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YOUTH PERSPECTIVES ON SOFT DRINKS AFTER THE INTRODUCTION OF THE UK SOFT DRINKS INDUSTRY LEVY: A FOCUS GROUP STUDY USING REFLEXIVE THEMATIC ANALYSIS

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Background Soft drinks consumption is a key target area of the UK Childhood Obesity strategy, with 36% of young people reporting consuming sugary drinks 2–4 times per week. The Soft Drinks Industry Levy (SDIL) was implemented in the UK in April 2018 to help tackle this issue and is designed to incentivise the reformulation of eligible soft drinks. To date, no study has explored youth perspectives of the SDIL through primary qualitative research. Therefore, this study aimed to explore perceptions of sugary drinks and the SDIL among adolescents in the UK, following its implementation on 6th April 2018, to investigate perspectives on this policy from a key target group.

Methods Four focus groups were conducted between December 2018 - May 2019 with 23 participants aged 11–14 years from schools in Essex, UK. A semi-structured topic guide aimed to elicit perspectives on sugar, sugary drinks and the SDIL. We also included a group task to rank a selection of UK soft drinks based on their sugar content, aiming to elicit engaged discussion. Braun and Clarke's reflexive thematic analysis was used to analyse the data inductively.

Results Four main themes were found during analysis: 1) Sugary drinks are bad for you, but young people still consume them, 2) Mixed awareness of and ambivalence towards the SDIL, 3) Marketing influences the perceptions of drinks, regardless of SDIL, and 4) Suggestions for additional, low agency interventions to reduce sugar consumption.

Conclusion Participants demonstrated high awareness that sugary drinks were detrimental to their health, however, this sometimes did not translate into holding positive views of the SDIL – a fiscal policy designed to reduce sugar in drinks. Marketing was a strong influence on consumption and the perception of drinks, sometimes unconsciously and independently of the SDIL. Interventions where participants had to do little to reduce their sugar consumption were preferred, implying that future policies should be constructed that require little engagement from young people to reduce their sugar consumption. High agency education-based interventions may be less appropriate, as participants already understand the negative consequences of excess sugar and SSB consumption.

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SOCIAL RELATIONSHIPS AND COGNITIVE DECLINE IN ADULTHOOD: AN INVESTIGATION FROM THE MRC NATIONAL SURVEY OF HEALTH AND DEVELOPMENT AND THE ENGLISH LONGITUDINAL STUDY OF AGEING

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Background It is difficult to determine the nature of the association between social relationships(SR) and cognitive capability, as different aspects of the former likely have different effects on the latter. Moreover, whether SRs are associated solely with cognitive performance or also with rate of decline remains unclear. We aim to examine associations between structural (marital/cohabitation status, network size) and interactional (frequency of contact, social participation, positive and negative social support) aspects of SR with average and change in measures of memory, executive function and processing speed over time.

Methods We used data from the MRC National Survey for Health and Development (NSHD, $n=2,109$) and the English Longitudinal Study of Ageing(ELSA, $n=8460$). Participants from NSHD aged 53y at baseline were followed up three times over 16y. Participants from ELSA aged 64.3y(9.8SD) at baseline were followed up 9 times over 17y. We applied multilevel models to examine each SR variable at baseline with each standardised measure of cognitive performance. We first examined average performance adjusting for time, then rate of decline by including an interaction term between SR and time. Models were adjusted for age at baseline, sex, social class, education, limitations in activities of daily living, and health conditions. We adjusted for depressive symptoms in sensitivity analyses.

Results In NSHD, having more positive support or less negative support was associated with higher memory scores ($\beta:0.05[95\%CI:0.02-0.09]$; $\beta:0.06[95\%CI:0.02-0.09]$), but not processing speed(executive function not measured).We did not observe associations between the other measures of SR and cognitive performance in NSHD. In ELSA, being married ($\beta:0.04[95\%CI:0.01-0.08]$), having a larger network size ($\beta:0.12[95\%CI:0.02-0.21]$ >6 vs. zero), more frequent contact ($\beta:0.25[95\%CI:0.08-0.24]$ 1–2/week vs <1 /year), greater social participation ($\beta:0.31[95\%CI:0.28-0.35]$ high vs low), more positive support ($\beta:0.02[95\%CI:0.01-0.03]$), or less negative support ($\beta:0.04[95\%CI:0.02-0.05]$) was associated with higher memory scores. Similar associations were observed for executive function but not processing speed. We did not observe any associations between SRs and decline in memory or processing speed in NSHD. In ELSA, being married and greater social participation were associated with less decline in memory and executive function but not processing speed.

Discussion Preliminary results suggest a relationship between both structural and interactional aspects of SRs with memory, and executive function but not processing speed. However, only marital status and social participation were associated with decline in memory and executive function over time in one cohort. We will also present replication of these analyses in the population-based SNAC-K and Rotterdam Study cohorts.

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COMMON HEALTHCARE VISITS PRIOR TO THE DIAGNOSIS OF DEMENTIA

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Background Dementia is commonly associated with co-morbidities and non-specific presentations. Individualised dementia care should ideally be provided within the context of these co-morbidities and presentations. To provide systematic insights, we described the dynamic changes of 20 commonest healthcare visits prior to the diagnosis dementia in Taiwan.

Methods We adopted a nested case-control approach. From the Taiwanese healthcare records, which covers >99% of Taiwanese population, we identified 491,000 case individuals first diagnosed to have dementia after age 50 years during 2002–2015, and control individuals matched at 1:1 ratio by age, sex, year of birth, and region at the time of first diagnosis. By 3-digit codes according to the International Classification of Diseases, 9th Edition (ICD-9), we identified 20 commonest causes of healthcare visits in case individuals between 2000 and 2015. Using stratified Poisson regression, we estimated cause-specific rates of healthcare visits between cases and controls within a compatible person-year, and observed the change of relative rates over the 8-year span leading to the diagnosis of dementia. With the large sample size, confidence of intervals of these relative rates for common events were almost negligible.

Results There was gradual increase in average numbers of all-cause healthcare visits prior to the diagnosis of dementia. However, we observed various decline of 15 of 20 cause-specific care prior to the diagnosis of dementia compared to controls, including diabetes mellitus (ICD-9 250), disorders of lipid metabolism (ICD-9 272), cataract (ICD-9 366), disorders of conjunctiva (ICD-9 372), essential hypertension (ICD-9 401), other form of chronic ischaemic heart disease (ICD-9 414), acute nasopharyngitis (ICD-9 460), acute upper respiratory infections of multiple or unspecific sites (ICD-9 465), acute bronchitis and bronchiolitis (ICD-9 466), diseases of hard tissues of teeth (ICD-9 521), and gingival and periodontal diseases (ICD-9 522), gastritis and duodenitis (ICD-9 535), osteo-arthritis and allied disorders (ICD-9 715), other and unspecified disorders of back (ICD-9 724), and other disorders of soft tissues (ICD-9 729). Four causes of healthcare visits that increased prior to the diagnosis of dementia included neurotic disorders (ICD-9 300), disorders of function of stomach (ICD-9 536) functional digestive disorders, not elsewhere specified (ICD-9 564), and possibly contact dermatitis and other eczema (ICD-9 692). There was little change in hypertensive heart disease (ICD-9 401 prior to the diagnosis of dementia)

Conclusion Paradoxical to the increase in all-cause healthcare visits prior to the diagnosis of dementia, there was decline of commonest care prior to the diagnosis of dementia. The few increasing exceptions could be common presentations prior to the diagnosis of dementia. These time-dependent findings provide systematic insights into dementia care and diagnosis.

P30 TREND IN DEMENTIA INCIDENCE IN CHINA 2002–2014: POPULATION-BASED LONGITUDINAL STUDY

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Background Globally, some 50 million people had Alzheimer's disease and related dementias in 2018. China accounts for approximately a quarter of cases. It is estimated that the cost of dementia in China was approximately USD 50 billion in 2010. China's rapid ageing process is occurring at an earlier stage of economic development than other countries, posing great demands on society, particularly health and care services. Accurate estimation of the recent time trend in the incidence of dementia in China is critical for tackling future challenges and formulating public health policies. There is evidence from several high-income countries of a recent downward trend in dementia incidence rates. It is currently unclear, in view of its less-developed status, whether the time trend is also downward in China. The aim of this study is to estimate the recent time trend in dementia incidence in China and to explore how much the effect of changes in risk factors on this trend.

Methods The Chinese Longitudinal Healthy Longevity Study (CLHLS) provides five waves of data (2002–2014). CLHLS wave 3 to wave 8 provided information about health status and quality of life of 47,584 people aged over 60 years in 23 provinces, municipalities and autonomous regions of China. In order to maintain representativeness, refreshment participants were recruited to study periodically. Dementia was ascertained at each wave using standardized cognitive and functional impairment criteria. Competing risks of mortality and non-random dropout were accounted for in analysing the temporal trend in dementia incidence. Joint model was fitted to estimate the temporal trends in dementia incidence in China. R package JM was employed to fitted the joint model.

Results Age-sex adjusted dementia incidence (2002–2014) increased at an annual rate of 2.5% (95% CI 2.4%–2.6%). Changes in potential risk factors accounted for about 20% of the time effect in dementia incidence.

Conclusion Time trends in dementia incidence in China was upward recently. To our knowledge, this is the first study to estimate the trend in dementia incidence in a middle-income country. This longitudinal study used joint modelling with time-to-event data to explore the time trends in dementia incidence for 12 years in China. The first limitation of this study was not possess data from eight provinces in remote areas in China. The second potential limitation is caused by the recall bias and measurements bias over time. The third limitation is that we assumed a constant rate of change of the dementia incidence rate which based on the rate of change was uniform across the Chinese population, but the population structure changed between 2002 to 2014.

P31 ABSTRACT WITHDRAWN

P32 AORTIC STIFFNESS AS A RISK FACTOR FOR DECLINE IN PHYSICAL FUNCTIONING IN THE WHITEHALL II STUDY

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