and c. In this model the combined relative mortality (θ) is a common effect of unemployment.

These simple multiplicative hazard regression models are equivalent to considering the observed numbers of deaths (D_{acs}) in the various cells (a,c,s) as Poisson variates with mean and variance both equal to $\lambda_{acs}T_{acs}$, where T_{acs} is the number of observation years in a cell (a,c,s).[7]

In the models with extra-Poisson variation[9,10] the D_{acs} has the same mean but the variance is $\lambda_{acs}T_{acs}+\sigma^2(\lambda_{acs}T_{acs})^2$, σ^2 being an additional parameter describing otherwise unexplained variation. Comparing results from analyses of the two kinds of models shows that the estimated standard errors are larger in the model with extra-Poisson variation.

For men the parameters θ_c and θ were also estimated for each of the four factors in models 1* and 2*, respectively, with extra-Poisson variation. As an example table VIII presents the results based on stratification by occupation (see also table III). In table VIII models 1* and 2* show the same general tendencies as models 1 and 2 but the confidence intervals based on the simple multiplicative hazard regression models are considerably narrower. Also the estimated relative death rates $\hat{\theta}_c$ and $\hat{\theta}$ are larger in the models with extra-Poisson variation. This is due to the fact that the weighting of the ratios $\hat{\lambda}_{a,unemployed}/\hat{\lambda}_{a,employed}$ was different in the two types of models, the extra-Poisson variation model giving comparatively more weight to younger ages (see fig 1 (men)).

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SHORT REPORTS

Alcohol consumption and dependence in elderly patients in an urban community

Much interest has centred recently on the consumption of alcohol and its misuse by young people, but little attention has been paid to the drinking patterns of elderly people in the community and their dependence on alcohol. Drew even suggested that alcohol dependence was self limiting in the elderly because of changing psychological, social, and economic factors.[1] We have conducted a cross sectional survey in an urban community examining alcohol consumption and alcohol dependence.

Methods and results

Subjects were taken from the age-sex register of a singlehanded general practice in the centre of Newcastle upon Tyne, which had 828 patients over the age of 60; one in six were randomly picked and asked to participate in a general health survey. Of these 138 patients, 101 were interviewed in their homes by one interviewer (RB), 32 refused to take part, and five had not been contacted after at least three calls. No further information was obtained on the non-responders.

A structured questionnaire based on previously validated general population surveys was used[2,3]; it covered demographic features and questions relating to alcohol consumption and dependence (including the CAGE questionnaire[4]). Approval was obtained from the Newcastle District Health Authority and University ethical committee, and data were analysed with the statistical package for the social sciences.

The respondents' mean age was 71·3 (SD 8·1) years (range 60-95 years); 53 were women and 48 men. Patients aged 75 and under made up two thirds of the study population. Altogether 41 (85%) men and 19 (36%) women were married; 64 patients were in social class III, the rest being evenly distributed among the other social classes.

Alcohol intake was determined from ratings of quantity and frequency (units/week) and self assessment; respondents were classified as alcohol dependent if they answered two or more of the four questions on the CAGE questionnaire positively.[4] Mean weekly alcohol consumption was 16·5 units, men consuming more than women (22·6 *v* 10·9 units/week) and patients 75 and under more than those aged over 75 (20·5 *v* 8·7 units/week). By the method of classification of the general household survey 13 (27%) of men and five (9%) women were heavy drinkers (table)[2] compared with eight (16%) and five (10%), respectively, by that of the Office of Population Censuses and Surveys.[3] Overall 31% claimed to be abstainers by the Office of Population Censuses and Surveys criteria, 16 by those of the general household survey, and 21 by self categorisation; only two thought they drank heavily. Forty two respondents said they had decreased their alcohol intake since they were 60, but 12 had increased it. The CAGE questionnaire classified 17 patients as having problems related to alcohol (11 men (23%), six women (11%)). Patients classified as being alcohol dependent drank 38·0 (SD 27·0) units/week compared with 12·3 (6·3) units/week for those not dependent on alcohol ($p<0·02$).

Classification of types of elderly drinker by sex and age (figures are numbers (percentages) of patients)

	Sex		Age (years)		
Type of drinker*	Men	Women	≤75	>75	Total
Abstainer	4 (8)	12 (23)	9 (13)	7 (21)	16
Occasional	6 (13)	7 (13)	7 (11)	6 (18)	13
Infrequent light	4 (9)	11 (21)	6 (9)	8 (23)	15
Frequent light	14 (29)	15 (28)	22 (33)	8 (23)	29
Moderate	7 (14)	3 (6)	9 (13)	1 (3)	10
Heavy	13 (27)	5 (9)	14 (21)	4 (12)	18
Total	48	53	67	34	101

*By general household survey classification.[2]

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Comment

This is the first community based study in the United Kingdom that we know of that has examined alcohol consumption and possible alcohol dependence in the elderly. Despite being a fairly small study it raises several issues. Altogether 13% of respondents drank enough to put them at risk from alcoholic liver disease; this proportion might have been higher if data from non-responders had been available. Although this figure may seem high, a similar study of the elderly in New York reported 20% of men and 2% of women to be heavy drinkers.[5]

Surveys of self reported alcohol use and abuse all have problems with overreporting and underreporting, which may partly be why some respondents classified as alcohol dependent by the CAGE questionnaire claimed to be abstainers. The CAGE questionnaire also lacks sensitivity and specificity for current events. Care must therefore be taken in interpreting questionnaires on use of alcohol by the elderly; the CAGE questionnaire requires validation in this age group. Nevertheless, heavy alcohol consumption and alcohol dependence may be a largely unrecognised problem in the elderly.

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Effect of fenfluramine on autistic symptoms

The finding of raised blood serotonin concentrations in a subgroup of autistic children has been widely replicated, although its clinical and biological relevance remains unknown. Fenfluramine is an anorectic agent that lowers brain serotonin concentrations in animals.[1] Its administration to autistic children has resulted in symptomatic improvement in some studies[2] but not others.[3] Our study was designed to evaluate the usefulness of fenfluramine in a local group of patients.

Patients, methods, and results

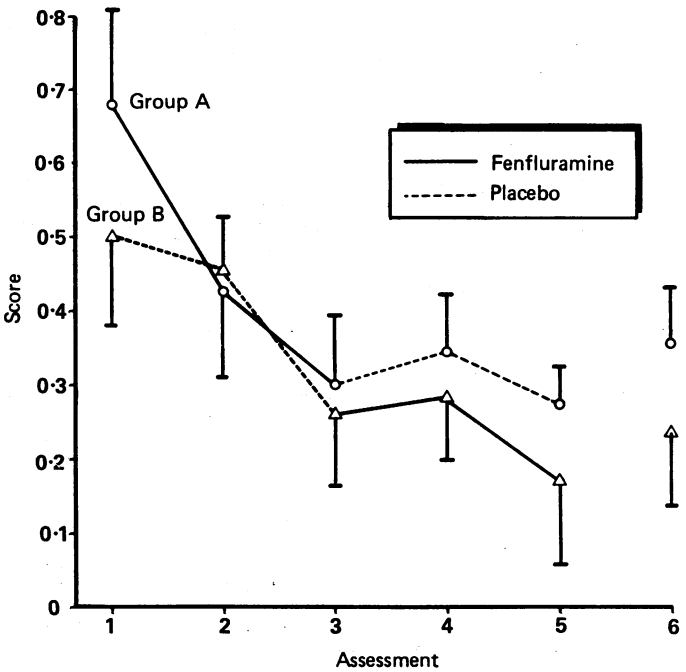
Twenty patients aged 7-20 were recruited into the trial from two local institutions for autistic patients. All the participants were in good general health, and none was receiving any psychotropic or anticonvulsive treatment. The study was double blind and crossover in design: all the patients received placebo for a two week run in period and then were randomly assigned to receive either fenfluramine 1·5 mg/kg daily (group A) or placebo (group B) for three months, followed by the other drug for three months.

Behavioural assessments were carried out on six occasions: at the end of the run in period (baseline), at one month and three months (immediately before the crossover), and then at four and six months. The final assessment took place one month after all treatment had stopped. The assessment used was the Ritvo-Freeman real life rating scale for autism.[4] This scale assesses 47 types of behaviour grouped into five categories (motor, affect, language, sensory, and social) and can be administered by novice raters trained to code behaviours. Observations were made at the same time of day and in the same place in all but two instances. In addition, both teachers and parents completed questionnaires for each child's behaviour during the trial.

We used *t* tests to compare scores in the statistical analysis.

No serious side effects occurred but two patients in group A withdrew from the trial because of drowsiness soon after starting fenfluramine. Five children lost weight, all less than 10% body weight, and this was regained when fenfluramine was stopped.

The figure shows the mean scores on the Ritvo-Freeman scale for all the children at each assessment. A higher score reflects increased autistic symptoms. There was no significant difference in the baseline or subsequent scores between the two groups. Neither was there any difference in the scores in either group after three months' treatment with fenfluramine and three months' treatment with placebo (assessments 3 and 5). There was no clear period effect. The mean scores at each assessment decreased during the trial, irrespective of whether fenfluramine was given before or after placebo. A small rise occurred in each group after treatment was stopped. When the five categories of behaviour were analysed separately no significant differences emerged.



Mean (SD) score on behaviour rating scale during and after treatment with fenfluramine or placebo.

Six children were thought to be clearly better during one half of the trial by both parents and teachers: four were receiving fenfluramine at the time and two placebo.

Comment

A report from a multicentre trial in the United States combined results obtained from small numbers of patients at several centres.[2] The experimental design did not entail a crossover of treatment and therefore did not permit an assessment of order effect. Had we not had a control group (group B) for comparison we too would have deduced that fenfluramine decreases autistic symptoms as shown by the lower scores in group A during the administration of the drug.

In our experience symptoms in many autistic children fluctuate. We have not shown fenfluramine to improve these symptoms significantly and would not advocate its widespread use in autistic patients.

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