Prevalence of risk factors of non-communicable diseases in rural population of India

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Introduction: Major non-communicable diseases (NCDs) include cardiovascular diseases, cancers and type 2 diabetes mellitus. The important risk factors identified for NCDs are high blood pressure, high cholesterol, being overweight or obese, and tobacco use. Primary prevention of risk factors, along with their early identification and management can help delay the progression of NCDs. The present study was undertaken with the objective of profiling risk factors for NCDs in the rural population of Uttarakhand, India.

Methods: 707 participants aged over 15 years were included. Behavioural risk factor profiles were obtained by interview, followed by anthropometric measurements and biochemical assessment of all the individuals.

Results: 14.8% of the study population was found to be overweight or obese (BMI ≥ 25 kg/m²) and this was twice as common in females. Using the weight hip ratio, 44.8% population was in the moderate to high risk category (male > 0.96, female > 0.88). Overall, 6.7% of the subjects had diabetes (random blood glucose > 200 mg/dl). Blood cholesterol levels were > 200 mg/dl (the at risk category) in 7.4% of subjects.

Conclusions: Prevalence of NCD risk factors is lower than expected in the area. However, the “at risk” population is large and requires appropriate and timely action to prevent an epidemic of NCDs.

Comparison of traffic crashes information presented by the I.R. of Iran’s significant information sources with in-use models of the USA and different Asian countries

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Objective: Traffic crashes information presented by the I.R. of Iran’s significant information sources was compared with in-use models of the USA and different Asian countries.

Methods: Information on traffic crashes epidemiology was investigated and collected directly in the organisations by trained experts of the study using questionnaires verified in validity and reliability. Afterwards, information collecting and traffic injury surveillance systems of some countries were explored and after being compared with current information recording systems of the I.R. of Iran qualitatively, differences and probable weaknesses were clarified.

Results: Traffic Police collects five major parts of the mentioned model in the 113 and 114 Com from format. Emergency Medicine Management Center is responsible for providing some parts of the injury surveillance system’s information—which are some parts of the mentioned model—in the 115 EMS mission form format. In comparison with the American traffic records model, records of the I.R. of Iran’s traffic police are similar to the model in the crash and vehicle information components completely. They are also similar in all details of the roadway and driver information components except for the traffic volume and conviction history. In comparison with some Asian countries, in the core minimum data on any case of injury class, the diagnosis of injury-related disease in not based on ICD and AIS in the I.R. of Iran.

Conclusions: Traffic injury information gathering system needs utilising ICDs and AISs and—like other countries in the region—a unit format and language on traffic injuries records.

Preparedness for malaria prevention in relief camps for flood affected: A cross sectional survey from Pakistan

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Introduction: The monsoon floods in Pakistan affected about 3.2 million people, 1.4 million children and 133 000 pregnant women. 1.3 million people were internally displaced. Stagnant water forms a breeding ground for mosquitoes, poses a serious threat. A survey in the relief camps of (IDP’s) to evaluate the malaria prevention preparedness was conducted.

Methods: A cross sectional survey was conducted in October 2010. Interviews were conducted with 500 individuals, recruited through multi-stage cluster sampling. The study comprised of two phases. In the 1st phase the camps were visited and a complete checklist containing the information regarding the availability of bed nets, insecticidal sprays, mosquito repellents, coils were collected. Camps and surrounding were observed for water and sanitary conditions. In the 2nd phase of the study, the administrations of camps were interviewed regarding the measures taken for malaria prevention.

Results: 500 families were interviewed. Average no of children ≤ 5 years of age per family was 4. None of the family reported to receive any preventive intervention. Sanitary conditions were poor with open drainage system, surrounded by stagnant water.
Accessibility to clean water was difficult. 96% individuals reported not practicing any preventive measure for malaria. Inadequate Chloroquine was available in the medical camps, armthetmer was not available. The doctors reported, visiting of 8–10 patients daily with malaria symptoms.

**Conclusion** Malaria is a major epidemic and public health concern particularly during flood catastrophe. Transparent policy making is required to design strategies for the preparedness of malaria in Pakistan.

**Introduction** Iron deficiency anaemia is one of the most common blood disorders across the world. According to the WHO, more than half of pregnant women and one third of non-pregnant women of childbearing age suffer from anaemia. The present cross-sectional study aimed to determine prevalence of maternal iron deficiency anaemia during labour and its impact on birth outcomes.

**Methods** A sample of 600 mothers with live births who referred to the Besat hospital in Sanandaj city western Iran was randomly recruited. Blood samples were taken and measured for Maternal CBC and neonatal CBC as well as Feretin laboratory tests.

**Results** Prevalence of iron deficiency anaemia among mothers and their neonates was 22.7% and 5.8% respectively with a significant correlation (p=0.001). The mean haemoglobin levels were 11.95 and 11.8 in mothers who received iron supplements during pregnancy and those who did not with no significant association. Moreover, no significant relationship was observed between maternal iron deficiency anaemia and birth outcomes of LBW, prematurity, preterm labour and Apgar score.

**Discussion** Maternal iron deficiency anaemia was not significantly associated with adverse birth outcomes of LBW, prematurity and low Apgar score in the present study. Laboratory based interventional programs are recommended to improve prenatal care for pregnant women in developing countries’ surveillance system.

**Materials and Methods** Overall, 500 civilian mine victims in Kurdistan Province western Iran during 1991–2005 through a cluster randomised sampling method were recruited. The documentary data for those who lost their lives was gathered from the archives of local police, Red Crescent and War-disabled Organisation. Other survived mine-injured victims were interviewed for data collection using a validated checklist. SPSS was used for all analyses.

**Results** Overall, 17.7% of victims (n=53) have been killed immediately after explosion and 82.3% (n=247) were injured. Of those survived, 40% (n=99) had an amputation surgery of lower limb in particular. Majority of victims were either farmers, shepherd men, or children. Among risk factors investigated, victims’ job and age were significantly correlated with mine accidents in Kurdistan province after adjusting for other factors including gender, education level and socioeconomic status (Adjusted OR 2.1, 95% CI 1.1 to 3.2, p<0.01 and AOR 1.7, 95% CI 1.1 to 2.5, p=0.04 respectively).

**Conclusion** Young civilians living in border areas between Iran and Iraq with certain jobs are still affected by un-neutralised war mines despite the great efforts made by the government. Struggling efforts are required to avoid and minimise the adverse effects of mine expulsions in border areas in west of country and in Kurdistan in particular.