

At Dingleton we have routinely seen out-patients at home, preferably with a co-therapist for 25 years. Up until now this model has not been evaluated in a well controlled trial, although several new services have made favourable comparisons between themselves and previous or adjacent hospital-based services. Punukollu (1991) reported reduced bed occupancy after introducing a crisis intervention team to one of the sector teams in Huddersfield. Pullen & Gilbert (1985) and Dean & Gadd (1989) reported fewer admissions if the initial emergency assessment was done at home rather than hospital.

Home assessment was introduced by Querido in Amsterdam in the 1930s in an effort to save money by reducing admissions (Querido, *Journal*, 1968, 14, 293–302). Burns *et al* appear to have given further support to his claims by showing that home-based services are cheaper and reduce bed use. It is important to remember that Querido felt that there were other advantages in having the first assessment at home where “a picture is unfolded which I am convinced never can be obtained in any other way.” This theme is repeated throughout descriptions of home assessment services and there is a general belief that home assessment allows a better assessment of social and family circumstances. All the home-care studies quoted by Burns *et al*, with the exception of Dean & Gadd (1989), involved initial contact with the patient at hospital. For example, Muijen *et al*'s (1992) patients were randomised after initially being assessed as needing admission in the Maudsley 24-hour walk-in clinic. This is a home-treatment rather than a home-assessment service and I feel it is important to emphasise the difference.

Home assessment also improves access to care. Dingleton's failure-to-attend rate runs at around 5%. This is similar to the 7% in Burns *et al*'s experimental group while their 25% control-group rate is similar to rates in other hospital-based services reported recently. Dingleton's success can no longer be dismissed because it has not been systematically evaluated.

DEAN, C. & GADD, E. (1989) An inner-city home treatment service for acute psychiatric patients. *Psychiatric Bulletin*, 13, 678–669.

MUIJEN, M., MARKS, I., CONNOLLY, J., *et al* (1992) Home-based care and standard hospital care for patients with severe mental illness; a randomised controlled trial. *British Medical Journal*, 304, 749–54.

PULLEN, I. & GILBERT, M. A. (1985) Description of an extramural service for psychiatric emergencies. *Health Bulletin* (Scotland), 38, 163–166.

PUNUKOLLU, N. R. (1991) Huddersfield (West) crisis intervention team: four years follow-up. *Psychiatric Bulletin*, 15, 278–280.

JOHN R. TAYLOR

*Dingleton Hospital  
Melrose  
Roxburghshire TD6 9HN*

#### Small babies and schizophrenia

SIR: The story of obstetric complications and schizophrenia continues to intrigue. The finding of McNeil and his colleagues (*Journal*, April 1993, 162, 517–523) that preschizophrenic babies had small heads on lean bodies is, on the one hand, a curious echo of Kretschmer's link of asthenic body build to schizophrenia, but on the other it is further evidence pointing to an anomaly of early development.

McNeil *et al* could find no association between reduced head circumference and documented pregnancy complications. The problem (as ever) is one of definition: reanalysing the stratified data using our operational scale (Lewis *et al*, 1989) yields a significant association ( $\chi^2 = 13.2$ , 2 d.f.,  $P < 0.005$ ).

McNeil *et al*, comparing 70 schizophrenic patients with a matched control group, found both birthweight and head circumference to be significantly smaller in the preschizophrenic group. Repeating their analysis after removing 'preterm' infants, they found that only head circumference was significantly smaller and then focused only on head circumference differences between the two groups.

There are problems with this approach. Firstly, it is unclear what their preterm cut-off was. They excluded all infants born “at least two weeks before term”. If term means 40 weeks then this could mean that all infants of 38 weeks or less were excluded. This is very much above the accepted preterm cut-off and appears fairly arbitrary. This cut-off also meant that twice as many preschizophrenic as control subjects were excluded.

The choice of body length as the “body size control variable” is also problematic. Body length is notoriously difficult to measure at birth with wide variations reported between different people measuring the same infant. In addition, body length was the only measure which was not significantly smaller in preschizophrenics compared with controls on paired *t*-tests, and it is thus not surprising that preschizophrenics' head circumferences remained smaller after controlling for body size with a measure that was not different in the two groups. It would seem to be more appropriate to use birthweight, a measure which is reliable, was significantly smaller in the preschizophrenic group, and which has been shown in other samples to be smaller in preschizophrenics (Lane & Albee, 1966; Woerner *et al*, 1973).

Potentially the most informative approach would be to convert the absolute values of both head circumference and birthweight to Z-scores, standardised by charts of head size or birthweight. One could then compare the various birth measures in the entire sample, and by looking at the head circumference:birthweight ratios, could determine whether

the smaller head size and lower birthweight in the preschizophrenic group were independent of one another or were both reduced in the same individuals at birth.

We found the birthweight findings particularly interesting as we have recently completed a study of maternally recalled birthweight in a consecutive series of 73 DSM-III schizophrenic patients compared with 43 affective psychosis patients. Mean birthweight in our schizophrenic sample was reduced by 7.1%, compared with McNeil *et al*'s finding of 6.4%. McNeil *et al* matched for sex, maternal age and social class; we entered sex, ethnicity and parental social class into a four-way ANOVA. After controlling for these variables, mean birthweight was significantly lower in the schizophrenic group ( $f=8.9$ ;  $P=0.004$ ), a finding which remained significant ( $P=0.01$ ) when all preterm births (<37 weeks) were excluded from the analysis.

LANE, E. A. & ALBEE, G. W. (1966) Comparative birth weights of schizophrenics and their siblings. *Journal of Psychology*, **65**, 227-231.

LEWIS, S. W., MURRAY, R. M. & OWEN, M. J. (1989) Obstetric complications in schizophrenia. Methodology and mechanisms. In *Schizophrenia: Scientific Progress* (eds S. C. Schultz & C. A. Tamminga). New York: Oxford University Press.

WOERNER, M. G., POLLACK, M. & KLEIN, D. F. (1973) Pregnancy and birth complications in psychiatric patients: a comparison of schizophrenic patients with their siblings. *Acta Psychiatrica Scandinavica*, **49**, 712-721.

LARRY RIFKIN  
SHON W. LEWIS  
ANN STEWART  
ROBIN M. MURRAY

*Institute of Psychiatry*  
Denmark Hill  
London SE5 8AF

#### A social atmosphere which tolerates eccentrics

SIR: Some end-of-year figures in Supplement 19 (Leff, *Journal*, April, 162) for patients resident in mental hospitals (pp. 7-8) show a decline from 350 per 100 000 in 1954, to 155 in 1981 and to 133 from a 1988-89 report. On page 8 there is a reference to Tooth & Brooke (1961) that the:

"longstay population resident in 1954 would run down at a rate which would eliminate it by 1975. The authors warned of a potential new longstay population but advocates of community care were convinced that community care would ameliorate such a trend."

In 1962 I wrote a letter to the *Lancet* (Lindsay, 1962) drawing attention to a statistical misinterpretation. I recalculated their data to generate their findings and then predicted that half of the resident long-stay

population would remain in 10 years, a third in 16 years, a quarter in 20 years, and so on. I noted that Hailey (1971) (pp. 10-11)

"concluded that a curvilinear model of declining bed need would provide a more realistic projection than the linear downward trend of the Tooth & Brooke study."

Tooth & Brooke (pp. 711-712) wrote about the potential new long-stay population and arrived at figures for short-stay beds at 343 per million population, for medium stay at 503 beds per million population, and for long-stay over two years at 890. The total is 1762 beds per million population, or 176 beds per 100 000. Rates for the decline of the figures above can be calculated from 350 to 133 per 100 000 in 35 years with a geometric mean of 0.9727 (2.73% decrease each year). Tooth & Brooke's 176 per 100 000 would occur after 25 years, the 155 per 100 000 after 31 years, and 133 in the 35th year. The rates of decline slowed between 1954 and 1981 (0.97, 3% per annum), and 1981 to 1988-9 (0.981, 1.19%).

Tooth and Brooke (1961) noted the likely increase for older patients to develop cerebral deterioration, and the hard core of organically deteriorated patients in rehabilitation programmes. They addressed their concerns about the future:

"Maintenance in the community will depend upon the existence of a social atmosphere which tolerates eccentrics and an economy which enables them to be largely self-supporting." (p. 711)

The TAPS Project 7 (O'Driscoll, *Journal*, April 1993, 162 (suppl. 19), 7-17) starts with a comment that most outcome studies have concluded that a new long-stay group will replace the old long-stay patients and that a residual group of ageing patients, mostly with organic syndromes, is difficult to accommodate in the community.

Are the advocates of community care suggesting that this is just a relocation of the hospital treatment, or is there some special therapeutic community advantage for tolerating the eccentrics outside the former institutions? Moore *et al* (*Journal*, December 1992, 161, 802-808) have recorded some opinions about staff members working with long-term adult mentally ill in terms of research orientated to the human information processing, with the computer adopted as the model and their expressed emotions construct. In their discussion they stated that "an analysis of the organisational structure of the setting and its effect on the staff might also be indicated" (p. 806). They report that:

"Only 13 of the staff (37%) said they hoped to remain in their jobs, at least for the time being; 11 (31.4%) were uncertain about their intentions and 11 definitely