Conclusions DOTS awareness is still low among doctors who graduated before the introduction of DOTS. Private practitioners harboured myths and misconceptions about DOTS.

P1-259 RELATIONS BETWEEN BMI AND TOTAL AND CAUSE SPECIFIC MORTALITY IN JAPAN: AGES COHORT

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Purpose Within OECD countries, Japan has the lowest percentage (3.4%) of the people with obesity (30≦ body mass index, BMI). This study aims to reveal the relationship between BMI and mortality among older Japanese.
Method We started a cohort study (Aichi Gerontological Evaluation Study, AGES) on non- institutionalised elderly aged 65 and over in 2003. We excluded the subjects with missing data and who died within 1 year in 4 year follow-up period considering reverse causation. Consequently, 17 017 subjects among 21 047 respondents for baseline survey were analysed. Cox's proportional hazard model was applied to calculate HR and 95% CI of BMI for all cause and cause specific mortality. Age, disease history, weight loss, smoking, alcohol drinking, and exercise were used as covariates.
Result Respondents with lowest category of BMI (under 18.5) had the highest all cause mortality among both sexes. Compared to the respondents with BMI 23.0–24.9, men respondents with under 18.5 BMI and BMI 18.5–22.9 had significantly higher BMI (2.16 (1.58–2.95, p<0.001) and 1.30 (1.04–1.63, p=0.015) respectively). For cause specific mortality, men with BMI under 18.5 had a significantly higher HR of malignant neoplasm mortality (HR=1.68 (1.05–2.67, p=0.030)) and respiratory disease mortality (HR=5.63 (2.57–12.34, p<0.001)).
Conclusion Older Japanese with lower BMI had a significantly higher risk of all cause mortality in both sexes. Not only obesity, but also underweight prevention is needed for older Japanese.

P1-260 DENTAL FLUOROSIS IN CHILDREN OF SÃO PAULO, BRAZIL, IN 1998–2008

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Introduction Water fluoridation and fluoride dentifrice contribute effectively in caries prevention. Both resources have nearly universal coverage in Sao Paulo, Brazil, since the 1980s. However, multiple exposures to fluoride demand the surveillance of dental fluorosis. This study aimed to assess fluorosis prevalence from 1998 to 2008.
Methods Epidemiological surveys of oral health conducted in 1998 (n=244), 2002 (n=253) and in 2008 (n=4249) informed fluorosis prevalence among 12-year-old school children. Although using different sample sizes, all surveys were considered representative for the city. Dental examinations were performed at schools, under natural illumination. The assessment of dental fluorosis used the index proposed by Dean in 1942, and recommended by the WHO for oral health surveys in 1997. Data analysis used the comparison of proportions included in the Epi-Info software.
Results Fluorosis prevalence was 43.9% (95% CI 37.7% to 50.1%) in 1998, 33.2% (27.7% to 39.2%) in 2002, and 39.1% (37.6% to 40.6%) in 2008. Mild and very mild fluorosis accounted for 88% of cases observed in 1998, 95% in 2002, and 94% in 2008. Less than 1% of examined children had severe fluorosis in 1998 and 2008; no cases were observed in 2002. No statistically significant difference was observed for the overall prevalence and for rates that specifically assessed differential levels of fluorosis during the period.
Conclusion The prevalence of dental fluorosis among children in Sao Paulo was stationary in the period 1998 to 2008. Most of the prevalence refers to mild and very mild levels of fluorosis, with no impact in function and aesthetics.

P1-261 PREDICTION OF DROPOUT TUBERCULOSIS TREATMENT ON PRIORITARY CITIES TO CONTROL IN ESPÍRITO SANTO STATE, BRAZIL

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Objectives To identify the epidemiological factors related to the abandonment of TB treatment in the priority municipalities for TB control and to establish a score for use in TB control programs to identify patients most likely to abandon treatment.
Methods case-control study matched by sex and notification place to compare patients who dropped out of the treatment (cases) with those who were cured (control) in eight priority municipalities for TB control in the Espirito Santo state, from January 2006 to July 2008. Patients were interviewed directly by one of the researchers, at the clinic or at home. To data analysis we performed a bivariate analysis and the significant results obtained from these analysis were for the logistic regression analysis and network neural artificial (NNA). The questionnaire score was created and validated.
Results The study involved 21 cases and 41 controls. In the bivariate analysis, the epidemiological factors involved in the TB treatment dropout were identified as follows: average income, smoking, age, occupation, religion, drugs, previous treatment for TB and willingness to abandon. The logistic regression analysis and neural network revealed that the use of illicit drugs and patient without religion was strongly related to the abandonment. It was found that the neural classification was not more effective than logistic regression for the score marks preparation.
Conclusions The score created was able to estimate the treatment dropout cases identified in the study and can be used in programs of TB control to identify patients most likely to abandon TB treatment.

P1-262 POST-MORTEM INFECTION CONTROL IN JAPAN

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Introduction Healthcare workers in Japan lack the required level of understanding when dealing with cadavers at home and have the continuous and conflicting problem of balancing traditional, cultural beliefs with providing high quality infection control methods.
Objective The objectives of this research were to clarify the reasons for poor infection control post-mortem and to statistically show the significance of the problem.
Methods In 2006, 4773 participants gave feedback from a questionnaire. Participants were drawn from 13 different types of healthcare. They completed questionnaires about prevention and control of infection from cadavers. Questions covered four main areas: (1) The management of cadavers, (2) The role of nursing staff,

(3) The recognition of possible infection from cadavers, (4) The background of nurses.

Results A descriptive analysis showed that the when running a correlation between the "organization type" and the "protocol usage" (frequency of use), the amount of "protocol usage" was only 45%±3%. It also showed that <50% of the participants use a standard set of protocols in the treatment of cadavers and that certain organization types use standard protocols much more than others (correlation, −0.122. sig=p<0.001). The results strongly indicated that "time" & "level of understanding" affected protocol usage.

Conclusion The research shows that this is a significant problem in Japan. As part of our report we have now proposed a detailed and structured set of standardised infection control protocols and a range of educational tools for healthcare workers and families.

P1-263 A PROSPECTIVE STUDY OF OBESITY AND RISK OF OESOPHAGEAL AND GASTRIC ADENOCARCINOMA

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Explanations for increasing rates of oesophageal adenocarcinoma (OAC) remain unclear, though the concurrent increase in the prevalence of obesity may be a partial explanation. Although obesity has emerged as a leading candidate risk factor for OAC, few studies have examined body fat distribution. Therefore, we evaluated the relation between overall (BMI) and abdominal (waist-to-hip ratio (WHR)) obesity with OAC (n=253) and gastric cardia adenocarcinoma (n=191) in 218 850 men and women of the NIH-AARP Diet and Health Study cohort. We used Cox proportional hazards regression to estimate HR and 95% CIs, with control for many potential confounders. Comparing the highest to the referent category, we observed that BMI and WHR were both positively associated with OAC [HR (95% CI); 2.11 (1.08 to 4.09) and 1.76 (1.22 to 2.54), respectively]. A positive association was also found for BMI and gastric cardia adenocarcinoma [HR (95% CI); 3.67 (2.00 to 6.71)], but not for WHR [HR (95% CI); 1.34 (0.91 to 1.97)]. Mutually adjusting models for BMI and WHR attenuated, but did not eliminate the associations for both BMI and WHR with OAC [highest vs referent category; HR (95% CI); 1.77 (0.90 to 3.49) and 1.44 (0.98 to 2.10), respectively]. Mutual adjustment had only minor influence on the BMI risk estimates for gastric cardia adenocarcinoma [HR (95% CI); 3.28 (1.76 to 6.11)], whereas WHR estimates were attenuated [HR (95% CI); 1.06 (0.71 to 1.58)]. Overall obesity and abdominal obesity were both related to a higher risk of OAC, but only overall obesity showed an association with gastric cardia adenocarcinoma.

P1-264 EXPLAINING RECENT CARDIOVASCULAR TRENDS IN EASTERN MEDITERRANEAN POPULATIONS

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Introduction Middle income countries are facing an epidemic of non-communicable diseases, especially diabetes, stroke and coronary heart disease (CHD). We analysed population and mortality trends in Palestine, Syria, Tunisia and Turkey.

Methods Populations and timeframes. West Bank Occupied Palestine Territory (2.5 million population, 1998–2009); Turkey (73 million, 1995–2008); Tunisia (10 million, 1997–2009); Syria (20 million, 1996–2006).

Data Sources National and local surveys, routine national and WHO statistics. Data on populations, mortality, patient groups and numbers, treatments and risk factor trends were critically appraised. Data were integrated and analysed using a previously validated CHD policy model.

Results CHD mortality rates fell by 20% in Palestine and by 44% in Turkey, but increased by 17% in Tunisia and by 60% in Syria. Smoking prevalences were high in men, ranging from 24% to 39%. Male smoking persisted in Tunisia and Syria but decreased 10% in Palestine and 15% in Turkey. Population blood pressure levels decreased in Palestine and Turkey, but increased slightly in Tunisia and Syria. Conversely, cholesterol levels decreased in Palestine and Tunisia but increased in Turkey and Syria. BMI rose by 1–2 kg/m^2 and diabetes increased by 20%–30% in all four countries, especially among women. Modelling demonstrated that part of the mortality decreases were attributable to treatments, particularly for secondary prevention and heart failure. However, the contributions from statins, surgery, and angioplasty were consistently small.

Conclusions Recent trends in CHD mortality were complex. They mainly reflect changes in major cardiovascular risk factors, modestly alleviated by treatments.

P1-265 EFFECTIVENESS OF SMOKING PREVENTION PROGRAMS FOR MATERNAL AND CHILD HEALTH

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Introduction Smoking is a very important risk factor for health including that of pregnant women. It can cause low birth weight babies and various maternal and child health problems. Though the number of municipalities which provide smoking prevention programs has been increasing, not all of them do so. This study aims to clarify the effectiveness of smoking prevention programs for maternal and child health.

Methods We collected two data sets in 2005. One is from a self-administered questionnaire survey for all of the mothers who participated in health checkups of babies in a certain period in randomly selected municipalities from all of Japan. Another is from a mail survey of various maternal and child health programs including smoking prevention programs for all of the municipalities in Japan. The two data sets were merged by municipality. Multilevel logistic regression analyses were applied to calculate the ORs concerning the data structure at the municipality and individual level.

Results The response rate of the survey for mothers was 77.1%. Data on 17 482 mothers in 115 municipalities can be merged. Among them, 73 municipalities were providing smoking prevention program for teenagers and 42 were not. Smoking rates of mothers during pregnancy were 7.6% in the municipalities with the program and 9.5% in those without it. OR (95% CI) of smoking in the municipalities with the program was 0.733 (0.584 to 0.919), p=0.007.

Conclusion Smoking prevention programs for teenagers seem to have a certain effectiveness in reducing the smoking rate of mothers during pregnancy.