Background There is growing evidence that anaemia is common in CHF and may contribute to the high morbidity and mortality of this condition. There is considerable disagreement about the prevalence of anaemia in this condition.
Methods In 219 consecutive patients were admitted to our hospital (January–December 2010) with diagnosis of CHF we extracted from the charts the haemoglobin (Hb), serum creatinine, age, sex, NYHA functional class, smoking, diabetes, hypertension, hyperlipidaemia and cardiac aetiology of the CHF.Anaemia was considered when the Hb on admission was <12 g/dl.
Results The patients were NYHA functional class III-IV.118 (53.8%) of the 219 patients had a Hb on admission that was <12 g/dl. The mean Hb for the entire group was 12.0+/−1.8 g/dl. 54(51.9%) of the 104 women were anaemic compared to 64 (55.6 %) of the 115 men. The mean serum creatinine was 1.8+/−1.2 mg/dl. The prevalence of renal insufficiency (serum creatinine >1.5 mg%) was 48.5%. There was a negative correlation between the level of serum creatinine and Hb (p<0.00001.) Of the 118 patients who were anaemic, most of 76 (64.4%) had a serum creatinine >1.6 mg/dl.
Conclusions Anaemia is a common finding in patients hospitalised with CHF .In view of the negative effect of anaemia on cardiac function, it may be important contributor to the mortality and morbidity of CHF in these patients.

OTHER THEMES

P1-383 SEXUAL BEHAVIOUR AND KNOWLEDGE OF PREVENTION OF SEXUALLY TRANSMITTED INFECTIONS AMONG STUDENTS IN CO-EDUCATIONAL AND NON CO-EDUCATIONAL SCHOOLS IN IBADAN, NIGERIA

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Sexual interaction between students may be different in co-educational (CE) and non co-educational (NCE) schools. The objective was to compare sexual behaviour and knowledge of prevention of Sexually Transmitted Infections (STIs) among senior secondary school students in CE and NCE institutions in Ibadan. A comparative cross sectional study was carried out using a multi-stage sampling technique. There were 510 respondents; 250 from CE schools and 260 from NCE. We used semi-structured self administered questionnaires which included a 30-point STI knowledge scale with scores classified as good and poor. χ^2 statistics was significant at p<0.05. The mean age of respondents was 15.9±1.5 years, 47.5% were girls. The main sources of sex education were parents (44%) and teacher (30.8%). There were no significant differences between the two types of schools. Significantly higher proportion of girls in CE schools have had one sexual intercourse with the opposite sex (25.6%-CE, 12.4%-NCE) and had multiple sexual partners (29.0%-CE, 0%-NCE) compared with girls in NCE schools. Girls in NCE schools had significantly better knowledge of causes and prevention of STIs than those in CE schools (28.8%-CE, 45.5%-NCE). There were no significant differences in the sexual behaviour and knowledge of causes and prevention of STIs among boys in the two types of schools. More girls in CE schools have had sexual intercourse compared to NCE schools whereas girls in NCE schools had better knowledge on sexually transmitted infections than those in CE schools. There is a need for strategies to increase reproductive health education in schools, particularly in CE schools.

P1-384 INVERSE SAMPLING TO ESTIMATE DISEASE BURDEN OF LEPROSY IN INDIA: A PILOT STUDY

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Background and Objective Leprosy continues to be an important public health problem. The magnitude of the disease is often expressed by the number of cases registered by the system. Estimation of leprosy by conventional sampling is difficult due to large sample size requirement. A pilot study was conducted using inverse sampling in Bareilly district, Uttar Pradesh, India with an aim to evolve inverse sampling procedure vis-à-vis conventional sampling.
Method Two community development blocks one with low endemic area namely Fatehganj and other high endemic namely Ramnagar in Bareilly district of Uttar Pradesh, India were selected. Inverse sampling was adopted in Fatehganj while conventional cluster sampling was used in Ramnagar. Under inverse sampling, 25 new cases of leprosy were predetermined while a sample of 44 000 subjects (population) was targeted for conventional sampling. Under inverse sampling the total population to be covered was not known in advance.
Findings A total of 63 new cases of leprosy were found in Ramnagar after covering a sample of 44 686 population while a sample of 14 734 population was covered in Fatehganj to detect 25 new cases of leprosy. Both the techniques provide similar estimates. The precision obtained under inverse sampling was though less than that under conventional sampling but found to be more feasible and suitable for estimation of leprosy due to less population covered, time and cost.
Conclusion Study reveals that inverse sampling was found to be advantageous over conventional sampling and could be adopted for the large scale survey at National level.

P1-385 RISK FACTORS ASSOCIATED WITH LAST-MONTH ILLEGAL DRUG POLYCONSUMPTION IN A POPULATION OF DRUG USERS

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Introduction Drug polyconsumption is a negative predictor for treatment success and is related to increased risk-behaviour. However, little is known about risk factors associated to polyconsumption.
Objective To identify risk factors associated to last month illegal drugs polyconsumption (two or more drugs) in a Chilean population of adult drug users.
Methods In 2008 we administered a previously validated 6th version of the Addiction Severity Index to 436 adult drug users, recently admitted to rehabilitation programs, without serious psychiatric disorders and who signed an informed consent (age 32.5+9.3 years. 71.8% male). This semi-structured questionnaire includes information about: medical history, social support, employment, legal problems, drug use and psychiatry disorders. Last 30 days consumption was considered to calculate the number of drugs consumed by individuals entering a rehabilitation program. Multivariate logistic regression was used to identify risk factors.
Results Mean age at drug use initiation was 16+5.4 y. Total number of drugs consumed ranged from 0 to 4 (theorical maximum 9). 30 days prevalence of polyconsumption was 30.5%. Cocaine, marihuana and sedatives were the most common illegal drugs used

(53.7, 52.2 and 19.1% each). Age was negatively associated with polyconsumption, adjusted OR=0.94 (0.90–0.98) and history of physically abused and friend with drug problems were identified as risk factors, 2.12 (1.15–3.9) and 2.38 (1.29–4.42), respectively. Neither education, marital and employment status, sexual abuse history, legal or medical problems, drug user partner or relative, nor depression were associated.

Conclusion Polyconsumption risk factors must be addressed to potentially improve the outcome of rehabilitation programs.

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P1-386 INVESTIGATION OF UNEXPLAINED SPORADIC DEATHS IN AJAH-ILAJE COMMUNITY: LAGOS, JULY 2008

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Introduction Following a community report of unexplained sporadic deaths in immigrants of a particular Nationality X in Ajah- Ilaje Community, an investigation was conducted to determine the extent and cause.

Methods Descriptive study and laboratory analyses were done, Caregivers interviewed and hospital records reviewed. Community search and tracing was conducted. A suspect was defined as any person with Abdominal pains and vomiting resulting in death within 72 h of symptoms onset, with any of the following: impaired vision, breathlessness, spasm, foaming in the mouth, coma. Samples of suspected alcoholic gins were collected and tested for potential contaminants.

Results Between 3rd and 23rd July 2008, 21 deaths were reported to have occured among persons of Nationality X. However, only 16 were identified. Mean age was 48 years (range 27–65). Of these, 14 victims had clinical history documented; the major symptoms were Abdominal pains (11, 79%), Vomiting (6, 43%), Impaired vision (4, 36%). All 16 (100%) identified cases had consumed alcohol prior to their illness and all (100%) died. Laboratory analyses of the illicit (local) gin consumed by the victims showed presence of a number of harmful chemicals including Chloroform, 1,1,1, Trichloroethane, Cyclohexanol, Arsenous acid, Pentanol and 1,2,2 Trichloro- 1,1, Difluoro ethane.

Conclusion The source of outbreak was local illicit gin contaminated with varying concentrations of toxic agents. The outbreak was interrupted by confiscation and destruction of sources, closure of sales outlets and mass enlightenment campaigns to dissuade consumption. Indiscriminate preparation and sale of illicit gins must be disallowed.

P1-387 TIME SERIES ANALYSIS PERFORMED ON NEPHROPATHIA EPIDEMICA IN BELGIUM

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Introduction Nephropathia epidemica is a Rodent-borne disease. Changing climate has been suggested as a triggering factor of recently observed epidemiologic peaks in reported (NE). We aimed at investigating whether there is a connection between the temporal pattern in NE occurrence in Belgium and specific trends in remotely sensed phaenology parameters of broad-leaved forests together with the oak and beech seed categories and the North Atlantic Oscillation (NAO).

Methodology The NE cases are higher in summer time than in winter time and it has a clear seasonal component. In order to the two environmental variables to quantify the dynamics of NE cases we used a dynamic harmonic Regression (DHR) model of the time series of monthly NE cases from 1996 to 2008. The selected variables were then used in a next step as inputs in multiple-inputs single-output (MISO) transfer function model to describe the NE dynamics as a function of climate and vegetation dynamics.

Results Based on the seasonal and cyclic component of NE the NAO index and oak and beach seed production categories were selected as an inputs for the MISO model. The MISO model was built to describe the incidence of NE cases from 2005 to 2008 (R^2 of 0.89).

Conclusion The results of the present study support defining the significant environmental factors explaining the spread and dynamics of the disease. In this way, a first step is made towards a tool that allows monitoring and predicting the NE cases.

P1-388 TRANSMISSION OF PANDEMIC INFLUENZA A (H1N1) ON A PASSENGER AIRCRAFT

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Introduction Screening for influenza in arriving airline passengers and follow-up of people seated near passengers with suspected infection was used in New Zealand during the containment stage of the H1N1 pandemic in 2009. However, there is little evidence for in-flight transmission of influenza in modern commercial aircraft. This investigation aimed to assess the risks of such transmission from a school group of infected passengers who arrived in New Zealand on 25 April 2009.

Methods We interviewed and obtained nasopharyngeal swabs and/or serological specimens from the school group. Passengers in the same section of the aircraft were interviewed and nasopharyngeal swabs collected from those who were symptomatic.

Results All 24 members of the school group were interviewed and had nasopharyngeal swabs and/or serological specimens collected. We obtained interview information from 97 out of 102 other passengers in the rear section of the aircraft. Nine laboratory-confirmed symptomatic cases of H1N1 infection occurred in the school group. Two other passengers seated within two rows of the infected passengers developed confirmed infection, 12 and 48 h following the flight, implying an infection risk of 3.5% for the 57 susceptible passengers in those rows. Follow-up by public health workers located 93.1% of passengers, but only 52.2% within 72 h of arrival.

Conclusions This investigation suggests a small but definite risk of pandemic influenza transmission during modern commercial air travel. This risk was concentrated close to infected symptomatic passengers. It is slow and difficult to follow-up and screen exposed passengers once they have left the airport.