application method. We calculated the exposure intensity level based on application method and use of personal protective equipment. ORs and 95% CIs were estimated by unconditional logistic regression analyses and adjusted for several potential confounders.

Results 293 case and 3198 control subjects were interviewed. We did not identify positive associations with activities in farming or forestry, pesticide application or pesticide mixing. No consistent positive associations were seen with exposure intensity level scores either. The only statistically significantly raised association in this study was for exposure to chemical fertilisers in forestry (OR 8.93; 95% CI 1.73 to 42.13), but this observation was based on only six exposed subjects. Results did not change when we restricted analyses to morphologically verified cases and excluded proxy interviews as well as cancer controls. We did not observe effect modification by sex or eye colour.

Conclusion Risk estimates for pesticide exposures and occupational activities in agriculture and forestry were not increased and did not indicate a hormonal mechanism due to these exposures. The possible risk increase associated with exposure to chemical fertilisers should be reinvestigated in future studies.

SP1-8 ANAEMIA IN PREGNANT WOMEN ASSISTED BY PUBLIC HEALTHCARE SERVICES OF THE FIVE BRAZILIAN REGIONS BEFORE AND AFTER THE POLICY OF FORTIFICATION OF FLOURS WITH IRON

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Objective To compare prevalence of anaemia and haemoglobin (Hb) levels in pregnant women in the five Brazilian regions, before and after the fortification of flours with iron.

Methods A repeated cross-sectional panel study was carried out by public healthcare services located in the five Brazilian regions. Retrospective data were collected from medical records. Pregnant women were divided into two groups: before-fortification (delivery before June 2004) and after-fortification (last menstrual period after June 2005). The sample included 12 119 records. Anaemia was defined as Hb<11 g/dl. We used χ^2, Student t test and logistic regression, with significance level of 5%.

Results Anaemia was lower after-fortification of flour ($p<0.05$). The prevalence dropped from 25% to 20% after-fortification ($p<0.001$). Hb level also was significantly higher after-fortification ($p<0.001$). The findings showed different sized reductions between regions. In the Northeast and North, where the prevalence of anaemia were high, a significant drop after-fortification was found: from 37% to 29%, and 32% to 25%, respectively. In the Southeast and South, whose prevalence was low before-fortification, there were smaller decreases: from 18% to 15%, and 7% to 6%, respectively. Logistic regression showed that group, geographic region, marital status, gestational trimester, initial nutritional status and previous pregnancy were associated with anaemia ($p<0.05$).

Conclusions The prevalence of anaemia in pregnant women is still high in the Northeast, North and Midwest of Brazil. However, the decrease in anaemia prevalence and increase in Hb levels suggest a positive effect of fortification of flour to control of iron deficiency. In should be noted that a number of other variables not studied may have contributed to this result.

SP1-9 PREDICTORS OF UNINTENTIONAL POISONING AMONG CHILDREN UNDER-5 YEARS OF AGE IN KARACHI: A MATCHED CASE-CONTROL STUDY

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Introduction Poisoning is the 4th leading cause of unintentional injury in children aged under-5 years. The study objective was to determine the factors associated with unintentional poisoning among children under-5 years of age, reporting to emergency rooms (ERs) of tertiary care hospitals in Karachi, Pakistan.

Methods A matched case-control study was conducted on 120 cases and 360 controls. Children with unintentional poisoning were included in the study as cases. For each case three control children matched for age and gender with complaints and diagnosis other than poisoning were selected from the same hospitals ER within 48 h of case identification. Parents were interviewed using structured questionnaires containing information on socio-demographic factors, child's behaviour, and storage practices. Conditional logistic regression was performed to analyse the data.

Results Accessibility to hazardous chemicals and medicines due to unsafe storage (OR 5.6, 95% CI 1.9 to 16.7), child's behaviour reported as hyperactive (OR 8.2, 95% CI 4.6 to 16.1), storage of kerosene oil and petrol in soft drink bottles (OR 3.8, 95% CI 2.0 to 7.3), low socio-economic status (OR 9.2, 95% CI 2.8 to 30.1), low mothers educational status (OR 4.2, 95% CI 1.8 to 9.6) and history of previous poisoning (OR 8.6, 95% CI 1.7 to 43.5) were all independently related to unintentional poisoning.

Conclusion The factors associated with unintentional poisoning in young children are modifiable Key health messages on the safe storage of chemicals and medicines and the use of child resistant containers may help in decreasing the burden of childhood poisoning.

SP1-10 ALCOHOL CONSUMPTION AND SMOKING OF MONGOLIAN ADULTS

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Introduction Alcohol consumption and smoking have being common health problems globally including Mongolia. The objective of this survey was to examine the epidemiology of alcohol consumption and cigarette smoking in the elder population of Mongolia.

Methods A cross-sectional study was carried covering urban and rural areas in Mongolia and used a standardised questionnaire according to WHO STEPwise approach to surveillance manual.

Results A total of 2280 people completed the study. The prevalence of smoking was 24.0% with significantly more in males (50.5%) as compared to in females (8.3%) ($p=0.0001$). Among smokers, mean age of initiation to smoking was 23.5 (±9.7) years and this was differed by sex whereas males started smoking at the age of 21.1 (±7.8) years and females started smoking at the age of 30.2 (±11.0) years. Mean number of cigarettes smoked per day was 11.1 (±7.8) among current daily smokers. Men smoked 12.3 (±8.1) cigarettes daily and women smoked 8.1 (±6.3) cigarettes daily. About six out of ten people using alcohol in last 12 months (60.3%). Alcohol consumption was different in gender (in men 75.6%, women 51.2%), in age group (in age 40–44 was 67.0%, in age above 60 was 45.1%) and in education level (in primary education 27.7%, in master degree 74.5%). Binge drinking was 19.6% in participants and different by sex (in men 34.2%, in women 10.8%, $p=0.0001$) and location (in rural 24.1%, urban 16.2%).