

cohort study of women included in the Swedish national inpatient register. They compared first hospitalisation rates for connective tissue diseases between 7442 women with implants and 3353 women who had undergone breast reduction surgery over 92 880 person years of observation. No significant increase in risk of connective tissue disease was apparent when rates in the implant group were compared with expected rates in the general population (standardised hospitalisation ratio 1.1; 0.8 to 1.6) or with those in the breast reduction group (1.3; 0.7 to 2.2). Careful attention was paid to validating diagnoses, and the use of admission rather than self reports of disease improves specificity. The results add weight to the conclusion that silicone breast implants are not associated with a meaningful excess risk of connective tissue disease.

It is difficult to see how epidemiological studies will shed more light on this vexed issue. Some of those concerned in prolonged legal disputes are clearly unshakeable in their belief that the association exists, and the public reputation of silicone breast implants may have been irrevocably tarnished. An independent review group of the Department of Health, established by the chief medical officer in response to ministerial concern, is due to report this spring. Until then perhaps the medical community's most appropriate response would be to endorse the American College of Rheumatology's plea that greater reliance should be

placed on the quality of evidence during the early appraisal of health issues such as this.

Cyrus Cooper *Professor of rheumatology*

Elaine Dennison *Wellcome training research fellow*

MRC Environmental Epidemiology Unit, University of Southampton, Southampton General Hospital, Southampton SO16 6YD

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Neonatal screening for cystic fibrosis

No evidence yet of any benefit

Neonatal screening for cystic fibrosis by using a simple test that can be performed on the "blood spots" routinely collected in screening for phenylketonuria and hypothyroidism raises exciting possibilities. The test is relatively easy to perform and the specimen is already collected, but even a simple test performed on millions of individuals will be costly, and the early knowledge of a serious disorder will cause more harm than good if there is no effective remedy. The results of a large randomised trial of neonatal screening for cystic fibrosis have recently been published in the *New England Journal of Medicine*.¹ The trial involved two thirds of a million newborn infants and their subsequent follow up. The conclusion that screening and subsequent treatment improves the growth and development of children with cystic fibrosis was met with enthusiasm.² Unfortunately the conclusion may not be justified, and the results suggest that any long term benefit is small.

The neonates were randomised into two equal groups of about 325 000 and immunoreactive trypsinogen measured on the blood spots of all infants; towards the end of the study DNA testing was also performed. In the "screened" group the results were examined immediately and acted on if they were positive. In this group there were 74 cases of cystic fibrosis (15 with meconium ileus recognised at birth, 54

detected by screening, and five missed on screening but diagnosed later clinically). In the control group the trypsinogen results were stored and examined when the child was 4 years old. In this group there were 67 cases of cystic fibrosis (18 with meconium ileus recognised at birth, 40 who presented clinically before the age of 4, and nine who were diagnosed only when the trypsinogen results were examined at the age of 4). The expectation of benefit from screening can only be small because the median age at diagnosis was 23 weeks in the controls, only 16 weeks later than in the screened group. Screening materially advanced diagnosis in only a minority.

The weights and heights of the two groups are reported in the paper. A difficulty that is not discussed in the report is that the data in children under 4 years are subject to selection bias. On average, affected infants in the screened group are likely to be healthier than identified affected infants in the control group, because the affected infants in the screened group are likely to include infants with less severe disease that would not have presented clinically had they not been screened. Only after 4 years are the two groups, in expectation, comparable, and only after this point does the randomised design ensure the avoidance of bias. The conclusion by the authors that screening is associated with taller and heavier children rests on the results

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in the whole period of 10 years, but this is statistically strongly influenced by the results in the first three years, which are open to selection bias. The authors do not present a separate analysis restricted to follow up after the first four years. The pattern of results shown in the graphs comparing height and weight at different times since birth suggests little difference between the two groups. The study design is an ingenious one, but the analysis of the results is problematic.

One must conclude, therefore, that this trial provides no evidence of any benefit of screening. The pattern of results after four years weighs against a material benefit, but the number of cases is small, so failure to find a significant difference does not exclude a small benefit. Longer follow up (beyond the 10 years of age in this study) may be informative. When the children are older the key outcome measure should be lung disease because it is this above all that causes the severe disability and premature death in cystic fibrosis. This is not covered here, but with longer follow up the

rate of hospital admissions for respiratory illness in the two groups could be reported.

Although we cannot say at this stage whether neonatal screening is worth while, the present evidence is not encouraging and does not warrant any change in policy from that suggested by the National Institutes of Health consensus development statement,³ which concluded: "Offering cystic fibrosis genetic testing to newborn infants is not recommended."

Nicholas J Wald *Professor*

Joan K Morris *Senior lecturer*

Wolfson Institute of Preventive Medicine, St Bartholomew's and the Royal London School of Medicine and Dentistry, London EC1M 6BQ

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Missed problems and missed opportunities for addicted doctors

We need a special service for doctors addicted to drugs or alcohol

Every few days another addicted doctor comes to light in Britain. A report from an alliance of health professional bodies, led by the British Medical Association and published last month,¹ highlights the risk posed by such doctors to the general public and calls for better preventive education and awareness. It fails, however, to prioritise the need for improved treatment for addicted doctors.² This need arises from the special problems facing addicted doctors compared with other addicts and their special treatment needs, which ordinary addiction services do not serve well.

Doctors are at special risk of developing addiction problems,³⁻⁵ owing to the strain of medical practice, erosion of the taboo against injecting and opiates, and, particularly, access to supplies.⁶ Once addicted, they pose a particular risk to the general public, forcing consideration of whether they need urgent removal from their work. Ordinarily, many patients with drug or alcohol problems receive outpatient treatment while continuing to work, but the same level of disability may be incompatible with medical practice. In addition, since most doctors who become addicted to drugs misappropriate them from work, removing the doctor from his or her work environment may be necessary to protect both the doctor and the public.

Membership of the medical profession normally enhances access to treatment, through knowledge of providers and the old boy network, but addicted doctors face major problems in accessing effective treatment. Addiction fosters isolation and denial: when present in a medical culture that prizes self reliance and has deficient mechanisms for intervention and treatment, the paradoxical consequence is impaired access to health care. Doctors find it particularly

difficult to access help for stigma bound problems, fearing breaches of confidentiality and jeopardy to their reputation, professional accreditation, and employment. The NHS reforms have further aggravated the problem with their requirement for identifying patients referred outside normal contracts.

The identification of addiction problems is often characterised by crisis—perhaps following removal from the operating theatre or surgery after being deemed intoxicated, complaints from patients, or discovery stealing drugs from the workplace. The problem may be chronic, but the circumstances around public exposure give the condition an acute on chronic character. Internal investigations are often inefficient, protracted, and inhumane for a doctor who essentially has a health problem. It is easy to see why addicted doctors feel they cannot seek treatment. Nevertheless, such crises provide excellent opportunities for healthcare intervention.

Providing treatment to the addict-doctor also poses challenges. Doctors have difficulty accepting the role of patient. Clinical staff may deal with addicted doctors differently—for example, treating them more as colleagues and holding higher expectations for recovery, compliance, and participation in treatment. Nevertheless, despite these complications, when addicted doctors are comprehensively treated the outcome is good.^{3,5,7}

Thus addicted doctors are deflected from obtaining help by numerous obstacles and eventually come to light through distorted routes of referral—via distraught colleagues, friends, or family seeking secret consultations or informal opinions. Existing provision, as listed in the BMA report,¹ falls far short of an accessible and appropriate and adequate service. A