the trainee year was finished. During the trainee year I had the opportunity and time to put together my own programme of training under the guidance of my trainer. The preparation time I put into the examination would have seriously affected this opportunity.

The present drive towards summative assessment, however framed, will result in what will be seen as an examination, and its content will be seen as the curriculum for the year. Trainees will lose the time and opportunity to develop their individual skills, and the essence of the trainee year which I so valued will have been sacrificed. We do not need to find out if trainees are able to pass examinations, as this has been proven many times over at university.

I agree that a wide spectrum of abilities exists in general practice, but I have seen little evidence that the tests being devised are aimed at identifying specific deficiencies in those less able, more at testing the small minority of attributes that are testable in a reproducible and valid way.

I predict that imposing this development will further exacerbate the recruiting problem for our branch of the profession. General practitioner trainees opposed summative assessment at their last national conference, and their call for a survey of trainees' views has been turned down by the General Medical Services Committee (Medicopolitical digest, *British Medical Journal* 1993; **307**: 330). I hope the experiences of those of us who have recently come through the system are sought and listened to.

MILES MACK

Muircroft
Jamestown
Strathpeffer
Ross-shire IV14 9ER