how alcohol habits change with age and in different subgroups. The aim is to study stability and variations in alcohol habits for demographic subgroups over time.

**Methods** The data derives from the longitudinal population-based study of mental health (the PART-study) in Stockholm County, Sweden. The data were gathered using postal questionnaires and register data, including three measure points 1998–2000 (n=10441), 2000–2003 (n=8613 persons), and 2010 (tentative n=8576) with ages ranging between 20 and 64 years at t1. The Alcohol Use Disorders Identification Test (AUDIT) was used to measure alcohol habits. Intra-class correlations over the three time points are used as measures of stability, calculated from the AUDIT-scores for different subgroups.

**Results** The results will be presented for subgroups, comparing the intra-class correlations. The findings and the contextualisation of the results will be discussed for the subgroups with stable and high variation in alcohol habits.

**Conclusion** While a vast number of studies have described the stability of alcohol habits for whole cohorts, the literature on stability and variation in specific subgroups is sparse. The findings will add to the knowledge about alcohol habits in demographic subgroups.

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### P1-528 STATISTICAL MODELS IN LONGITUDINAL EVALUATION OF CHANGES IN HEALTH BEHAVIOURS

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**Introduction** During long-lasting intervention programs, the socio-demographic structure of the target population may change and influence the results of the overall evaluation. The Primary Prevention Program of Neural Tube Defects in Poland which was carried out in 1997–2007 in the whole country, gives the opportunity to discuss application of different statistical models in this context.

**Methods** Three surveys were conducted on representative samples of women aged 18–35 years during the Program activity. The samples were drawn from patients of the same randomly selected primary health centres in five chosen main administrative regions in 2001 (n=775), 2003 (n=756) and 2007 (n=756). Relative changes in women’s knowledge and behaviour concerning folic acid were analysed by Poisson regression and generalized estimation equation models.

**Results** The proportion of women taking folic acid during the pregnancy increased from 52% in 2001 to 68% in 2003 and 86% in 2007 and the proportion of women beginning supplementation before the pregnancy increased from 11% to 15% and 29%, respectively. The behaviours towards folic acid strongly differentiated according to socio-demographic characteristic, which was also not stable during the period of program implementation. For example, the proportion of post-secondary educated women increased from 20.4% in 2001 to 23.1% in 2003 and 41.7% in 2007. These changes significantly and depending on statistical approach chosen, the overall magnitude of effects.

**Conclusions** Time depending socio-demographic structure of the target population has to be considered in evaluation of health promotion programs.

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### P1-530 BLOOD PRESSURE CATEGORIES AND LONG-TERM MORTALITY RISK OF TOTAL AND COMPONENTS OF CARDIOVASCULAR DISEASES AMONG JAPANESE: A 24 YEAR FOLLOW-UP OF REPRESENTATIVE JAPANESE (NIPPON DATA80)

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In Western population, blood pressure (BP) was reported to predict long-term (over 20 years) future mortality of cardiovascular diseases (CVD). However, there is few reports based on long-term follow-up studies in Asian population where stroke is dominant among CVDs. We investigated the association between BP and 24 year mortality risk of total and components of CVD death among a representative Japanese population.

**Methods** A cohort study of nationwide representative Japanese samples, a total of 8592 men and women age 30 and over without history of CVD and anti-hypertensive medication was followed for 24 years (mean follow-up, 21.3 years). Multivariate-adjusted HRs of total and components of CVD death according to the BP categories (Seventh Report of the Joint national Committee criteria) were calculated using the Cox proportional hazard model.

**Results** During the follow-up period, 689 participants died from CVD. Multivariate-adjusted HR of total and components of CVD mortality was progressively and significantly greater from the lowest to highest BP group. Compared with normal BP, adjusted HRs in stage 2 hypertension was 2.45 for total CVD death and 5.99 for cerebral haemorrhage death. An adjusted HR for total CVD were higher in younger participants aged 50 to 59 years than that in elder aged 60 years and over at baseline.

**Conclusion** Blood pressure in general Japanese retain a strong association with total and components of CVD death during next 24 years. The association was stronger in younger participants.