Subjects and Methods In this study, 409 public assistance recipients with illness/disabilities and 787 controls were recruited. One or two controls were matched with each recipient on age (10-year category) and residence area (city, town or village). A self-administered and anonymous questionnaire was distributed by case workers and local welfare commissioners to public assistance recipients and control subjects, respectively, during the period from July to November 2007. The information on birth weight, parent-child relationship in childhood, relationship with friends, academic backgrounds for both study subjects and their parents, marital history, lifestyles including smoking and alcohol drinking habits, health action, employment history, possession of driver's license, and relationship with their children.

Results and Discussion In addition to the reported common characteristics, higher frequencies of poor relationship with their parents, smokers, no driver's license, and poor relationship with their children were observed in the public assistance recipients than control subjects. Interactions between each factor and more details will be discussed.

SP5-25 **ASSESSMENT OF BEHAVIOURAL ANTECEDENTS TO TESTICULAR SELF-EXAMINATION AND TORSION AMONG MALE STUDENTS OF BABCOCK UNIVERSITY ILISAN-REMO, OGUN STATE, NIGERIA**

O Solademi,* F Oshiname. *University of Ibadan, Ibadan/Oyo State, Nigeria*

Testicular Torsion (TT) poses a serious health challenge to young men and Testicular Self-Examination (TSE) is recommended for its early detection and management. However studies related to the perception and adoption of TSE among students are not common in Nigeria. This study was designed to assess the knowledge, perceptions and practice of TSE, using a three-stage random sampling technique in selecting 500 male undergradutes for the quantitative survey. Respondents' mean age was 21 ± 3.2 years. Only 28.2% had heard about TT; while 39.6%, had heard about TSE. The sources of information about TSE included health workers (16.4%), books (12.0%), magazines (10.6%), and friends (9.4%). Respondents' mean knowledge score was 8.5 ± 4.8. 58% perceived every male to be vulnerable to testicular pain and/or swelling. Majority (62.0%) perceived testicular pain to be a symptom of testicular disorder, while 67.6% believed that swelling in the testes requires medical care. Few (18.2%) knew that testicular pain and/or swelling could lead to loss of testes. 67% considered TSE to be a useful practice. Only 0.4% had ever had TT; 33.0% had ever experienced testicular pain and/or swelling and only 8.4% had ever visited a hospital immediately. Only 48.0% had ever practised TSE. The mean knowledge score of respondents who had ever practised TSE (10.6 ± 5.1) was significantly higher than the score of those who had never done so (6.7 ± 3.7) ($p<0.05$). Participants' knowledge of TT and TSE was also low. Integration of TSE into the general studies curriculum of the university.

SP5-26 **DETECTION OF GOAT MILK ADULTERATIONS IN BRAZIL: A PUBLIC HEALTH QUESTION**

[1]I M Paiva, [1]M A M Furtado, [2]K M Paiva.* [1]*Federal University of Juiz de Fora, Juiz de Fora, Minas Gerais, Brazil;* [2]*University of São Paulo, São Paulo, Brazil*

Introduction Goat milk and their dairy products are frequently adulterated with cow milk because of its smaller production in the world and its higher price compared to cow milk. However, the main benefit claimed about goat milk is that it is less allergenic than cow milk and is a suitable substitute, especially among children. Besides, cow milk proteins, even in low concentrations, are able to trigger allergic reactions.

Methods It was collected reliable samples of goat and cow milk. Afterwards, adulterations were performed adding different concentrations of cow milk (3%, 5%, 8%, 10%, 12%, 15% and 50%) in goat milk. Polyacrylamide gel electrophoresis (UREA-PAGE) and densitometry (ImageQuant TL) were used because this technique is simple and inexpensive to analyse proteins. Samples were applied in duplicate, obtaining two densitograms for each concentration. It was used bovine α_{s1}-casein to detect cow milk, because this protein fraction has a larger electrophoretic migration than caprine α_{s1}-casein.

Results Area peak of bovine α_{s1}-casein were directly proportional to the increase of concentration of cow milk and a linear regression was performed with the average of the duplicates: $y=56.18x+1239$. The linearity of the method could be observed because of high correlation ($R^2=0.9989$).

Conclusion There is no official method to assure the absence of cow milk in goat milk and their dairy products in Brazilian legislation. Then this method can be easily introduced as a tool to detect this fraud, which may represent a dangerous for health population.

SP5-27 **PERCEPTION OF PAKISTANI WOMEN PILLION RIDERS ABOUT HELMET USE: A QUALITATIVE STUDY**

U Khan,* N Zia, S Awan, A Khan. *Aga Khan University, Karachi, Pakistan*

Introduction Despite the importance of helmet in prevention of head injuries in motorcyclists, there is lack of use of helmet both by riders and pillion passengers. It is a common practice in Pakistan that women pillion passengers do not wear helmet. The objective of the study is to assess the knowledge of women pillion riders regarding the motorcycle safety especially use of helmets.

Methods Data were collected from five focus group discussions held with women pillion riders working at the Aga Khan University. The study participants were recruited voluntarily. Written informed consent was taken from each participant before beginning of each discussion.

Results Some major themes emerged from the data analyses, which included (1) motorcycle is a risky transport particularly due to clothing of women that gets trapped in wheels and causes injuries (2) All participants never wore a helmet and never thought about it before, on the contrast, the most important benefit of helmet use expressed was "safety" (3) Main barriers to helmet use, identified were, included: lack of appropriate information on helmet use; unaware of helmet laws; gazes or stares of people; the current sitting style of women in bikes with both the legs on one side (4) Strategies to implement helmet use included; awareness campaigns in media; women should make example and start using helmet as a first step; strict law enforcement in the form of fine/challans.

Conclusion The findings of this study provide insight factors associated with non-use of bicycle helmets.

SP5-28 **COST OF DOMICILIARY TREATMENT OF DRINKING WATER IN SELECTED SLUMS IN NORTH INDIA**

Ritvik,* S Kapoor, C Pandav, A Krishnan. *All India Institute of Medical Sciences, New Delhi, India*

Introduction Treatment of drinking water at home is commonly advocated for prevention of diarrhoea by health personnel. The methods of disinfection include chlorination, boiling or use of filters. Among others, the cost of water treatment is a known barrier to its practice.

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**

[1]K Fatema,* [1]N Islam, [1]L Ali. [1]Bangladesh Institute of Health Sciences, Dhaka, Bangladesh; [2]Dinajpur Medical College, Dinajpur, Bangladesh

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 dyslipidemea with BMI, 2HBG 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**

M Kelaher,* A Ferdinand, H Taylor. University of Melbourne, Melbourne, Australia

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**

[1]F Auler,* [1]A Nakashima, [1]C Rosaneli, [2]A de Moraes, [1]L Ricardi, [1]T Souza. [1]Pontifical Catholic University of Paraná, Maringá, Paraná, Brazil; [2]University of São Paulo, São Paulo, São Paulo, Brazil

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 scholarity. 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 promoters 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**

[1]E Kenu,* [1]R Adanu, [2]O Razum, [1]F Binka. [1]University of Ghana, Accra, Ghana; [2]University of Bielefield, Bielefield, Germany

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