was screened by a nurse (and possibly many fewer if patient self screening was feasible) this would cost £4000 in a practice of four partners, in which 8-16 melanomas would be diagnosed over 10 years. If one of these melanomas could be prevented or diagnosed earlier, and other costs minimised, 15-20 life years could be saved with a cost effectiveness comparable with screening for that of hypertension.

Although Keeley reinforces some valid points, he ignores suitable study design, automatically assumes pessimistic outcomes, and unnecessarily polarises the debate when research is at such an early stage.

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Place of tricyclics in depression of young people is not proved

EDITOR,—P Hazell and colleagues address an important issue in their meta-analysis of the efficacy of tricyclic antidepressants in child and adolescent depression.¹ Owing to deficiencies in both the material and analysis, however, it is vital that their results are taken to mean that the efficacy of such depressants is “not proved” rather than that they are ineffective in this situation.

Firstly, the authors do not discuss the diagnosis and severity of depression in the patients. In adult psychiatry “minor” and mild depression show less specific response to antidepressive drugs than more severe, “major” depression.² It seems very likely, in view of the high placebo response in the studies analysed, that this might be true of the child and adolescent patients studied. Heterogeneity in the patient groups would weaken the power to detect differences in responses to drugs and placebos. Better definition of patients may identify a group of patients for whom drug treatment is beneficial.

Secondly, the studies used a variety of rating scales to measure change. Hazell and colleagues do not discuss the validity of combining effect sizes from different measures; they assume that these measures are similar in their ability to detect change, which may not be warranted. Thirdly, the total number of patients from all studies combined is very small (76 and 85 in active and placebo groups respectively). Even in a single, well conducted study, 80 patients in each group gives less than the conventionally required power of 0.8 to detect an effect size of 0.35 at 5% significance.³ It is therefore not possible to exclude a difference in efficacy between drug and placebo with these small numbers. Related to this point is the magnitude of effect size that the authors consider to be clinically significant. Requiring a difference in effect size of 2 over placebo is wholly unrealistic, and few, if any, treatments could claim this. Cohen gives 0.5 as a medium effect size likely to be of practical significance and 0.8 as a large effect size.³ In a recent meta-analysis of the efficacy of selective serotonin reuptake inhibitors and tricyclic antidepressants in adults with major depression, the mean difference in effect size compared with placebo was 0.4—not very different from the 0.35 in this meta-analysis except the larger numbers

made the result highly significant. Also, the confidence interval in the meta-analysis by Hazell and colleagues (0.86) encompasses a large effect size.

While the authors may be correct that drugs should not be the first line of treatment for child and adolescent depression they cannot conclude this from their study. The conclusion that they should draw from this meta-analysis is that larger studies with careful definition of patients are needed to determine whether antidepressants are effective.

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Labour and birth in water

Safety has yet to be determined

EDITOR,—The recent survey by Fiona Alderdice and colleagues of labour and birth in water in England and Wales shows that once again a new form of intrapartum care has been introduced without adequate assessment.¹

The survey was based on data collected through a short postal questionnaire and telephone interviews without any validation. The retrospective nature of the survey led to a high incidence of “good” and “rough estimates.” Unfortunately, even the place of birth was not accurately documented and the number of patients delivered in water was estimated. The inclusion of the good estimates in the study results raises doubt about the accuracy of the results. The analysis of two unmatched groups (labour in birthing pools and giving birth in water) without discrimination adds to the difficulty in interpreting these results.

As most units restrict the use of water birth to women at low risk, the death of 12 babies is an unacceptably high incidence. Although, these are reported as not being directly attributed to the use of water by the respondents, it would have been helpful if this had been validated by the survey team.

The report of the Confidential Enquiry into Stillbirths and Deaths in Infancy included deaths associated with home water births in 1993,² and these were presumably included in the survey. The confidential enquiry commented on the “general lack of details in the description of where and what had occurred” in deaths associated with home water births. Perhaps this applies to all death reports in such cases?

The survey also reports 51 cases of morbidity in neonates but does not state whether these were attributed to water births.

Unfortunately the survey by Alderdice and colleagues, which has been quoted by some members of the press to emphasise the safety of water births based on the large number of mothers in the study, once again shows that safety has not yet been proved and will not be proved without a randomised controlled trial being performed.

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- 1 Alderdice F, Renfrew M, Marchant S, Ashurst H, Hughes P, Berridge G, et al. Labour and birth in England and Wales. *BMJ* 1995;310:837. (1 April.)
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Temperature of pool is important

EDITOR,—Fiona Alderdice and colleagues reported on the safety of labour and birth in water and recommended that information about such practices should be collected routinely as part of local audit.¹ We have audited 112 case records selected by hospital number sequence from those of the 353 women who either laboured or delivered in a birthing pool in our unit between January 1990 and December 1993.

The mean cervical dilatation on entry to the pool was 4.8 (SD 2.0) cm (range 1-10). The time spent in the pool ranged from 10 minutes to a total of 13 hours 25 minutes (mean 2 hours 28 minutes). Fifty one (46%) women delivered in the pool while 61 (54%) left permanently at a mean cervical dilatation of 6.5 (2.7) cm (1-10), before delivering a mean of 4 hours and 27 minutes (range 5 minutes to 21 hours) later with a vaginal delivery rate of 95%. The length of time spent in the pool did not influence whether the birth took place under water.

The table shows the reasons for leaving the pool. Four women left because fetal tachycardia was detected on intermittent auscultation with a portable waterproof Doppler ultrasound machine. A fifth woman was also noted to have fetal tachycardia but did not leave the pool. Before entry all had recorded oral temperatures of 36.8°C or less and a recorded baseline fetal heart rate between 120 and 150 beats/minute. While in the pool the baseline fetal heart rate increased to between 170 and 190 beats/minutes. In four cases this was associated with a recorded maternal oral temperature of between 37.5°C and 38.4°C; in one case, although maternal oral temperature was not recorded, the water temperature in the pool was noted to be >38°C. Four women immediately left the pool and subsequent monitoring by continuous cardiotocography confirmed baseline tachycardia with good baseline variability and no other adverse features apart from early decelerations in one case.

Reasons why 61 women left birthing pool before delivery

Reason for leaving birthing pool	No (%) of women
Need for alternative analgesia:	
TENS	1
Nitrous oxide/oxygen	9
Pethidine	8
Epidural	15
Poor progress in first stage of labour	5
Appearance of meconium stained liquor	3
Decelerations auscultated in first stage of labour	3
Fetal tachycardia auscultated in first stage of labour	4
To facilitate pushing in second stage of labour	5
Mother did not want to deliver in water	3
Fetal bradycardia in second stage of labour while pushing	2
Contractions worn off in pool	2
Raised blood pressure	1

TENS=Transcutaneous electrical nerve stimulation.

The baseline fetal heart rate then fell to normal over about one hour. The woman who did not leave the pool had cold water added and over the next hour the fetal heart rate and maternal temperature returned to normal. Within three hours all women were afebrile and had no further episodes of fever. They subsequently delivered vaginally with no further complications.

Fetal tachycardia associated with maternal fever or excessive water temperature was unexpected. In all cases, the tachycardia resolved on cooling. It is of concern because the fetus is 1°C warmer than