P1-296 CASE-FINDING AND TREATMENT OF TB PATIENTS IN MEDICAL COLLEGES IN PONDICHERRY, S. INDIA: PATIENT AND HEALTH SYSTEM DELAYS UNDER THE REVISED NATIONAL TB CONTROL PROGRAMME (RNTCP)

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Introduction Early diagnosis of TB and prompt initiation of treatment is essential for an effective tuberculosis control programme. Delay in the diagnosis may worsen the disease, increase the risk of death and enhance tuberculosis transmission in the community.

Objectives

1. To study the factors associated with case finding and treatment of TB patients under RNTCP in Medical colleges of Puducherry.
2. To study the referral and feedback mechanism under RNTCP in and around Puducherry.

Material & Methods From the 875 TB patients diagnosed at four Medical colleges during 2009, we selected 324 patients by systematic random sampling and could contact 216. They were personally interviewed by trained field health workers, using a semi-structured questionnaire.

Results The study group had 147 (68%) males and 69 (32%) females. 140 (64.5%) were receiving Cat I, 45 (20.5%) Cat II, 30 (13.5%) Cat III and 1 (0.5%) Cat IV treatment. The mean and median patient delay was 59.2 (SE 5.7) and 36.5 days, diagnosis delay was 37.2 (SE 4.9) and 12 days, treatment delay was 24.2 (range 7–90) and 18 days, health system delay was 44.1 (range 7–90) and 31 days and the total delay was 84.2 (range 17–140) and 74 days. Longer delays were not associated with knowledge about availability of DMC's but were associated with accessibility of diagnostic/treatment facilities. Impact on Policy: Regular sensitisation is required for medical personal in private health sectors where large number of patients seek treatment and RNTCP in Puducherry requires strengthening to reduce patient and health system delays.

P1-297 MATERNAL CHARACTERISTICS IN RELATION TO LOW BIRTH WEIGHT INFANTS IN A JAPANESE COHORT STUDY

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Introduction A low birth weight (LBW) is an important indicator of infant morbidity and mortality. There is also growing evidence that the adverse consequences of LBW may continue throughout a subject's life. The aim of this study was to determine the association of maternal factors during pre-pregnancy and pregnancy with LBW in a Japanese population.

Methods A prospective cohort study carried out in Tokyo by the National Center for Child Health and Development of Japan was performed between 1 October 2003 and 31 December 2005. A total of 1338 pregnant women with singleton pregnancies were recruited at ≦16 weeks gestation and followed-up until partus. Logistic regression models were used to assess the risk factors for LBW.

Results A maternal age of 30–34 years (OR=2.83, 95% CI 1.17 to 6.88), an increase in maternal height in cm (OR=0.94, 95% CI 0.89 to 0.99), pre-pregnancy body mass index <18.5 kg/m^2 (OR=2.53, 95% CI 1.47 to 4.34), gestational weight gain during pregnancy <7 kg (OR=2.27, 95% CI 1.18 to 4.36), passive exposure to smoking at work early in pregnancy (OR=2.48, 95% CI 1.16 to 5.28), an increase in annual household income (p for trend=0.01), a history of oral ferrotherapy to treat anaemia (OR=0.31, 95% CI 0.14 to 0.71) and gestational age ≧37 weeks (OR=0.01, 95% CI 0.01 to 0.02) were significantly associated with LBW.

Conclusions Our findings suggest that higher maternal socioeconomic status, passive exposure to smoking early in pregnancy, pre-pregnancy thinness and insufficient weight gain during pregnancy are important predisposing factors for LBW, and a history of oral ferrotherapy to treat anaemia seems to decrease the risk of LBW.

P1-298 TRENDS IN AVOIDABLE MORTALITY IN SCOTLAND

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Introduction Avoidable early deaths can be classified as preventable (due to behaviour) or amenable to treatment (Page, Tobias and Glover, 2007). Recent work from England to Wales (Wheller *et al* 2007) has shown that there have been differing trends for over the period 1993 to 2005 by types of avoidable death. For both men and women there was no trend for unavoidable death rates. Amenable death rates decreased more steeply for men than for women. Preventable causes of death had a downward trend for men, but had no change with time for women.

Methods We use data from the Scottish Longitudinal Study (SLS) (see http://www.lscs.ac.uk/sls/) to examine equivalent trends for Scotland and to relate them to socioeconomic factors. We used a sample of almost 250 000 SLS members who were aged 0 to 74 from the 1991 Census linked to early deaths to 2008.

Results Overall, 9% of men and 6% of women have died before the age of 75. The proportion of early deaths classed as amenable to medical treatment were 43% (men) and 44% (women), which compares with 36% and 39% for England and Wales. The proportion of early deaths classed as preventable 35% (men) and 30% (women) was more similar to England and Wales (35% and 28%). We will present trends in standardised death rates by these causes and relate them to sex and to socioeconomic status at the time of the 1991 Census.

Conclusion Scotland seems to lag behind England and Wales in reducing mortality due to amenable causes.

P1-299 METHOD PELC: METHOD OF PLANNING EPIDEMIOLOGIC TO LINES OF CARE

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Introduction Actions are linked in lines of care to organise the route of the healthcare consumer. To test and determine the best course of care and to ensure its quality, the Method PELC—Method of Planning Epidemiologic to Lines of Care has been created.

Method PELC The Method PELC has eight elements: "Team of referees", "Standard treatment", "Management experimentation", "PELC scores", "Case-tracer-standard", "Comparison groups", "Aftercare system" and "Self-referred health". The Method PELC forms a "Team of referees" that defines the "Standard treatment (ST)" of the line and its PELC-ST score; compares each line of care (LC) against the "Standard treatment" and the result is represented in the PELC-LC score; installs an retrospective study (case-control or historical cohort) or an prospective study (quasi-experimental or cohort); creates basis for comparison between the Case Group-LC

(PELC-LC distant from PELC-ST) and the Control Group-LC (PELC-LC close to PELC-ST). In the retrospective study a quality interval is defined, with upper limit equal to PELC-ST, enabling to sort the lines in the groups. In the prospective study, the "Management experimentation" produces the lines of the Control Group-LC. The "Aftercare system" monitors quality of care that is coming. A "Self-referred health" explores the relationship between PELC-LC and self-perceptions of the healthcare consumer (PELC-HC).

Result The Method PELC allows local and multicenter studies in the investigation of clinical-social-organizational factors that act on the lines of care.

Conclusions The Method PELC leaves open to discussion a new line of research to the lines of care.

P1-300 DISEASE PATTERN AND HEALTH-SEEKING BEHAVIOUR IN A RURAL AREA OF BANGLADESH

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Knowledge about existing disease pattern and health seeking behaviour is essential to provide need-based healthcare delivery and to make the healthcare system more pro-poor. A community-based cross sectional study was conducted among 493 systematically selected households to determine the prevailing disease pattern and health seeking behaviour in rural Bangladesh. More than half of the respondents gave history of illness of family members during the preceding 15 days. Fever, gastrointestinal and respiratory diseases were the most reported complaints. Overall, there were no discernible differences in the likelihood of seeking traditional or any kind of care considering socio-demographic variables and prevailing disease types. Occupation of household head as day labour or in agriculture and suffering from gastrointestinal diseases positively predicted use of para-professionals. Use of un-qualified allopaths was negatively predicted by the male gender or literacy of the household head and presence of gastrointestinal, respiratory and other types of diseases and positively predicted by occupation of the household head in agricultural field or as day labour. Use of qualified allopaths was positively predicted by respiratory, skin/eye/ENT and other types of diseases and also by standard of living and relationship of the respondents with household head and negatively predicted by agricultural or day labour work of the household head. Existence of several distinct therapeutic systems in a single cultural setting was found in the study area. It is important to develop a need based healthcare delivery system and actions should be taken to improve overall scenario of health system of rural Bangladesh.

P1-301 A COMPARISON OF TWO METHODS TO ESTIMATE THE CANCER INCIDENCE AND MORTALITY BURDEN IN CHINA IN 2005

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Introduction Knowledge of the cancer profile is an important step in planning rational cancer control programs and the evaluation of their impact. Due to rapid changes in cancer incidence over in China, national surveys may be insufficiently timely to provide adequate descriptions of the national burden.

Methods To evaluate the utility of cancer registries in describing the national cancer profile, this study compared two methods of estimating national cancer-specific incidence and mortality in China 2005, with estimates based on the Third National Death Survey (method I) compared with those based on registry material (method II).

Results A total of 2.6 million cancer cases and 1.8 million cancer deaths were estimated by method I, as compared to 2.8 million cancer cases and 1.9 million cancer deaths using method II.

Conclusion The higher level of burden using the latter method in part may be due to a sizable differential in the magnitude of incidence rates across registries for certain cancer sites. Most cancer registries were located in relatively more developed urban areas, or rural areas associated with higher risk for certain cancers. There are substantial differences in the cancer profile between urban and rural communities in China, and there may be concerns regarding the national representativeness of the data aggregated from this set of cancer registries. Timely and reliable estimation of cancer can only be realised if accurate information is available from cancer registries comprising representative samples of the country.

P1-302 POSITIVE ASSOCIATION BETWEEN TRAFFIC-RELATED AIR POLLUTION AND SOCIOECONOMIC STATUS IN A MEGACITY OF A DEVELOPING COUNTRY

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Introduction Most studies have shown that populations with lower socioeconomic status tend to experience higher levels of exposure to environmental air pollutants. We investigated the association between neighbourhood socioeconomic status and traffic related air pollution in São Paulo.

Methods We calculated total traffic density and traffic density for vehicles powered by gasoline and diesel, from traffic counts data, for 4964 geographical units with a population of 20 or more inhabitants, formed by a grid of 500 by 500 metres. The Human Development Index (HDI) was used as a socio-economic indicator and obtained for each of these geographic units. We analysed the association through logistic regression models for traffic density categories.

Results The neighbourhood socio-economic status was positively associated with all measures of traffic density with clear dose-response gradient. The category with the highest HDI presented Rate ratios of 10.2 (95% CI 7 to 14.9), 9.6 (95% CI 6.6 to 13.9) and 17.5 (95% CI 10.8 to 28.4), respectively, for total, gasoline and diesel vehicles traffic density.

Conclusion Our analysis suggests that richer areas are more exposed to traffic related air pollution. The greatest socioeconomic difference in exposure was found for diesel exhaust. In search of a more equitable solution of this environmental problem, investigations are warranted in megacities of developing countries about how the development of the road network and vehicle traffic relates to sites historically occupied by different social classes.

P1-303 INEQUALITIES IN SILICA EXPOSURE: A STUDY USING JOB EXPOSURE MATRIX

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Silicosis still persists as a worldwide problem and becomes a major problem for public health. Since 1995 the ILO/WHO established