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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.

P1-198 STUDY OF SPATIAL DISTRIBUTIONS AND EFFECT OF THE PATIENT DISTANCE FROM HEALTH CENTER ON DEFAULT AND INTERRUPTED THERAPEUTIC OUTCOMES IN TUBERCULOSIS DISEASE USING GIS AND GPS, IN URMIA, IRAN, DURING 2004–2009

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Objective To determine of the spatial distributions of tuberculosis (TB) and effect of patient distance from the health center on default or interrupted therapeutic outcomes in Urmia, Iran, during 2004–2009.

Material and Methods In this cross sectional study we used the data of 452 new TB cases, which have been recorded by TB management center in Urmia, capital of West Azerbaijan province, during a five-year period. In order to identifying the significant geographical clusters, we used the “Average Nearest Neighbour” method. Linear regression method was used to determine linear correlation between patients distance and number of default and interrupted therapeutic outcomes.

Results Five countryside areas had significantly spatial clusters of TB ($p < 0.0001$). As the distance of patient from TB health center are increased, the number of the default and interrupted cases were also increased ($r^2 = 0.25$, $p = 0.04$). In comparison with the number of default and interrupted cases and the mean distances of TB health center, wherever mean distance was more than 1 Km, number of default and interrupted cases were more than 3 ($p = 0.02$).

Conclusion Spatial distributions of tuberculosis disease in Urmia are not randomly and suburban areas need more serious attentions by policy makers and health planners. According to the health system in Iran, health posts has not actively role in treatment of TB patients at urban settings. As a result, if the health posts are

contributed to in the TB treatment programs, the patient distance from the treating health centers will decreased and subsequently the positive therapeutic outcomes will grow.

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, 63% 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, 32% 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, 3.2% from bronchitis, 2.6% from diarrhoea, 0.5% from accident and 3.6% from others causes.