distress alone were more likely at the higher end of the socioeconomic distribution.

OP50

## ALCOHOL INTAKE, DRINKING BEHAVIOUR AND DRINKING PATTERNS AS PREDICTORS OF EMPLOYMENT STATUS IN WORKING-AGE MEN IN IZHEVSK. RUSSIA

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**Background** Hazardous alcohol consumption and unemployment are both associated with high mortality in Russia. Unemployment adversely affects mental and physical health. The relationship between alcohol and employment is complex as alcohol consumption may lead to unemployment but unemployment may also increase hazardous consumption. Very few longitudinal studies have investigated the effects of alcohol use on employment status. The objectives of this study were to investigate alcohol intake, drinking behaviour and drinking patterns as predictors of employment status in a longitudinal study of working-age men in Izhevsk, Russia.

Methods Participants were 1217 men aged 25-54 resident in Izhevsk, Russia in regular paid employment at baseline (2003-6) who were followed up and re-interviewed (2008-9). Alcohol use was measured by total volume of ethanol consumed from beverage alcohol, drinking behaviour (abstainers, beverage alcohol drinkers with no problem drinking behaviour, beverage alcohol drinkers with problem drinking behaviour and non-beverage alcohol drinkers (e.g. eau de cologne)), and three aspects of drinking pattern (drinking spirits without food, drinking alone and drinking before noon). Problem drinking was defined as twice weekly or more frequency of hangover, excessive drunkenness, sleeping in clothes because of drunkenness or one or more episodes of zapoi in the past year (defined as continuous drunkenness of two or more days during which participants were withdrawn from normal life). Logistic regression was used to investigate whether alcohol use at baseline predicted employment status at follow up after adjusting for sociodemographic variables.

**Results** Total volume of ethanol from beverage alcohol at baseline did not predict whether men were still in regular paid employment at follow-up (P value for linear trend=0.21). Problem drinkers (adjusted odds ratio 2.82 95% CI 1.23, 6.46) and non-beverage alcohol drinkers (adjusted odds ratio 2.42 (95% CI 1.18, 4.93) were more likely not to be in regular employment at follow-up than non-problem beverage alcohol drinkers. Among drinkers drinking spirits without food (adjusted odds ratio 2.13 95% CI 1.28, 3.54), drinking alone (adjusted odds ratio 1.65 95% CI 1.09, 2.50) and drinking before noon (adjusted odds ratio 2.49 95% CI 1.65, 3.78) all predicted employment status at follow-up.

**Conclusion** Drinking behaviour and drinking patterns predicted future employment status in a sample of working-age men in Izhevsk Russia. However the volume of alcohol consumed per year did not, suggesting how alcohol is consumed and whether it leads to problem behaviour is more important than the overall amount consumed when considering the impact of alcohol on employment.

OP51

## MATERNAL EMPLOYMENT AND SOCIO-EMOTIONAL BEHAVIOUR AT AGE 7: FINDINGS FROM THE UK MILLENNIUM COHORT STUDY

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**Background** Maternal employment in the UK has increased significantly in recent years, but evidence of its relationship with child

Methods The study comprises a longitudinal analysis of the United Kingdom Millennium Cohort Study (MCS), based on 10,723 singleton children who participated in all four sweeps of the study (at ages 9 months, 3, 5 and 7 years). Socio-emotional behaviour was measured using total Strengths and Difficulties Questionnaire (SDQ) scores, dichotomised using an established cut-off for borderline / abnormal behaviour. Risk ratios (RR) were estimated using Poisson regression for borderline / abnormal SDQ scores at age 7 according to cumulative maternal employment over four sweeps of the MCS (at 9 months, 3, 5 and 7 years), unadjusted (uRR) and adjusted (aRR) for confounders (age at first live birth, ethnicity, family size, lone parenthood, and maternal psychological distress, all recorded at 9 months). In order to disentangle whether there was a differential impact of earlier and current employment, additional analyses estimated the risk associated with employment up to age 5 years, adjusting for employment at age 7.

Results The risk of borderline/abnormal scores decreased linearly by number of MCS sweeps that mothers were in employment; after adjustment for confounders the gradient attenuated but remained significant. Children growing up in households where mothers were employed in all MCS sweeps were significantly less likely to display borderline / abnormal behaviour at age 7 (compared to never in paid employment): uRR=0.37 (0.32–0.44); aRR=0.68 (0.56–0.81). Analyses differentiating early employment (between ages 9 months and 5 years) and current employment (at age 7) suggest that the cumulative impact of prior non-employment may be ameliorated once a mother gains employment. After adjusting for current employment and confounders, there was no increased risk of borderline / abnormal socio-emotional behaviour associated with non-employment in all earlier sweeps up to age 5 compared to being in paid employment continuously (baseline): aRR=1.01 (0.82–1.23).

**Conclusion** This longitudinal analysis supports an association between maternal employment and child socio-emotional behaviour. Possible explanations and implications will be discussed.

OP52

## LONG-TERM EXPOSURE TO INCOME INEQUALITY: IMPLICATIONS FOR PHYSICAL AND MENTAL HEALTH AT OLDER AGES

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**Background** The 'inequality hypothesis' proposes that higher levels of societal income inequality have a detrimental effect on both physical and mental health. Previous studies have provided only mixed support for this hypothesis, particularly among older people. However, by using only contemporary income inequality estimates, or estimates from a single lag period, the majority of previous studies have not accounted for people's continued exposure to income inequality over the long-term. In this study, we addressed this problem by examining the association between older people's experience of inequality over an extended period and their subsequent health. Methods The data for this project were taken from three comparable nationally representative surveys (covering 16 countries) of the health and circumstances of older people; the English Longitudinal Study of Ageing, the Survey of Health and Retirement in Europe, and the U.S. Health and Retirement Study. Standardised estimates of national income inequality from 1960–2006 were taken from the Standardised World Income Inequality Database. We used multilevel regression methods to model the association between average