aspects of Russian drinking behaviour and its consequences are related to scores obtained from the internationally recognised AUDIT instrument for detecting alcohol problems.

Design Population-based age-stratified cross sectional survey.

Setting Izhevsk, Russia.

Participants 925 men aged 25–59 years.

Main outcome measure Men and proxy respondents completed an interview including questions on alcohol consumption and socio-economic and demographic variables. These included questions on six drinking behaviours and their consequences. These were: going on zapoi (a period of continuous drunkenness of two or more days); drinking non- beverage alcohol; frequency of excessive drunkenness; frequency of hangover; drinking before noon and frequency of sleeping in clothes at night because of drunkenness. The men also completed a Self Completed Questionnaire containing questions constituting the alcohol use disorders identification test (AUDIT).

Results There was a strong association with AUDIT score and hazardous drinking (one or more episodes of zapoi in the past year or drinking non beverage alcohol or twice a week or more occurrence of excessive drunkenness, hangover or going to sleep at night clothed because of drunkenness) using both proxy and self report of drinking behaviours (self-report OR 5.25 95% CI 2.86 to to 9.65). The association was stronger when proxy report was used (proxy-report OR 6.66 95% CI 4.00 to to 11.07). The same pattern was seen for all the drinking behaviours individually. Confirmatory factor analysis supported a two factor structure for the AUDIT measuring alcohol consumption and alcohol related problems. Hazardous drinking behaviour specific to Russia was more strongly associated with AUDIT questions relating to alcohol related problems than to questions measuring consumption.

Conclusions The drinking behaviours used in this paper are unconventional measures of hazardous drinking. The strong association with AUDIT shows that both self and in particular proxy report of distinctive directly observable drinking behaviours provide useful data on alcohol consumption and abuse in Russian men.

Cancer incidence

078 INCIDENCE RATES AND SURVIVAL TRENDS OF CANCER IN 0–29-YEAR-OLDS BY ETHNIC GROUP IN YORKSHIRE, UK

doi:10.1136/jech.2010.120956.78

[1]M van Laar, [1]P A McKinney, [1]R C Parslow, [2]A Glaser, [2]S E Kinsey, [2]I J Lewis, [2]S V Picton, [2]M Richards, [2]G Shenton, [3]D Stark, [4]P Norman, [1]R G Feltbower. *[1]Paediatric Epidemiology Group, Division of Epidemiology, University of Leeds, UK; [2]Paediatric Oncology and Haematology, St James's University Hospital, Leeds, UK; [3]Institute of Oncology, Bexley Wing, St James's University Hospital, Leeds, UK; [4]School of Geography, University of Leeds, Leeds, UK*

Objective Few studies have examined differences in the epidemiology of cancer between ethnic groups for children and young adults in the UK. We investigated incidence rates, associated trends and survival by ethnicity (south Asian vs all other ethnic groups) across childhood (0–14) and young adult (15–29) ages using a unique specialist cancer register.

Methods The data used for this study were extracted from the Yorkshire Specialist Register of Cancer in Children and Young People. Patients diagnosed from 1990 to 2005 in the former Yorkshire Regional Health Authority were included in the analysis. Ethnicity was assigned using name analysis programs and Hospital Episode Statistics data. Incidence rates (per 1 000 000 person-years) by ethnic group were derived using mid-year population estimates. Poisson regression was used to examine trends in incidence by ethnicity and diagnostic sub-group, adjusting for sex and age. An interaction term between year and ethnicity was added to the model and likelihood-ratio test used to determine whether incidence trends differed for south and non south Asians. Survival rates were assessed using Kaplan-Meier estimates and log-rank tests. Cox regression was used to assess the effect of ethnicity on survival, adjusting for age, sex, year and deprivation.

Results Overall cancer incidence was similar for south Asians (12.1; 95% CI 10.7 to to 13.5, n=275) and non-south Asians (12.6; 95% CI 12.2 to to 13.1, n=3259). For non-south Asians, incidence rates increased on average by 1.5% per year (95% CI 0.8 to to 2.3); the rate of increase for south Asians was significantly higher (7.0%; 95% CI 4.2 to to 9.9). Survival rates were significantly poorer for 15–29 vs 0–14 year olds (HR 1.25; 95% CI 1.09 to to 1.43). A significant increased risk of death was seen for south Asians compared to non-south Asians with leukaemia (HR 1.76; 95% CI 1.10 to to 2.81) and lymphoma (HR 3.11; 95% CI 1.61 to to 5.99). South Asians with other solid tumours had a significantly reduced risk of death (HR 0.43 95% CI 0.23 to to 0.81) compared to non-south Asians.

Conclusion If present trends continue, the higher rate of increase seen among the Asian population in Yorkshire will result in 3-times higher incidence than non-south Asians by 2020. Lower survival rates seen for south Asians with leukaemia and lymphoma and for 15–29 year olds warrant further detailed investigation.

079 INCREASING INCIDENCE OF THYROID CANCER IN GREAT BRITAIN, 1976–2005: AGE–PERIOD–COHORT ANALYSIS

doi:10.1136/jech.2010.120956.79

[1]R J Q McNally, [1]K Blakey, [1]P W James, [1]B Gomez Pozo, [1]N O Basta, [2]J Hale. *[1]Institute of Health and Society, Newcastle University, Newcastle-upon- Tyne, UK; [2]Northern Institute of Cancer Research, Newcastle University, Newcastle-upon- Tyne, UK*

Objective To examine temporal trends in the incidence of primary thyroid cancers diagnosed in 0–49 year olds in parts of Great Britain (GB) during the period 1976–2005. We specifically aimed to analyse age, period and cohort effects.

Design Population-based descriptive analysis of cancer registry data.

Setting Parts of Great Britain.

Participants Case data on thyroid cancer were obtained from four regional cancer registries in GB (i. Northern and Yorkshire, ii. North West, iii. Wales and iv. Scotland).

Main outcome measures Age-standardised incidence rates (ASRs) and 95% CIs were calculated. Negative binomial regression was used to examine the effects of age, sex, drift (linear trend), non-linear period and non-linear cohort.

Results The study analysed 4327 cases of thyroid cancer aged 0–49 years at diagnosis. For males, the overall ASR was 3.9 per million persons per year (95% CI 3.6 to to 4.1). For females, the overall ASR was 12.5 per million persons per year (95% CI 12.0 to to 12.9). The best fitting negative binomial regression model included age ($p<0.001$), sex ($p<0.001$) and drift ($p<0.001$). Non-linear period ($p=0.42$) and non-linear cohort ($p=0.71$) were not statistically significant. For males aged 0–14 years, the ASR increased from 0.2 per million persons per year in 1976–1986 to 0.6 per million persons per year in 1997–2005. For males aged 15–29 years and 30–49 years the ASRs increased from 1.9 to 3.2 and from 7.3 to 12.6 per million persons per year, respectively. For females aged 0–14 years, the ASR increased from 0.3 to 0.5 per million persons per year. For females aged 15–29 years and 30–49 years the ASRs increased from 7.0 to 12.3 and from 21.2 to 40.0 per million persons per year, respectively.

Conclusions There has been a linear increase in the incidence of thyroid cancer, which has led to a doubling of the number of cases diagnosed over a 20 year time span. The reasons for this increase are not well understood, but it is consistent with findings from other countries.