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Objective Comparison of active vs passive primary healthcare function in rural with urban setting at determine of delay to diagnosis and treatment of tuberculosis and its outcomes in West Azerbaijan province, Iran, at 2004–2009.

Material and Methods In this perspective study we used years TB new cases data that have been recorded by TB management center in West Azerbaijan province. Patient and health system delay were determined as number of days between onset of symptoms to diagnosis and diagnosis to start of treatment respectively.

Results At comparison of domicile, both of patient and health delay mean days were more in urban patients (respectively 241 vs 133, p value <0.02 and 11 vs 7, p value =0.006). In rural patients, females at comparison of males had more mean total time delays (163 vs 115, p value =0.01). Despite of higher mean of total delays in extra pulmonary to pulmonary at both of domicile (respectively urban 278 vs 232 and rural 197 vs 97), there was significantly difference in rural regions (p value =0.0001). Default rate in rural regions was less than urban settings (respectively 3.53% vs 6.08%) and whereas success rate was more than it (respectively 81% vs 79%).

Conclusion At regard to health system policy in Iran that primary healthcare for tuberculosis in rural regions is active whereas urban setting is passive, it seems there is urgent need to change of policy in case finding and case holding of patients in urban area to decrease time delays and increase positive outcomes.

**P1-199** LIMITATIONS OF THE “HIGH-RISK STRATEGY” FOR LONG-TERM DISABILITY CARE PREVENTION: REVISITING GEOFFREY ROSE

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Introduction In 2006, the Japanese government introduced a new prevention policy to limit the growth of old age disability care. The policy is based on what Geoffrey Rose called the “high-risk strategy” of prevention, and seeks to identify individuals with multiple risk factors. We provide cohort data to examine the feasibility of the policy.

Methods Older people (≥65 years old, n=11 889) who were independent in activities of daily living were followed up for 3 years as a part of AGES (Aichi Gerontological Evaluation Study) project. The endpoint is becoming functionally dependent. We used eligibility criteria for public long-term care insurance policy.

Results At baseline, 65% of subjects had no risk factors and 3% had three or more risk factors (high-risk group, HRG). After 3 years, 1149 individuals become dependent. Among the HRG, 52% lost independence compared to 6% of those with no risks. Although the HRG showed a higher rate of functional decline, they only comprised 9% of those who became dependent. If the targeted population is expanded to those with one or more risk factors, 57% of dependent people become eligible but the number requiring surveillance rises to more than ten million individuals in the country, with substantial costs of screening.

Conclusion The majority of cases of disability arises among individuals with fewer risk factors, illustrating Rose’s principle of the prevention paradox. Pursuing the high-risk strategy results in lower coverage, as well as substantial costs of screening. This suggests that a population strategy is the only sustainable approach.

**P1-200** PROPORTION WITH CHILDREN UNDER 2 YEARS IN BRAZIL WHO HAD AN AVOIDABLE HOSPITALISATION, 2006

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Introduction Prevention of hospitalisation is a public health challenge worldwide. Many of the reasons for hospitalisation in developing countries should be avoided by presence of effective health systems. The aim of the study was to identify the proportion of young children with history of avoidable hospitalisation in the previous 12 months in Brazil, in order to gain insight into distribution and causes of hospitalisation to inform policies to prevent children hospitalisation.

Methods Analysis of causes of avoidable hospitalisation among children under 2 years of age based on data from the Brazilian DHS 2006 conducted by the Ministry of Health. The data collection was carried out in households with children by means of interviews with their mothers or guardians.

Results Mothers or guardians of 1901 children were examined. 11.8% reported infants to have been hospitalised at least once in the previous 12 months. The proportion with at least one hospitalisation in the previous year were 2.0% from pneumonia, 5.2% from bronchitis, 2.6% from diarrhoea, 0.5% from accident and 3.6% from other causes.
Conclusion Respiratory and gastrointestinal diseases and accidents were predominant causes of hospitalisation of children under 2 years of age. The results demonstrate that prevention activities could be essential strategies in order to reduce proportions of hospitalisation among children under 2 years of age in Brazil at least by half. Besides, this study suggests that such investment in health promotion could improve the health profiles of children in developing countries.

**P1-201 USING EPIDEMIOLOGY DATA FOR EVALUATING ECONOMIC BURDEN OF CARDIOVASCULAR DISEASES IN RUSSIAN FEDERATION**

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**Purpose** To study the economic burden of cardiovascular diseases (CVD) in Russian Federation in 2006–2009.

**Methods** The economic burden was calculated by the cost of illness method. The calculations included direct costs of healthcare system and indirect costs, associated with premature death in working age and disability. We used official statistics of healthcare resources utilisation, associated with CVD, the results of epidemiological surveys of CVD mortality statistics in Russia in 2006–2009.

**Results** The total economic burden of CVD increased from 20.6 billions of euro in 2006 till 26.6 billions of euro in 2009. Indirect costs was equal to 3.1%–2.8% of GDP of Russian Federation. The increasing of the burden was mainly caused by the price increasing and in some degree by the increasing of PCI in CHD patients in recent years. Direct costs accounted 21.3% of total cost of CVD (5.7 billions of euro), indirect costs—78.7% (20.9 billions of euro) in 2009. Indirect costs mainly consisted of the GDP losses because of premature death of working age men. CHD represented 37.3% and cerebrovascular diseases 17.1% of overall CVD costs. In-hospital care represented 47.5% of direct costs, out hospital visits—21.8%, medication—20.7%, PCI—4.1% and emergency care 4.1% of direct costs in 2009, respectively. CHD represented 45.3% of direct cost, because of large duration of hospitalisation and PCI costs.

**Conclusion** CVD is a big public health challenge in Russia. The results of economic burden assessment should help policy makers evaluate policy impact and prioritise expenditures.

**P1-203 SOCIAL AND GENDER Differentials in childhood MORTALITY in RUSSIAN Federation**

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**Introduction** Achieving Millennium Development Goals on child mortality in developing countries requires that inequities be addressed. This study examined changing gender differentials as social and economic improvement occurred in a rural north Indian community.

**Methods** A dynamic cohort of children aged <5 years old in 10 villages under Ballabhgarh HDSS were followed from 1st January 2008 to death, age 5 or data censoring on 31st December 2010. Data on births, mortality, caste and parental literacy are routinely collected and stored in electronic databases to which information on wealth Index was appended in 2010. Cox proportional hazards modelling was used to produce HRs for mortality in girls according to socioeconomic strata after adjustment for birth order, number of siblings and other socioeconomic variables.

**Results** The mortality rate for the cohort was 67.9 per 1000 live births (B=74.4; G=62.4). This declined significantly as wealth index improved (from 102.4 to 25.4 per 1000 live births). The HR for girls declined from 1.57 (95% CI 1.0 to 2.5) in the wealthiest to 0.67 (0.3 to 1.4) in the lowest tertile. There was no change in total or sex specific mortality rates according to caste or father’s education. Mothers’ education beyond 10th grade resulted in sharp decline in mortality (14 per 1000 live births) but did not impact the sex differential in mortality. The sex ratio at birth was worst for population with highest wealth index and highest level of maternal educational attainment.

**Conclusion** Major social and gender differentials persisted in this study population with gender discrimination moving from after to before birth.

**P1-204 EPIDEMIOLOGY OF DISABILITY IN INDIA: OBSERVATIONS FROM A RECENT STUDY IN TWO STATES, 2009–2010**

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**Introduction** Disability refers to functional impairment of any part of the body and may be congenital or acquired. Estimation of disability load and its causes is an important index for determining services for social justice and rehabilitation. This study aimed to estimate the community disability burden in India at the request of the Government of India and WHO.