

References

1. Gilbert RE, Augood C, Gupta R, Ades AE, Logan S, Sculpher M, et al. Screening for Down's syndrome: effects, safety, and cost effectiveness of first and second trimester strategies. *BMJ* 2001; **323**: 423–425. (25 August.)
2. Howe DT, Gornall R, Wellesley D, Boyle T, Barber J. Six year survey of screening for Down's syndrome by maternal age and mid-trimester ultrasound scans. *BMJ* 2000; **320**: 606–610.
3. Ford C, Moore AJ, Jordan PA, Bartlett WA, Wyldes MP, Jones AF, et al. The value of screening for Down's syndrome in a socioeconomically deprived area with a high ethnic population. *Br J Obstetr Gynaecol* 1998; **105**: 855–859.

Authors' reply

R E Gilbert, senior lecturer in clinical epidemiology, C Augood, research fellow in systematic reviews, R Gupta, research assistant in statistics, S Logan, senior lecturer in epidemiology, A E Ades, reader in biostatistics, M Sculpher, senior research fellow, J H P van der Meulen, senior lecturer in clinical epidemiology

The Surgery, Welling, Kent DA16 2JZ

Department of Fetal Medicine, Birmingham Women's Hospital, Birmingham B15 2TG

Queen's Hospital, Burton-on-Trent, Staffordshire DE13 0RB

Wessex Fetal Medicine Unit, Princess Anne Hospital, Southampton SO16 5YA

Systematic Reviews Training Unit, Department of Paediatric Epidemiology and Biostatistics,

Department of Paediatric Epidemiology and Biostatistics, Institute of Child Health, London WC1N 1EH

Centre for Health Economics, University of York, Heslington, York YO1 5DD

Health Services Research Unit, Department of Public Health and Policy, London School of Hygiene and Tropical Medicine, London WC1E 7HT

Department of Pediatrics, St Stephen's Hospital, Tis Hazari, Delhi 110054, India

Department of Congenital Heart Disease, Guy's Hospital, London SE1 9RT

EDITOR—The questions about costs raised by Venn-Treloar, Whittle, and Reynolds were addressed in the full text version of the report on bmj.com, with further details in the technical report (www.ich.ucl.ac.uk/srtu/frampubs.htm).¹ We included the costs of counselling before amniocentesis, chorionic villus sampling, or termination, but we assumed that screening options were discussed with all women at booking. As all women were assumed to have had a dating ultrasound scan, the cost of the nuchal fold translucency test relates to the additional time to take measurements, explain the results, and train ultrasonographers.

Reynolds seems to have missed the section in the methods that explains that the nuchal fold measurement was adjusted for verification bias. Howe makes the case for a modelling exercise. Differences between our detection rates and those from studies based on routine care will be strongly affected by uptake rates, referral practices, and verification bias. Modelling takes account of these factors to allow comparison of test performance and would still be required even if trials were feasible.

Finally, Reynolds raises an important point about the poor precision of the detection rate. One approach is to look for consistency of the characteristics of test performance. Meta-analyses of the results for biochemical markers produce comparatively precise results, which are consistent with the characteristics used in the analysis. But to take account of the correlation between markers we used test characteristics from a single large, archived dataset. Other archived datasets have given similar results.² We believe that this approach gives the best estimates of test performance but accept that random error is not represented.

References

1. Gilbert RE, Augood C, Gupta R, Ades AE, Logan S, Sculpher M, et al. Screening for Down's syndrome: effects, safety, and cost effectiveness of first and second trimester strategies. *BMJ* 2001;**323**: 423–425. (25 August.)
2. Wald NJ, Kennard A, Hackshaw A, McGuire A. Antenatal screening for Down's syndrome. *J Med Screen* 1997;**4**: 181–246.

Ratio of femoral length to tibial length needs to be evaluated extensively

Pooja Sachdev, registrar in paediatrics, Shubhra Bahl, senior house officer in paediatrics, Jacob M Puliyeel, consultant paediatrician (puliyeel@vsnl.com)

The Surgery, Welling, Kent DA16 2JZ

Department of Fetal Medicine, Birmingham Women's Hospital, Birmingham B15 2TG

Queen's Hospital, Burton-on-Trent, Staffordshire DE13 0RB

Wessex Fetal Medicine Unit, Princess Anne Hospital, Southampton SO16 5YA

Systematic Reviews Training Unit, Department of Paediatric Epidemiology and Biostatistics,

Department of Paediatric Epidemiology and Biostatistics, Institute of Child Health, London WC1N 1EH

Centre for Health Economics, University of York, Heslington, York YO1 5DD

Health Services Research Unit, Department of Public Health and Policy, London School of Hygiene and Tropical Medicine, London WC1E 7HT

Department of Pediatrics, St Stephen's Hospital, Tis Hazari, Delhi 110054, India

Department of Congenital Heart Disease, Guy's Hospital, London SE1 9RT

EDITOR—Gilbert et al and Howe et al in their articles rely heavily on maternal age to screen for Down's syndrome. ¹ ² But maternal age is not so useful in India and other countries where early marriage is the norm and the social pressures for early motherhood are enormous. In our series, which included 3000 deliveries and seven babies with Down's syndrome, we saw that all babies with the syndrome were born to mothers younger 35 years.

We reported in the *American Journal of Perinatology* our finding that the ratio of femoral length to tibial length remains remarkably constant around 1.15 (range 1.13–1.19) in fetuses after 13 weeks' gestation.³ Fetuses with Down's syndrome had this ratio greater than 1.2 (standard deviation 4.5) compared with norms. The youngest fetus with Down's syndrome in our sample was 22 weeks old at the time of measuring. We hope that this ratio will be evaluated more extensively and earlier in