to the overlapping of non-communicable diseases (NCDs) and transmitted diseases (TDs) as the main causes of morbidity and mortality. This study describes the distribution of avoidable mortality from the Brazilian List of Preventability (LBE) among the elderly (60−75 years) in the cities of Belo Horizonte, Porto Alegre and Recife in the years 2003−2007. Data on elderly mortality were taken from the Mortality Information System (SIM). The profile of causes of death in the three cities showed no significant differences. In all of them, LBE preventable causes of deaths were more frequent—average of 2907 deaths (60%). The NCDs accounted for 1248 deaths (83.2%). Ischaemic heart diseases was the largest cause of NCDs. Among the TDs (n=163 deaths), respiratory infections were the main cause of death. Among causes avoidable by immunisation, TB was the most prevalent. Accidents and violence were 2.2 times more frequent among men. In the three cities, traffic accidents were also prominent. Preventable deaths predominated, especially NCDs, despite there also being a significant number of deaths from TDs. The use of the LBE showed the process of epidemiological transition in the three cities. I order to reduce premature mortality among the elderly, it is essential to invest in programs and actions promoting health and prevention of both NCDs and TDs.

P2-349 | **USE OF INSECTICIDE TREATED NETS AMONG PREGNANT WOMEN ATTENDING ANTENATAL CARE AT A PRIMARY HEALTHCARE FACILITY KADUNA STATE, NIGERIA**

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Introduction Malaria is an important public health problem in Nigeria. Pregnant women are among the high risk groups for developing malaria. Insecticide Treated Nets (ITNs) have been shown to be an effective means of preventing malaria. A study was undertaken to assess use of ITNs among pregnant women attending Antenatal care.

Methods A descriptive study was conducted. A sample of 330 pregnant women attending Antenatal clinic at a Primary Healthcare center were interviewed on history of fever, use of ITNs and use of other interventions to repel or kill mosquitoes.

Results The mean age of respondents was 25.25 years (±5.48). More than a third 127 (39%) were in their third trimester of pregnancy. Most 273 (83%) reported having had a fever during the index pregnancy. Only 43 (13%) had any type of mosquito net. Overall 25 (7.6%) had ITNs. Pregnant women with higher levels of education were more likely to have mosquito nets than those with lower levels of education (Secondary education or higher 72% vs Primary education 14%). Most 324 (98%) of the ANC attendees used other interventions to repel or kill mosquitoes, 181 (56%) mainly used insecticide sprays.

Conclusion There is low utilisation of Insecticide Treated Nets by pregnant women attending Antenatal Care. Use of other interventions to kill or repel mosquitoes was higher. Antenatal Care provides an opportunity to create awareness and distribute Insecticide Treated Nets to pregnant women. Indoor Residual Spraying is likely to be acceptable as a means of vector control.

P2-350 | **WILLINGNESS AND SELF-RATED COMPETENCE TO PROVIDE SMOKING CESSATION SERVICES BY FAMILY AND COMMUNITY MEDICINE DOCTORS IN A TERTIARY HOSPITAL IN NIGERIA**

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Background Patients advised to quit smoking by their physicians are more likely to quit than patients not receiving physician advice. However, most smokers do not receive this advice when visiting their physicians. This scoping study was to assess the willingness and self-rated competence of doctors to provide tobacco cessation services as a prelude to the establishment of a hospital based cessation service.

Methodology Self-administered semi-structured questionnaire was used to collect information from doctors working in the family medicine and community medicine departments of a teaching hospital.

Result Forty-one doctors participated in the study. Mean age of participants was 35.5±7.5 years. Majority (61.0%) were males and most (78.1%) had worked ≤5 years in the institution. About half (51.2%) were aware of Nigeria tobacco decree, 14.5% were aware of WHO-FCTC and the 5As of smoking cessation. Only 4.9% had ever used the change model. Barriers to tobacco cessation activities in everyday practice included having no materials to hand out (41.5%), lack of time (29.3%), not knowing what to say or do (14.6%); and where to send patients for counselling (31.7%). Smoking cessation services were offered routinely in the clinics of 17.1% of respondents. Less than 10% believed they had excellent knowledge and skills in pharmacology of nicotine, motivating patients to quit and behavioural smoking cessation techniques. Seventy percent expressed willingness to learn more about these topics with majority (53.7%) preferring the on-site continuing medical education mode.

Conclusion Training and creation of an enabling environment is needed to encourage doctors to practice tobacco cessation in their facilities.

P2-351 | **IRON STATUS AND CARDIOVASCULAR DISEASE RISK IN BLACK SOUTH AFRICAN WOMEN: THE PURE STUDY**

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Objective To examine the associations between measures of iron status and cardiovascular disease (CVD) risk factors in South African women.

Design The study was cross-sectional in design. Demographic information and health history were obtained during individual interviews using validated questionnaires. Anthropometric indices, iron indices, blood pressure, blood glucose and lipid profiles were measured using standard procedures. Iron status was assessed using serum concentrations of ferritin, transferrin receptor and transferrin receptor to ferritin ratio.

Setting North West Province of South Africa.

Subjects 1262 apparently healthy black South African women (>35 years).

Results Associations between iron status parameters and CVD risk factors were generally weak (r<0.3, p<0.01) and were not retained when age, BMI, smoking, alcohol consumption and C

reactive protein were adjusted for in the analysis. Waist circumference (WC) and waist to hip ratio (WHR) were higher in the fourth quartile of serum ferritin than the third, also, in the third quartile compared to second quartile (p<0.05). 31% and 52% of the women had excess abdominal obesity as indicated by WC and WHR respectively. The mean (95% CI) serum transferrin receptor concentration {9.09 µg/l (8.77, 9.44)} was high indicating risk of iron deficiency. The mean (95% CI) concentrations of lipids {TC=4.78 (4.64, 4.93), HDL-C=1.45 (1.39, 1.52), LDL-C=1.65 (1.53, 1.78), TG=1.12 (1.07, 1.18) mmol/l} were within recommended reference ranges.

Conclusions No significant association exists between iron status parameters and established CVD risk factors. But, excessive abdominal adiposity indicated by high WC and WHR contributes significantly to increased serum ferritin concentration in this population.

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Introduction Youths are particularly vulnerable to HIV/AIDS, sexual and reproductive health problems, which are major challenges to their health and development. There is a need to estimate HIV prevalence and understand predictors among them towards implementation of appropriate and evidence-based national interventions.

Methods A 2007 nationally representative household survey was analysed. It involved 4633 youths aged between 15 and 24 years. HIV prevalence and behavioural indicators were assessed. Logistic regression was used to model predictors of HIV infection.

Results Mean age was 19.1±2.8 years; 50.9% male and 49.1% female. Youth HIV prevalence was 2.4% (national prevalence was 3.6%); young women HIV prevalence was 2.9% and male counterpart 1.9%. Sexual debut <15 years was 10.4%; 7.8% exchanged sex for gifts; 28.3% had been away from home for >1 month; 18.4% had more than one sexual partner; 80.7% knew male condom protected against pregnancy; 75.6% knew male condom protected against HIV/AIDS. 81.9% had sexual intercourse in the last 12 months of which 45.8% used condom, and 10.5% were engaged in intergenerational sex with partners ≥10 years. Risks for HIV infection were away from home for >1 month AOR=2.1 95% CI 1.3 to 2.7; being a female AOR 3.4 95% CI 2.8 to 6.7; sex without condom AOR=2.1 95% CI 1.4 to 5.6 while having at least secondary education was protective with AOR: 0.7 95% CI 0.3 to 0.9.

Conclusion Youths accounted for 67% of HIV prevalence in Nigeria with young women disproportionately affected by HIV. Youths need appropriate and targeted behavioural interventions that involve partner reduction, consistent condom use and avoidance of intergenerational sex.

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Introduction Middle Eastern and North African countries have some of the highest obesity prevalence levels in the world (40% among women in Egypt in 2008). The prevalence of obesity in low-and-middle income countries has been rising in the last 2 decades and its socioeconomic distribution appears to be changing to the disadvantage of those with low socioeconomic status (SES) in many low-and-middle income countries.

Methods We first use five nationally representative survey waves (1992–2008) from Egypt to examine (1) prevalence trends; and (2) associations between SES and obesity using multivariate logistic regression and interaction tests. To help assess the policy implications, we are currently adapting the prediction model developed for the Foresight Tackling Obesities study in the UK to predict future obesity trends in Egypt.

Results Our regression analyses indicate that the rapid increase in obesity prevalence among low socioeconomic groups is the main factor driving the rise in overall prevalence. Adjusted coefficients of increase by education group were 7% (no education); 3% (primary education); 2% (secondary education);1% (higher education)-p-value for linear trend <0.001. Those most at risk appear to be those with low education and higher income (p<0.05 for an inhibitive interaction of education with income).

Conclusion Improving education levels appears to be an important policy approach to addressing both the prevalence rise and the socioeconomic inequalities in obesity in Egypt, particularly among lower socioeconomic groups experiencing rapid increases in income. Calculations from the prediction model will help quantify the impact of different educational policies on the obesity burden.

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Background Illicit drug use is widespread in penal institutions worldwide. Despite this, the use of opioid substitution therapy (OST) in prisons is low. This study evaluates the effectiveness of OST in reducing the negative outcomes associated with opioid abuse among prisoners.

Methods Randomised controlled trials comparing OST with psychosocial therapy or no intervention for opioid dependent prisoners were included. Electronic searches were conducted in: MEDLINE, Embase, CINAHL, PsycINFO and the Cochrane Controlled Trials Register. Two reviewers independently identified relevant papers. Study quality was assessed using the Cochrane risk of bias tool. Pooled RRs were calculated using random effects models (with 95% CI) for opioid use (measured by hair or urine analysis), and re-incarceration after release from prison.

Results Five studies with 820 participants met the inclusion criteria. Allocation concealment was adequate in one study and unclear in four. OST reduced opioid use (3 RCTs, RR 0.78 95% CI 0.64 to 0.95) and re-incarceration (3 RCTs, RR 0.41 95% CI 0.26 to 0.63). Two studies reported a statistically significant reduction in criminal activity and heroin use days, but the data were not pooled because of heterogeneity. Single studies reported statistically significant reductions in syringe sharing, mortality after release, cocaine use and retention in treatment.

Conclusion OST is in effective in reducing many negative outcomes associated with drug use among prisoners, giving far reaching benefits for prisoners, their families and society as a whole. OST should be widely available to prisoners with opioid dependence.