survival between cTnI>0.06 and <0.5 μg/l and cTnI≥0.5 μg/l subgroups. Increased mortality (HR, 95% CI) was associated with ages 70 to 80 years (2.58, 1.17 to 3.91) and >80 years (3.30, 3.50 to 5.06), peripheral vascular disease (1.50, 1.16 to 1.94), heart failure (1.36, 1.05 to 1.83), diabetes (1.68, 1.36 to 2.07), severe LV dysfunction (1.50, 1.00 to 2.21) and creatinine per 10 μmol/l (1.65, 1.02 to 1.08), whereas ages 50 to 60 years (0.55, 0.32 to 0.96), β blockers (0.53, 0.44 to 0.64), aspirin (0.80 0.65 to 0.99), ACE inhibitors (0.67, 0.56 to 0.80), statins (0.73, 0.59 to 0.90) and revascularisation (0.33, 0.12 to 0.92) lowered the risk of death.

Conclusion Quantitative evaluation of cTnI concentration in ACS patients with a cTnI>0.06 μg/l is associated with no added prognostic information. However, the dichotomisation of patients by cTnI status ("positive" and "negative") continues to facilitate ACS risk stratification.

RELATIONSHIP BETWEEN PREGNANCY OR CHILDBIRTH SATISFACTION AND WILLINGNESS FOR SUBSEQUENT PREGNANCY IN JAPAN

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Introduction In Japan, a survey of children and their parents was conducted to assess national campaign "Sukoyaka Family 21" in 2009. Our aim was to clarify the relationship between pregnancy or childbirth satisfaction and willingness for subsequent pregnancy.

Methods Children aged 3–4 months, 18 months, or 3 years who underwent medical check-up in 138 cities and their mothers were surveyed. Data from 5500 children aged 3–4 months and their mothers was analysed; this data included responses regarding willingness for subsequent pregnancy and pregnancy or childbirth satisfaction. Factor analysis was performed to verify existing categories of 15 items associated with pregnancy or childbirth satisfaction. Multivariate logistic regression analyses were performed to determine factors associated with the willingness for subsequent pregnancy, stratified by mothers' age and parity.

Results Factor analysis indicated that 4 factors influence pregnancy or childbirth satisfaction: medical care, family support, birthing facility, and support in the workplace and society. Multivariate logistic regression analyses in mothers having one child revealed that those aged 25–29 years and satisfied with the birthing facility [OR: 2.26, 95% CI: 1.06 to 4.85] and those aged 30–34 [OR: 2.21, 95% CI 1.12 to 4.35] or >35 years [OR: 2.94, 95% CI 1.15 to 7.51] and satisfied with family support were significantly more willing for subsequent pregnancy. Among mothers having >2 children, no significant association was found.

Conclusion Factors that influence willingness for subsequent pregnancy vary with mother's age. Therefore, age should be considered when planning services and support for parturient women.

PRE-HOSPITAL DELAY AND PREDICTORS OF MORTALITY IN PATIENTS PRESENTING TO EMERGENCY DEPARTMENT WITH STROKE: A DEVELOPING NATION SCENARIO

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Background Stroke is one of the leading causes of death and disability in developed nations.

Materials and Methods A prospective study was conducted to assess the factors influencing this delay in admission of acute stroke cases, in-hospital mortality was calculated and factors associated with mortality were looked for. Survival was calculated using Kaplan-Meier curve and Cox-proportional hazards model was constructed to identify independent predictors of inpatient mortality.

Results Of 134 subjects studied, 73.4% were male with mean (SD) age of 53.8(18.0) years. Median delay in reaching hospital was 9 h and only 18 (13.4%) reached hospital within 3 h and 31(20.3%) reached within 6 h. Distances from hospital, referral, belief in myths and alternate medicine and low threat perception of symptoms of stroke were independent factors associated with delay in arrival. Living in city, day time onset, urgency shown by attendant, availability of transport and presence of family history were associated with early arrival. ICF rate has no relation with age (p=0.516), sex (p=0.460), number of episodes (0.795), underlying hypertension (p=0.905). Odds of diabetics dying were 12 times higher than non-diabetics. Inpatient mortality was also significantly higher in smokers compared with non-smokers (p=0.004), in patients with right-sided compared with left-sided hemiplegic (p=0.029) and who couldn't afford computed tomography (CT) scan (p=0.007).

Conclusion Majority of patients did not reach hospital early enough to receive thrombolytics and had high in-hospital mortality. Diabetes and smoking were independent predictors of in-hospital mortality.

IODINE DEFICIENCY IN CHILDREN: A COMPARATIVE STUDY IN THE TWO DISTRICTS OF SOUTH-INTERIOR KARNATAKA

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Introduction and Objective Iodine is an essential micronutrient. A daily consumption of 100–150 μg of Iodine is recommended for normal human growth and development. Iodine Deficiency Disorders (IDD) can be easily prevented. Simplest, most effective and most inexpensive preventive method is consumption of iodated salt. In this study, we estimated the prevalence of IDD among children in the rural areas of Mysore and Coorg districts, and the results were compared.

Materials and Methods A cross sectional study in the age group of 6–12 years using PPS systematic sampling method. The total sample size being 10 082 out of which 5337 is from Mysore and the rest from Coorg district. Clinical examination of the thyroid was done and urine samples were collected for Iodine estimation. Data were analysed using SAS software.

Results and Conclusion Prevalence of Goitre was more in females compared to males with a ratio of 2:1 in Mysore districts and 4:1 in Coorg district. It was observed that IDD is Endemic in both districts and the presence of goitre is directly proportional to the age of children. The significant difference in the level of Goitre in children across districts and within districts is being studied.

VALIDATION OF A FOOD FREQUENCY QUESTIONNAIRE TO ASSESS DIET IN CHILDREN AGED 4–5 YEARS

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Introduction We need valid food frequency questionnaires (FFQ) to assess diet in preschool children using parental report.

Methods We collected dietary information for 171 children aged 4−5 years from parents of the INMA study in Valencia, a prospective mother-child cohort study. A 105 food items FFQ was used to assess the child's diet of previous year, at baseline and, on average, 10 months later. As the reference method, we estimated several carotenoids, vitamin C and E in the plasma of the children. Pearson (and Spearman) correlations were calculated for reproducibility (FFQ1 vs FFQ1), and validity by comparing nutrient estimates from FFQ to nutrient biomarkers (biochemical calibration).

Results The average of correlation coefficients for reproducibility (Spearman r) between the two FFQ was 0.44 (0.44 for energy, 0.41 for protein, 0.39 for carbohydrate, 0.41 fat, 0.55 for β-carotene, 0.60 for vitamin C and 0.39 for vitamin E). The average of correlation coefficients for validity (Pearson r) between the mean of two FFQ and nutrients in plasma were 0.06 for α-tocopherol, 0.10 for lutein-zeaxanthin, 0.44 for β-cryptoxanthin (p<0.001), 0.20 for lycopene (p=0.01), 0.18 for α-carotene (p=0.021), 0.24 for β-carotene (p=0.002) and 0.23 for vitamin C (p=0.008). When children from mothers who reported a change in their children diets were excluded from the analysis correlations were improved.

Conclusions The FFQ showed a relatively good reproducibility and satisfactory agreements with most nutrient biomarkers measured in blood which may support its use as a valid instrument for dietary assessment in preschool children at these early ages.

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Introduction When electronic patient records are used for non-randomised research, a range of different study designs, eligibility criteria and adjustment methods may be used. This study aimed to compare the apparent bias and precision of effect estimates resulting from different potential design and analysis methods.

Methods Comparisons were based on the association between thiazolidinedione (TZD) therapy and heart failure in 91 872 participants with diabetes. Nested within the same dataset, we applied all feasible combinations (N=162) of: five study designs; five sets of eligibility criteria for sample selection; and eight methods of adjustment. Apparent bias was evaluated by comparison to the RR of 1.72 (1.21−2.42) from a meta-analysis of RCTs. Precision was evaluated from SEs.

Results The multiple regression adjusted HR from the full sample cohort study was 1.34 (1.15−1.56). Adjusted effect estimates from the case-only study designs had low precision and were higher than the reference value, ranging up to an OR of 8.22 (4.92−13.71) for the case-crossover design. After applying restrictive eligibility criteria (including new-user, and RCT-like criteria) precision was lower and adjusted effect estimates were generally lower than the reference value. Application of new user, propensity score and confounder based exclusions gave the lowest HR of 0.43 (0.10−1.76). Choice of adjustment method had a relatively small impact on the magnitude and precision of the effect estimate.

Conclusion Our results suggest that restricting eligibility criteria, or implementing case-only designs, may not always reduce bias, and may reduce precision, in comparison to a cohort study using the full sample.

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Nowadays, in many sectors of the economy, society functions 24 h per day. During last century, there has been a decrease in time that people spend sleeping. Studies have suggested that disruption of circadian rhythm may lead to obesity, we assessed the relation between sleep deprivation and overweight among shift workers. A cross-sectional study was conducted on a sample of 902 workers aged 18 to 50 years who were working on the production line, in a poultry slaughterhouse in Southern Brazil. Overweight (overweight + obese) was defined as body mass index $\geq 25 \ kg/m^2$. Time of sleep was categorised as: >5 h continuous/day; <=5 h continuous/day with some additional rest (sleep deprivation level I); and ≤5 h/day without any additional rest (sleep deprivation level II). The mean age of the participants was 31 years (SD =8.7), 63% of the sample were women and 20% sleep 5 h or less in continuous/day. Workers with sleep deprivation level II and level I showed higher prevalence of overweight (66.7% and 45.7% vs 37.4%) than workers who slept 5 h or more hours in continuous/day. After adjusting for sociodemographic, parent's overweight, behavioural (meals/day) and shift work (night/day), the prevalence ratios for sleep deprivation level II and level I were, respectively, 1.76 (95% CI 0.93 to 3.36) and 1.24 (95% CI 0.93 to 1.64) compared with workers sleeping >5 h continuous/day. Sleep deprivation may be an independent risk factor for overweight in shift workers.

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Introduction Socioeconomic factors might play important roles in developing psychological distress. As part of a large study on health perception in Iran the relationship between anxiety and socioeconomic factors was investigated.

Methods This was a nationwide cross sectional study. A random sample of individuals aged between 18 and 65 were entered into the study. Respondents were asked to rate their anxiety on a 5-point scale. The record of demographic and socioeconomic data included age, gender, education, marital status, employment, income, and chronic diseases. Logistic regression analysis was used to estimate ORs for contributing factors to self-reported anxiety.

Results In all 27 883 individuals took part in the study. The mean age of the respondents was 32.7 (SD=11.8) years. Overall 20.1% reported that they were very or very much anxious. The results obtained from logistic regression analysis showed that females [OR =1.52], lower income groups [OR for lowest income group =1.53], having at least one chronic disease [OR =1.27], and those with lower self-reported health [OR for lowest group =5.12], were more likely to suffer from poor mental health.

Conclusion The findings indicated that there were inverse relationships between anxiety, income and self-reported health. The contribution of income to psychological distress might be explained in the context of social determinants of health.