## letters to the editor

Please submit letters for the Editor's consideration within three weeks of receipt of the Journal. Letters should ideally be limited to 350 words, and sent by email to: Clinicalmedicine@rcplondon.ac.uk

## Alcohol and hospital readmission (1)

Editor – I read the article by Shalchi *et al* with great interest (*Clin Med* October 2009 pp 426–30). Having recently conducted an audit on hospital readmission in patients with alcoholic liver disease I am surprised that alcohol-related problems are not mentioned in the article.

I audited admissions of patients coded to have alcoholic liver disease in one Glasgow hospital during one year (September 2006 to August 2007). Of 124 patients admitted with the diagnosis, 22 died during the initial admission and 102 were discharged alive and followed up for one year. Seventy-six patients (75%) were readmitted at least once after discharge, about 50% within two months (Fig 1). The average number of readmissions was 3.2 per patient (virtually all emergency admissions). The average duration of the admissions and readmissions was 12 days, accounting for 3,887 days in hospital. Significantly, 28 of the patients discharged with alcoholic liver disease died within one year, most (24) during a readmission. Thus 40% of those studied died within the period analysed and the burden for the hospital was enormous. Even though the epidemiology of alcohol-related problems is worse in Scotland than the rest of the UK and Western Europe, I do not think that this problem is specific to Glasgow.1

I therefore believe that certainly alcoholic liver disease, and in my experience also other alcohol-related problems, are an important predictor for readmission and worth investigating further (they are lacking in Table 1 and Fig 4 of Salchi *et al*'s article). Alcoholic patients present a significant proportion of admissions to wards with a

variety of medical problems including many of the ones mentioned in the authors' Table 1. Alcoholic patients are stigmatised, difficult to deal with and difficult to treat. Therefore, if readmission in alcoholic patients was regarded as avoidable, most are probably in the categories 'inadequate therapy' and 'poor discharge planning' of Shalchi *et al*'s Fig 4.

MATHIS HEYDTMANN RAH Paisley Glasgow

#### Reference

 Leon DA, McCambridge J. Liver cirrhosis mortality rates in Britain from 1950 to 2002: an analysis of routine data. *Lancet* 2006;367:52–6.

### Alcohol and hospital readmission (2)

Editor – We read with interest the paper by Shalchi *et al* looking at readmission rates

after acute medical treatment (*Clin Med* October 2009 pp 426–30). As the authors state, there are concerns that the pressure to diagnose, treat and discharge patients from acute medical units (AMU) is leading to increased readmission rates. These rates may be an important indicator of the quality of medical care delivered, especially in vulnerable, frail older people.

We have been examining outcomes for frail older patients attending AMUs in the East Midlands. In one centre, readmission rates following attendance at an AMU with a multidisciplinary team (MDT)-facilitated discharge were as high as 53% over one year, with associated high mortality rates (28%).1 In another centre, frail older people comprised 20% of all attendees aged ≥70 years. This group were the least likely to be discharged from AMUs (4%  $\nu$  19% for non-frail older people) and once admitted had longer mean length of stay (9  $\nu$  5 days, p<0.001). Once discharged, frail older people were more likely to be readmitted within 30 days (30% v 22% for non-complex older people, p<0.001), hazard ratio for readmission over time 2.2.

Based on these worrying process outcomes for frail older people, and drawing on the extensive evidence base which supports comprehensive geriatric assessment for frail older people in acute and

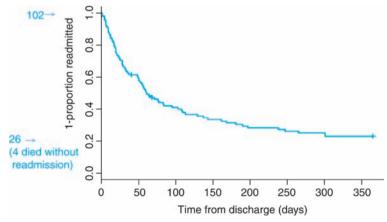


Fig 1. Readmission-free survival of patients with alcoholic liver disease after being discharged from hospital.

community settings, we established an 'acute frailty unit' (AFU) within one AMU.<sup>2–5</sup>

Patients in the AFU have access to all usual care (including the MDT), but have an increased nursing ratio, and some specialist geriatric input. Despite limited resources, we have been able to show some clinically important trends toward improved process outcomes compared to historical controls (also frail older people):

- increased discharge rates (AFU 9% v
  5% AMU) odds ratio 1.4 (0.8–2.3),
  p=0.17
- mean difference in length of stay for AFU patients -0.5 days, p=0.6
- equivalent 90-day readmission rates (historical control 36% (32–47%), AFU 36% (29–56%)).

While these data lack sufficient precision, or indeed the robustness of a controlled trial, they do point to potentially useful new ways of addressing acute care of frail older people.

#### JAMES WOODARD

Specialist registrar in stroke/health care of the elderly Nottingham University Hospitals

#### SIMON CONROY

Senior lecturer/geriatrician University of Leicester School of Medicine

#### References

- Woodard J, Gladman J, Conroy S. Frail older people at the interface. *JNHA* 2009;13(Suppl 1 S308).
- Baztan JJ, Suarez-Garcia FM, Lopez-Arrieta J et al. Effectiveness of acute geriatric units on functional decline, living at home, and case fatality among older patients admitted to hospital for acute medical disorders: meta-analysis. BMJ 2009; 338:b50.
- 3 Ellis G, Langhorne P. Comprehensive geriatric assessment for older hospital patients. Br Med Bull 2005;71:45–59.
- 4 Stuck AE, Siu AL, Wieland GD et al. Comprehensive geriatric assessment: a meta-analysis of controlled trials. Lancet 1993;342:1032–6.
- 5 Day P, Rasmussen P. What is the evidence for the effectiveness of specialist geriatric services in acute, post-acute and sub-acute settings? A critical appraisal of the literature. NZHTA Report 2004.

## Alcohol and hospital readmission (3)

Shalchi et al are to be congratulated on their paper on hospital readmission rates (Clin Med October 2009 pp 426-30). This concentrated on the medical factors which might have influenced readmission and thus contrasts with previous work which derives from the same catchment area and the same hospital, albeit 20 years earlier.1 Their definition of 'readmission' was within a period of two weeks, whereas we reported on readmissions up to three years. Our sample was limited to those aged 75 or more. Our objective was to assess the effects of a social service run 'care attendant' scheme in which the health concepts of rehabilitation – a planned withdrawal of support - were melded with the need for care. The service was provided by Harrow Social Services trained care attendants incorporating the rehabilitation ethos.<sup>2</sup>

Like Shalchi et al, we found that common medical diagnoses at the initial episode were cardiorespiratory, but that readmission was reduced in the care attendant group. Likewise, older patients were more likely to be readmitted as emergencies. Those patients whose original admission was an emergency were more likely to be readmitted as an emergency. Emergency admissions were significantly more likely for elderly patients living alone.

Shalchi *et al* did not detail the nature of the social support post discharge. However, specific care assistant (as currently named) support targeted at frail elderly emergency admissions, particularly if living alone, would probably be cost effective as our scheme saved money by reducing readmissions even though the scheme provided potential support for many who were not at risk. Care assistants could check that medication was taken appropriately, for example.

Although the scheme was reproduced elsewhere, it was withdrawn by Harrow Social Services at the end of the controlled trial as the savings accrued to the NHS while the investment was made by Harrow Social Services (the monies in fact being spent on other community care projects needing care attendants in the borough).<sup>3,4</sup>

The lessons learned then were that:

- 1 Hospital and social services had to have trusting relationships.
- 2 Joint funding across health and social services was appropriate (utilised by the community-based hospital discharge scheme<sup>2</sup> and the care attendants supporting younger people<sup>4</sup>).
- 3 Social support after discharge utilised the rehabilitation approach facilitating optimal independence at home thus reducing readmissions.

#### ANDREW FRANK

Retired consultant in rehabilitation medicine Northwick Park Hospital

#### References

- Townsend J, Dyer S, Cooper J et al. Emergency hospital admissions and readmissions of patients aged over 75 years and the effects of a community-based discharge scheme. Health Trends 1992;24:136–9.
- 2 Townsend J, Piper M, Frank AO et al. Reduction of hospital readmission stay of elderly patients by a community-based hospital discharge scheme: a randomised controlled trial. BMJ 1998;297:544–7.
- 3 Townsend J. Hospital aftercare service for older people (care attendant scheme): implementation study for NHSE North Thames Regional Office – research and development. Hatfield: University of Hertfordshire, 1997.
- 4 Ellis PF, Frank AO. Care of a severely handicapped person over eight years: implications for the future pattern of community care. Br J Gen Pract 1990;40:383–5.

# In response – additional support to high-risk patients can reduce hospital readmissions

We have been heartened by the response to our article, particularly the letters published above. These emphasise our conclusions, highlight further areas of concern and provide solutions for their management.

The term 'readmission' is poorly defined. Whereas we limited our readmissions to a period of up to 14 days, Woodard and Conroy considered all patients readmitted within 30 days, and Frank felt three years was a suitable time period.

Nevertheless, it is clear from our data, as well as those cited by our colleagues in response, that readmission is more likely in