

Methods A total of 96 households treating water at home, by boiling (n=15), filtration (n=6) or sodium hypochlorite solution (Safewat® n=75) in urban slums of Haridwar and Dehradun districts of Uttarakhand were studied. Respondents were administered a pre tested semi-structured interview schedule for identification, measurement and valuation of all the resources involved in these three methods. The mean and 95% CIs of cost of treating ten litres of drinking water were estimated.

Results The cost of using Safewat, water filter and boiling was estimated to be INR 1.44[1] (1.29–1.50) INR 1.79 (1.31–2.27) INR 5.82 (5.24–6.40) per ten litres of water treated respectively. The cost of boiling was high because of the cost of fuel (69%) despite a subsidy by the government on the gas. The use of filter required an initial capital investment for purchase of filter (Approximately INR 500). Safewat solution accounted for 13% of the total cost of treatment by chlorination.

Conclusion Assuming similar effectiveness rates, Safewat use appears a more affordable alternative, with little initial investment. This makes a case for promotion, by the physicians, of water chlorination in place of the more costly option of boiling, which has been advocated for long.

SP5-29 CARDIOVASCULAR RISK FACTORS AMONG SANTAL POPULATION IN BANGLADESH

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Introduction In Bangladesh tribal race constitutes <1% and among them Santals is the oldest and largest ethnic group. Data on risk factors of CVDs in Bangladesh, specially from tribal, are virtually non-existent. The present study was undertaken to explore the anthropometric and clinical risk factors among the Santal in Bangladesh.

Methods A total of 316 Santal participants (135 male and 181 female, aged ≥20 years) were screened through camps from the northwestern part of Bangladesh. Sociodemographic, anthropometric and clinical data were collected and OGTT preformed following WHO guidelines.

Results The age (M±SD) of the subjects was 39 (±11) years, BMI 18.7±2.8; WHR 0.85±0.17. Using BMI for Asian 61.3% found underweight of whom 35%, 12% and 14% were in chronic energy deficiency stage I, II and III respectively; for WHR females were in risk (70%) which not corresponding with male (within range 94%). Among males & females alcohol habits (≥3 serves/day) had 93% and 64%; prevalence of hypertension were 15.6% and 7.2%; dyslipidemia 49% and 29% respectively. Males had high (77%) smoking habits. The prevalence of diabetes and prediabetes among the participants were 4.4% and 11.1%. Hypertension showed significant association with age, chol, LDL and dyslipidemia with BMI, 2HGB and SBP on logistic regression analysis (p<0.05).

Conclusion A substantial number of Santals are still suffering from underweight. All kind of RR are less among Santal comparing with the existing increased pattern of CVDs risk in Bangladesh, focussed attention need to reduce smoking and alcohol consumption.

SP5-30 EVALUATING THE IMPLEMENTATION OF TRACHOMOA TREATMENT GUIDELINES IN AUSTRALIA

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Introduction Trachoma control guidelines for the WHO recommend the SAFE strategy which includes surgery for trichiasis, antibiotic treatment, facial cleanliness and environmental improvement.

Australia is the only developed country where trachoma persists. In contrast to other countries, it has largely been assumed that lack of access to antibiotics and health services is not a major contributor to the persistence of trachoma in Australia. We assessed the relationship between reported treatment with azithromycin, levels of treatment required on WHO guidelines and the supply of azithromycin.

Methods Data on the supply of azithromycin to health services (2007/2008) was obtained from Medicare Australia. The reported treatment with azithromycin reported by individuals and trachoma prevalence was estimated based on data from the National Trachoma Surveillance and Reporting Unit (NTSRU) in 2008.

Results Reported treatment by Azithromycin was below levels suggested WHO guidelines. This disparity occurred despite the presence of sufficient available doses at health services.

Conclusion All aspects of the SAFE strategy are important in the eradication of trachoma. However, improving the supply and distribution of azithromycin is relatively easy to implement, fund and monitor. This study highlights the importance of continued focus on the delivery of azithromycin in the treatment of trachoma.

SP5-31 FOOD AND NUTRITIONAL INSECURITY AMONG COLLECTORS OF RECYCLED MATERIAL IN SOUTHERN BRAZIL, 2010

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The objective of this study was to estimate the prevalence of Food and Nutritional Insecurity (FNI) and its association with socio-demographic factors in a population under social vulnerability of a metropolitan region in the Southern Brazil. The outcome (FNI) was determined through the Brazilian Food Insecurity Scale and the independent variables analysed were gender, skin colour, age, marital status and scholarship. Categorical variables are presented in percentages and χ^2 test (Yates' correction for 2×2 tables) analysed the existence of associations. The significance (p) was set at 5%. The sample was formed by 123 collectors of recycled material members of six cooperatives. The FNI in this population was high (61%), and according to the independent variables the prevalences were: adults 92%, non-white 70.7%, women 69.3%, non-married 54.7% and illiterate 52%. The statistical analysis only showed association with gender, women presented more prevalence of FNI than men, 69.3% and 30.7% respectively, (p=0.002). The results showed high prevalence of FNI in the population investigated and the women have more probability to present food intake in insufficient quality and quantity. This way actions that aim the improvement of adequate food intake access without damaging the access to other essential necessities like food intake practices promotes health that respect the cultural diversity and that is, environmentally, culturally, economically and socially sustainable must be intensified once Brazil has public politics in this area but does not achieve the investigated population in the correct way.

SP5-32 RISK PROFILE FOR TRANSMISSION OF MYCOBACTERIUM ULCERANS IN AKUAPEM SOUTH AND SUHUM KRABOA-COALTAR, GHANA

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Introduction Buruli ulcer (BU) disease is a chronic debilitating skin disease caused by *Mycobacterium Ulcerans*. The ulcer can be so

extensive that it affects daily activities of the person affected, ulcers can heal and lead to disfiguring of the part of the body involved. Ghana is one of the countries in the West-Africa that buruli ulcer affects. Among the districts, our study area is affected. Unfortunately the exact way of getting the disease is not known. Our study set out to determine risk profile for transmission of *M Ulcerans*.

Methods We conducted a case-control study with Spatial mapping, a case was defined as any person aged 2 years or more who resides in the Suhum-Krabo-Coaltar and Akuapem South districts diagnosed of Buruli ulcer meeting the WHO clinical case definition for *M ulcerans* disease and a control is without the disease. We carried out active case search throughout all the communities in the study area (yet to finish) and took geographical positioning system (GPS) co-ordinates of the cases and control as well as significant features of the environment. Culture samples of the cases will be tested to show the various haplotypes.

Results So far 50 cases and controls have been identified. GPS maps generated shows areas where buruli ulcer is most prevalent and its relation to the Densu River.

Conclusion Our preliminary findings show that there is clustering of cases of buruli ulcer. Haplotypes of the various cases are yet to be done to throw more light on the mode of transmission.

SP5-33 SYSTEMATIC REVIEW OF THE ADVERSE EFFECTS OF CUTANEOUS LEISHMANIASIS TREATMENT IN THE NEW WORLD

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Introduction Pentavalent antimonials are first-line drugs for the treatment of the cutaneous form of American tegumentary leishmaniasis. Second-line drugs include amphotericin B and pentamidine. Although these drugs have been used for decades, there is still no systematic review about their safety. The objective of this review was to identify the adverse effects associated with these drugs and to estimate the frequency of these effects.

Methods Intervention studies, case series and case reports containing information regarding clinical, laboratory or electrocardiographic adverse effects of drugs used for the treatment of cutaneous leishmaniasis were systematically retrieved from 10 databases searched between 13 August 2008 and 31 March 2009.

Results The 65 studies included in this review had treated 4359 patients from 12 countries infected with 8 different *Leishmania* species. Despite the small number of drugs used in these studies, a wide variability in the therapeutic regimens was observed. As a consequence, the adverse effects of these drugs needed to be classified jointly according to system, irrespective of daily dose, duration of treatment and route of administration. The frequencies of adverse effects were calculated based on the data of 1866 patients. The most frequently reported clinical adverse effects of pentavalent antimonials and pentamidine were musculoskeletal pain, gastrointestinal disturbances. Electrocardiographic QTc interval prolongation and a mild increase in liver and pancreatic enzymes were additional adverse effects of pentavalent antimonials.

Conclusion Although closer surveillance is needed for the treatment of cutaneous leishmaniasis, anti-leishmanial drugs are safe and the side effects severe enough to stop treatment are uncommon.

SP5-34 DETECTION OF ANTENATAL DEPRESSION AND MALE GENDER PREFERENCE IN PREGNANT WOMEN IN A TEACHING HOSPITAL-A DEVELOPING NATION SCENARIO

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Background Maternal depression during pregnancy has been studied less than depression in postpartum period. Prevalence rate has been found to be between 5% and 26% for antenatal depression based on very few studies done. Various psycho-social and endocrine factors have been connected to antenatal depression. Antenatal depression has also been considered to increase the risk for postnatal depression. In India, female feticide and male preference has resulted in decline of child sex ratio (933/1000 males).

Aim To identify antenatal depression and male gender preference among pregnant women.

Methods This study was done from July to September 2010. A total of 221 subjects were studied covering the sociodemographic, cultural and other risk factors including gender preference. Edinburgh postnatal depression scale was used for detection of depression.

Results 74% of the women came from rural background. Most of them were illiterate, Hindu (83%), housewives (86%) who lived in joint families (62%) and had family support. Average married life was about 2 years and relationship of 75% of the women was reportedly good with their husbands. 81% of the women did not have a boy. 46% had a preference for a boy. 28% of the women were depressed.

Conclusion 28% of women were depressed and 40% of them had male gender preference.

SP5-35 STIGMA AMONG THE LEPROSY PATIENTS OF URBAN LEPROSY CENTRES IN MYSORE: A FIELD STUDY

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Aim To analyse stigma prevalence, KAP and mental state of the leprosy patients of urban population of Mysore.

Setting and Design This study is a cross sectional study done among all the leprosy patients of urban leprosy centres of Mysore.

Methods and Material All the patients who were clinically detected at U.L.C., K.R.Hospital and U.L.C., Nazarbad in Mysore were interviewed. Modified Kuppusswamy Scale was used to analyse the socio-economic status of the patients. Field work in the form of home visits were done to assess the socio economic status, living conditions and mental status of all the patients registered.

Results 52% belonged to lower socio-economic status and stigma association with disease was seen to a higher extent. Deformities were major reason for Stigma association with the disease, in majority of cases. Striking ignorance about the disease could be noted with 42% unaware of name of the disease, 30% believing the cause to be curse/wrath/sin & a vast majority (80%) ignorant of the mode of spread. A majority of the patients (54%) showed signs of depressive mental states.

Conclusions Although much has been done by intensive therapy to decrease prevalence of leprosy, stigma still continues to persist and there's a danger of it being over sighted. Need for intensive and uninterrupted (Information, Education, Communication—IEC) activities at all levels with active government and NGO participation. Detection of disease at earliest stage & MDT, thereby reducing deformities should be aggressively done.