Methods We present as indicators in the development of genocide: for example, language change, devaluation of others, polarisation, inequality, discrimination, riots, weapons available, medical experiments, and murdering without legal prosecution.
Results The development of genocide can be described with indicators. By using these indicators areas of differing risk for genocide could be defined in other regions of the world. We will apply these indicators to selected examples of countries.
Conclusion Indicators can be useful for scoring countries at risk. Violence control programmes could operate within this framework of stages for mapping violence.

SP2-4 IMPACT ASSESSMENT OF INSTITUTIONAL CAMPAIGNS COMPARED TO SUMMER MONTHS ON THE SEARCH FOR INFORMATION ABOUT SELF-EXAMINATION OF THE SKIN

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Introduction The analysis of log files of qualified websites has become recently a simple way to estimate the collective demand for health information. We analysed the access to the Brazilian National Cancer Institute (INCA) website to estimate the impact of perception of sun exposure in summer as well as the influence of national campaigns on the search for information about self-examination of the skin (SES).
Methods The INCA's website was selected by its popularity and volume of qualified information. We studied 4800 pages over 4 years (January 2006 to December 2009) by means of a log analyser to estimate the access to pages related to SES during institutional campaigns compared with the summer months in southern hemisphere.
Results The average number of hits in the summer months were 1037; 1609; 2275 and 2529 hits (2006 to 2009, respectively) indicating an audience below the annual average (1131; 2013; 2741; and 2827). On the other hand, there was more access to pages about SES in the months of the national campaigns (1710; 2640; 3722 and 3197 hits) surpassing the annual average.
Conclusions In Brazil, the perception of sun exposure during the summer months seems to be not sufficient to arouse great interest in the SSE. We affirm the opposite in relation to institutional campaigns, which seem to arouse more interest about skin cancer early detection on the internet.

SP2-5 DIABETES IN ASIA: A HYPOTHESIS

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Introduction With rapid economic development, diabetes is reaching epidemic proportions in Asia, even in relatively non-obese populations. Changing lifestyles, obesity and genetics undoubtedly play a key role, however it is increasingly recognised that causes of disease may extend over generations.
Methods The developmental origins of health paradigm has focused on the health consequences of constrained pre-natal or infant growth. Here we consider the complimentary question of constrained pubertal growth. Specifically, we examined the physiological and biological consequences for long-term health of constrained pubertal growth.
Results Generations of constrained environments, common in Asian countries such as China, Indonesia or India, may increase vulnerability to diabetes, via low pubertal sex-steroids and hence low muscle mass. Furthermore, this hypothesis is consistent with the observed negative associations of diabetes with some hormonally related cancers and the sex-specific associations of diabetes with cardiovascular diseases.
Conclusion We offer a hypothesis for conceptualising diabetes in developing populations and the aetiology of diabetes in all populations with corresponding practical and testable implications for diabetes prevention.

SP2-6 MAINTAINING LOCAL PUBLIC HEALTH IN THE GLOBAL CONTEXT: A SUSTAINABLE IMMIGRANT HEALTH SCREENING SYSTEM IN A STATE WITH AN IMMIGRANT MAJORITY

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Introduction The 1981 Ministry of Health law of United Arab Emirates mandates health screening of all immigrant residents above 18 years of age at initial visa issuance and visa renewal every 3 years. Screening is done for five communicable diseases. The Health Authority of Abu Dhabi (HAAD) which is the healthcare regulatory body is responsible for implementation of the visa screening law in the Emirate. Annually, about one million applicants including new and old immigrants undergo screening at seven certified centers in Abu Dhabi. This report discusses the improvement in the health screening process and the 2010 prevalence of HIV infection among the immigrants in Abu Dhabi.
Methodology In 2009, HAAD upgraded the visa health screening system by issuing screening standards for the delivery of efficient and standardised clinical services. Concomitantly an Oracle-based information system was established for rapid and reliable data collection and generation of real-time reports.
Results Following system upgrades, the screening capacity increased from 1500 to 5000 applicants daily and time for issuance of fitness certificate decreased from 48 h to 2 h over 2 years.

There were 935 233 applicants screened in 2010 including 56% new visa applicants and 20% females. The prevalence of HIV infection was 25 and 7 per 100 000 among the new and old immigrants respectively ($p<0.001$).
Conclusion The Abu Dhabi immigrant health screening has improved particularly the applicant turnaround time, data availability and reliability. The process could be adopted by health systems with similar visa screening requirements.

SP2-7 PRESCRIBING OMISSIONS OF CARDIOVASCULAR RISK MANAGEMENT THERAPY IN ELDERLY PATIENTS ADMITTED TO A STROKE UNITY

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Introduction Drug-related problems (DRPs) are common in elderly patients, the majority being preventable. Several criteria have been published to help clinicians identify DRPs due to inappropriate prescribing. However, few studies provide criteria to help clinicians identify underuse of medication considered beneficial. This study aimed to quantify and characterise prescribing omissions of cardiovascular risk management therapy using START (Screening Tool to Alert Doctors to the Right Treatment) criteria.
Methods A descriptive study was conducted in the Stroke Unity of Hospital Center of Cova da Beira. During 3 months the medical files of all elderly patients (age ≥65 years) admitted with acute cardiovascular disease were reviewed and START criteria applied to the information of medication, at admission and clinic discharge.

Results During the study period 56 elderly patients were admitted to the Stroke Unit. At the time of admission 63 prescribing omissions were found in 69.8% of elderly (average 1.19 omissions per patient), of which 74.5% (n=38) were corrected at the time of discharge. Prescribing omissions were also detected in 80.9% of patients receiving five or more medications simultaneously. In 10 patients, 13 omissions found at admission were not corrected during hospitalisation, and in three patients three new omissions were detected.
Conclusion The prevalence of prescribing omissions of cardiovascular risk management therapy in elderly patients admitted to a Stroke Unity is high. START criteria is an evidence-based and easy-to-use screening tool that can assist clinicians in the optimisation of geriatric therapy, particularly in relation to cardiovascular disease prevention.

SP2-8 BIAS REDUCTION AND PRECISION IN DIFFERENT TYPES OF CONTROL SELECTION IN ANALYTICAL CROSS-SECTIONAL STUDIES; A METHODOLOGICAL PAPER

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Introduction Control selection is a crucial step at the study designing phase. Although, the concept of the different types of matching for control selection has been discussed in the context of case-control studies, here we targeted analytical cross-sectional studies to explore the effects of each type of control selection on the amount of bias and precision of the OR.
Methods 41 coronary atherosclerotic patients and 92 disease-free hospital controls were recruited to assess the relationship between opium consumption (OpiumHx) and coronary atherosclerosis (Outcome). Considering the OpiumHx as the main independent factor and age as the confounder, we calculated point estimate and the CI for OR in different scenarios of matching for control selection, namely exact, stratified, frequency and propensity matching. Syntaxes were developed by STATA 10.
Results The crude OR was 3.4 (95% CI 1.5 to 7.9). By exact matching on age, 21 pairs remained for the analysis and the OR was equal to 3.3 (0.8 to 18.8). Stratified matching on age group kept 41 pairs and gave us the OR of 0.9 (0.5 to 1.7). Frequency matching kept 88 subjects for the analysis and led to the OR of 3.0 (1.2 to 7.4). By propensity matching, 27 pairs remained which gave the OR of 3.5 (1.1 to 14.6).
Conclusion Matching techniques influence effect size and precision, seriously. Although the most bias reduction happened in pair matched techniques, a large reservoir of controls would be needed to prohibit immense decrease in precision. These findings should be considered at both protocol development and analysis phases of observational studies with caution.

SP2-9 DIAGNOSTIC CRITERIA OF LIPODYSTROPHY IN HIV-INFECTED PATIENTS

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Introduction The prevalence of lipodystrophy ranges from 2 to 84% and the range of findings stems from differences between the populations studied and lack of standardised diagnostic criteria. The diagnosis of lipodystrophy is based on changes in body fat distribution with or without medical confirmation, objective measures of circumferences and skin folds or quantification of adiposity by dual emission x-ray absorptiometry (DEXA) CT scan or MRI.
Objective Establish diagnostic criteria for lipodystrophy and evaluate the prevalence of lipodystrophy among men and women with HIV/AIDS.
Study design Cross-sectional survey was conducted in HIV-infected patients of both genders, aged 18 years or older who sought to confirm the diagnosis or treatment in a reference service for HIV/AIDS for the period June 2006 to December 2008.
Results 1240 patients with HIV infection were invited to participate. Among the signs that contributed most to the detection of lipoatrophy, include hollow cheeks, reduced fat on the face, buttocks and arms. To lipohypertrophy the biggest contributor was an increase in fat in the abdomen, abdomen bigger than usual and increased waist circumference. Men were more often lipoatrophy ($p=0.049$) and women lipohypertrophy ($p<0.001$).
Conclusion This study identified high rates of self-reported signs of lipodystrophy were significantly associated with that objective measures. The differences between men and women do not represent a formal test validation, but the analysis comparing objective measures confirms the importance of using specific questions about changes in the distribution of fat in their accompaniment.

SP2-10 METHODS FOR BUILDING DIFFERENT TYPES OF AREAS FOR DIFFERENT APPLICATIONS IN PUBLIC HEALTH

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Introduction Spatial distribution of health indicators and health services use are important for the evaluation of population health and managers actions. In urban areas, to build small areas is not trivial, because there are different travelling possibilities for treatment. The aim of this paper is to present methods for building different types of areas for different applications in public health in a big city in Brazil.
Metodology We used the (x, y) coordinates of health services and tuberculosis cases. The indicators of population characteristics were located at census tract centroids. Tuberculosis rates were mapped using the ratio between the spatial smoothing of tuberculosis cases and the spatial smoothing of population. Catchment area of a health service was mapped based on the spatial smoothing of the tuberculosis cases treated in this service. The health service market was built using the ratio between the spatial smoothing of the cases treated in this service and the spatial smoothing of all disease cases. For risk areas, we mapped the spatial smoothing for each population feature. We sum all maps to elaborate a resultant one.
Results Influence areas differed from health service markets. Health service regionalisation was only partially similar to coverage areas defined by the Tuberculosis Control Program. The tuberculosis rates and risk areas showed some correlation.
Conclusion Different area types shows different types of information for the diagnosis of health conditions, population and health service resources profile, indicating the relation between the population, the health services and the territory.