

his textbook on the treatment of alcoholism to "ether inebriety" and a further nine pages to "chloroform inebriety." He gave his detailed views on the geographical and social spread of abuse of ether between 1842 and the legislative restrictions of 1909. He, too, believed that "another remedy would be the abolition of the retail sale" (of ether). He described the abuse of the substance by young "etherists." "Sturdy Irish lads and beautiful Irish lasses ... are slaves to ether drunkenness." He discussed supply: "The hawkers carry about a bottle of ether and do not scruple at selling to anyone, however young ... in this way the children may procure the ether on their way to school." He continued, "The habit has become so general, that small shopkeepers treat the children who have been sent to purchase some article with a small dose of ether, and schoolmasters have detected ether on the breaths of children from ten to fourteen (or even younger), on their arrival at school." He described escalation in dose; many drank ether, though his own patients inhaled: "In England I have known an ether inebriate use a pint of ether by inhalation every day." Users enjoyed the speed of the response: "The exhilarative stage of morbid exaltation ... the fun and exuberant merriment." A medical user preferred ether to opium.

McBride stood back to consider abuse of ether as "in reality, but a new manifestation of an underlying morbid condition which renders certain of the sons and daughters of men peculiarly liable to plunge into intoxication. We can never hope to succeed in the cure and prevention of any disease until we first recognise the presence of the disease itself. The malady of narcomania, as subtle as it is far-reaching in its influence on body, brain and mind, and morals." He further believed, "The disease of inebriety or narcomania (a mania for intoxication by any kind of narcotic or anaesthetic) may, besides other phases, assume a form correspondent to the particular inebriating substance." The success of the temperance crusade had caused an enormous reduction in the use of alcohol, but his population then turned to ether. The need for a mood altering substance or hallucinogen seems to remain; the substances vary. We must try to remove the most dangerous substances.

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- 1 Esmail A, Anderson HR, Ramsey JD, Taylor J, Pottier A. Controlling deaths from volatile substance abuse in under 18s: the effects of legislation. *BMJ* 1992;305:692. (19 September.)
- 2 McBride CA. *The modern treatment of alcoholism and drug narcotism*. London: Rebman, 1910:299-324.

Assessment of patients over 75

EDITOR,—Two recent studies on the assessment of people aged over 75 in general practice^{1,2} confirm some of the findings of a study that we carried out, evaluating the activity of 27 local practices regarding the assessment of patients over 75 in the first year of the new general practice contract. Interestingly, however, the two studies also seem to contradict each other's findings.

In a survey of 699 records we found a similar proportion of patients with new problems to that found by Ken Brown and colleagues¹ (43% compared with 37%). We also confirmed that more new problems were identified in the home than in the surgery (71% and 21% respectively). Brown and colleagues conjecture that this difference occurs because practices select high risk patients for further assessment in their own homes. We would be interested to learn the method used to define high risk groups for this conclusion. Our study also found that home assessment was more likely to identify problems, particularly sensitive ones, such as problems with continence, hearing, func-

tion, medication, and mobility. We therefore suggest that the time spent on the assessment and the comfort of the patients contributed to their willingness to respond.

We acknowledge Jill Tremellen's point that health education is a key element in anticipatory care.¹ Locally, we are expanding the link work scheme¹ and believe that link workers have a potential role in health education, in its broadest sense, in terms of giving advice and information relating to the needs that the assessor has unearthed. For more specialist advice the liaison role of link workers means that they can refer selectively to the practice nurse, health visitor, or district nurse.

Moreover, in contrast to the gaps in training of practice nurses, which are mentioned in both papers, link workers are prepared through their experience of working with elderly people in the community and the training they undergo for the job. The standardised, computerised assessment that link workers use, as well as the time and thoroughness they can give to the assessment, provides some confidence in the quality of assessments and means that Brown and colleagues' conjecture that the number of problems identified will reduce in subsequent years can be addressed. The benefits of this role not only outweigh any disadvantages but also provide solutions to the problems identified by these studies.

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- 1 Brown K, Idris Williams E, Groom L. Health checks on patients 75 years and over in Nottinghamshire after the new GP contract. *BMJ* 1992;305:619-21. (12 September.)
- 2 Tremellen J. Assessment of patients aged over 75. *BMJ* 1992;305:621-4. (12 September.)
- 3 Wallace P. Linking up with the over 75s. *Br J Gen Pract* 1990;4:267-9.

X-Y linkage and schizophrenia

EDITOR,—Michael Owen and Peter McGuffin's review of the present state of linkage studies in schizophrenia¹ overlooks a possible resolution of the conflicts of evidence with respect to the sex chromosomes. Correctly, the authors note that a "possible clue to the location of a locus for susceptibility to schizophrenia comes from the observation that pairs of siblings both affected ... are more often than not of the same sex" and point out that this might suggest a gene for schizophrenia in the pseudoautosomal region of the sex chromosomes. This is true but is unnecessarily restrictive. More generally, concordance by sex for diagnosis is consistent with X-Y linkage. Whereas previously it seemed that an autosomal pattern of transmission was compatible with a locus on the sex chromosomes only if that locus was within the pseudoautosomal region, a class of X-Y homologous genes in the sex specific regions of the sex chromosomes has now been described.² Disease associated with a gene of this type (like one within the pseudoautosomal region) would preferentially affect siblings of the same sex.

Owen and McGuffin discount the evidence of concordance by sex on the grounds that it might arise from a bias toward one sex (usually an excess of males) in the method of collecting pedigrees. This objection is weakened by a reanalysis of an earlier report of 120 sibships with two affected members¹ and a report from the Cardiff group itself.¹ Two further recent studies document an excess of siblings of the same sex,^{3,4} although

whether this is associated with a paternal family history (consistent with a dominant mode of transmission) or with absence of, or a maternal, family history (consistent with recessive transmission) is unclear. Thus while there is conflict regarding linkage to the pseudoautosomal telomere, concordance by sex (in the absence of a non-genetic explanation) points to X-Y linkage.

An X-Y homologous gene is an interesting candidate gene for schizophrenia because, firstly, there are grounds for suspecting that a genetic determinant of cerebral asymmetry is also of this type² and, secondly, concordance by sex is present in the affective disorders as well as schizophrenia;³ this leaves open the possibility of a common, sex linked locus for both affective and schizophrenic psychoses despite an apparently autosomal pattern of transmission.

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- 1 Owen M, McGuffin P. The molecular genetics of schizophrenia. *BMJ* 1992;305:665-6. (19 September.)
- 2 Davies K. The essence of inactivity. *Nature* 1991;349:15-6.
- 3 Crow TJ, DeLisi LE, Johnstone EC. Reply ... a locus closer to the telomere? *Br J Psychiatry* 1990;156:416-20.
- 4 Asherson P, Parfitt E, Sargeant M, Tidmarsh S, Buckland P, Taylor C, et al. No evidence for a pseudoautosomal locus for schizophrenia. *Br J Psychiatry* 1992;161:63-8.
- 5 Wang ZW, Crowe RR, Black D, Andreasen N. Pseudoautosomal locus for schizophrenia excluded in twelve pedigrees. *Arch Gen Psychiatry* (in press).
- 6 Maier W, Lichtermann D, Minges J. Further evidence for excess concordance by gender in sib pairs affected with schizophrenia. *Schizophrenia Research* (in press).
- 7 Crow TJ. Temporal lobe asymmetries as the key to the etiology of schizophrenia. *Schizophr Bull* 1990;16:433-43.
- 8 Crow TJ. The failure of the Kraepelinian binary concept and the search for the psychosis gene. In: Kerr A, McClelland H, eds. *Concepts of mental disorder*. London: Gaskell, 1991:31-47.

John Loutit's advance in collecting blood

EDITOR,—The obituary on John Loutit does not mention an important technical advance that he made with regard to the solutions used for blood collection from donors.¹

Those who had charge of transfusion centres from 1939 (the wartime emergency transfusion service) were faced with the problem that when alkaline citrate solution and glucose were autoclaved together caramelisation occurred, the autoclaved solution being dark brown like coffee or tea. Blood taken into citrate solution without glucose survived well in the recipient's circulation if used within a couple of days but was rapidly eliminated from the recipient's circulation if it had been stored for 10 days or more. Blood taken into citrate solution with glucose can be stored for up to 21 days and will survive quite well on transfusion; if stored for about a week it will survive about 100 days or so in vivo.

Caramelisation of glucose with its resultant deterioration was undesirable. Loutit introduced acid citrate-glucose solution, which was a great advance technically since such solutions could be autoclaved without caramelisation of the glucose. The autoclaved solution was the colour of lime juice. Blood taken into acid citrate-glucose solution had excellent in vivo survival. Before the introduction of acid citrate-glucose solution, the citrate and glucose solutions had to be autoclaved separately, the glucose being added at the time the blood was collected, entailing extra work and the risk of airborne contaminants. The use of acid citrate-glucose solution saved work and made for greater safety in blood collection.

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- 1 Obituary: John Loutit. *BMJ* 1992;305:519-20. (29 August.)