P-001 PRACTICES OF SMOKING (CIGARETTE AND ARGILEH) AMONG ADOLESCENT SCHOOL STUDENTS IN BEIRUT, LEBANON AND COMPARISON TO OTHER CITIES

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Purpose. Argileh is a form of smoking other than cigarettes that is currently spreading among people of all ages. The objective of the present study was to assess tobacco smoking practices (argileh and /or cigarette) among public and private adolescent school students in Beirut, Lebanon.

Methods. A sample of 2,443 students selected from 10 private and 3 public schools with intermediate/ secondary classes filled out a self administered anonymous questionnaire that inquired about socio-demographic characteristics, and behavior about tobacco smoking. Binary analysis was performed as well as 3 regression models for the relationship between exclusive cigarettes smoking, exclusive argileh smoking and both cigarettes and argileh as the dependant variables and gender, type of school, and class as the independent variables.

Results. The current prevalence of cigarettes smoking was 11.4%, and that of argileh smoking was 29.6%. Gender was significantly associated with cigarettes (OR= 3.2, CI= 1.8-5.6) but not argileh smoking. Public school students were respectively 3.2 (CI = 1.8-5.6), and 1.7 (CI = 1.4-2.1) times more likely to be exclusive cigarettes smokers, and exclusive argileh smokers. Class was not significantly associated with exclusive cigarettes smoking, however students attending secondary classes were 1.3 (CI = 1.1-1.6) times more likely to be exclusive argileh smokers.

Conclusions. The findings of the present study call for school-based prevention programs and other types of interventions such as tax increases, and age-restrictions on tobacco sales. More aggressive interventions to disseminate education and awareness among parents and students altogether are warranted.

P-002 A STUDY OF INJURIES AMONG MIGRATED CONSTRUCTION WORKERS AT DIFFERENT CONSTRUCTION SITES SITUATED IN VADODARA URBAN AREA, INDIA.

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Introduction: Although the development of technology is rapid in most sectors in working life worldwide, construction work is still labour-intensive. In the developing world, most construction workers perform high-risk work in return for low income. This is the sector where migrant labourers are employed in great numbers. Migrant labourers mainly do building and road construction. In the past few decades, relatively high and stable economic growth in India has led to a rapid increase in construction and influx of unskilled workers to major cities. There are few industries as hazardous as construction work. Work at elevation, work involving heavy overhead loads, operation of heavy machinery and power tools, confined space work and temperature extremes combine to increase the risk of injuries. The present study was conducted to understand the health problems and injuries related to the construction work in the migrant labourers.

Methodology: A cross-sectional study conducted in urban area of Vadodara during January-March 2006. Twenty construction sites were selected by simple random sampling from four administrative zone (North, South, East and West) of Vadodara Municipal Corporation. From each zone, five construction sites were selected and from each site 15 labourers, who were migrated to Vadodara city for construction work were selected for interview. After having the informed consent, 260 workers had given interview. A pretested and structured oral questionnaire was used to elicit the required information regarding socio-demographic profile of workers, health hazards and injuries to worker in last one year.

Results: Majority of workers were coming from schedule cast and schedule tribe community. Approximately one-fourth of the workers told that they had an injury in last one year. Majority of the worker (12%) had particle in the eye as the cause of injury. Fall from the height was almost three times higher in male workers than female workers. Highest number of injuries occurred in the group of 1-4 years (27.21%). 60.42% injured workers were illiterate. Scaffolding workers were reported maximum number of injuries. Majority of the migrant workers didn't know where to go if accident occurs.

Conclusion: Eye injuries and fall from the height were highest among the workers. Injuries were high because of lake of safety measures at the working site. Majority of workers didn't know the nearest health center. There is a need for safety training of workers.

P-003 EXPLORING THE NEXUS BETWEEN MIGRATION AND HUMAN HEALTH IN THIRD WORLD INNER CITIES: A CASE STUDY FROM ILORIN, NIGERIA

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The inner cities, particularly in the third world, are described with a characteristic decay and deterioration. The descriptions also portray classic lack of advantages, access and disproportionate deprivation of people and the environment. Within this circumstance, it is not clear what factors are responsible for the concentration of these characteristics in the core native areas of third world cities. In this paper, two positions are advanced, that the inner city is a 'migration field' receiving a greater proportion of both short- and long- term migrants per unit of time. This is to the extent that the number of new entrants into the city at any given time decreases as distance increases from the city centre. Secondly, as a result of the above, the attendant overcrowding, congestion, large family and household sizes, unemployment and poverty, etc are legitimate consequences. This position also presupposes negative consequences for human health. To examine this, four hundred and twenty households were sampled from the twenty'one traditional wards of Ilorin metropolis, Nigeria. This is to obtain information on the general household conditions as well as the 'migration history' of members of the household. A multiple regression analysis was used to obtain the relationship between 'numbers of joiners' (apart from birth) into households and selected household- condition variables. Part of the findings includes that factors like household and family sizes, income and household consumption expenditure were found possess positive and significant correlation with number of migrants into households while history of migration of household members had positive but weak explanation. Implications of these findings were drawn for household and public health, particularly in the third world city.

P-004 REFUGEES MIGRATION IMPACT ON URBAN ORAL HEALTH IN BELGRADE/SERBIA

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Introduction:Belgrade-Capital of Serbia is city with overall 1 600 000 inhabitants distributed in 16 municipalities: 6 rural, 5 rural-urban, 5 urban and also with 200 000 refugees (mostly located in rural municipalities),16,3% of them are schoolchildren, who use health service mostly in urban-central municipalities public health centers and private health sector.Health status of refugees is in worse condition than among the other citizens in Belgrade.Specially Oral health status of refugees in Belgrade is neglected.

Aim: Purpose of this study is to show oral health status of Belgrade schoolchildren -refugees and diference between other schoolchildren in our capital.

Method and material:This social medicine evaluation study is based on routine statistical. Reports of oral health status of schoolchildren-refugees in Belgrade in period of five years.(2000-2005Year).Indicators are defined by WHO: average Decayed Missed Filled Tooth at 12 years old schoolchildren and CPTIN at 15 years old children.

Results: In five years period in Belgrade according refugees status diversity in capital Belgrade oral health status was-from DMFT=3,13 in 2000 year to DMFT=3,43 in 2005 year. That results are in correlation with big amount of new migration from Kosovo and rural communities and their habits, attitudes, behaviour and knowledge of importance of oral health to integral health. Community Periodontal Index of Treatment Needs is also in negative trend from 5,53 in 2000 year to 6,62 in 2005.year at 15 years old schoolchildren. Oral health status among other schoolchildren in Belgrade in viewed period was average DMFT=2,68 in 2000 year to 2,28 in 2005 year.CPTIN= 4,42/3 sextants in 2000year to CPTIN=4,82 in 2005year.

Conclusion: There is significant difference in oral health status among schoolochildren in Belgrade correlated with their refugees status.

Measures suggestion: Strengthening community action among migrated population to improve their oral health status wit all measures andactivities of National Preventive Dental Health Program.

P-005 THE IMPACT OF INTERNAL MIGRATION ON POPULATION HEALTH IN SCOTLAND

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Introduction: Changes in population health and progress towards targeted reductions in inequalities are assessed on the basis of the comparison of area populations over time. However, population migration introduces problems into the measurement of population health. Migration patterns are not random; populations have been decreasing in deprived (and high mortality) areas and increasing in affluent (and low mortality) areas. Our aim is to examine the relationship between migration patterns, deprivation and population health in Scotland.

Methods: Census data are used to assess population change at the output area level in the year preceding the 2001 Scottish Census. Areas are classified as having experienced a net population increase from elsewhere in the UK (5% + increase), a net decrease (5% + decrease) or as having remained stable (< 5% total change) with high or low turnover. High turnover is defined as turnover of at least 20%. Net UK population change is also assessed at the 10% level. The Scottish Index of Multiple Deprivation 2004 is used to measure area level deprivation. Our main outcome measure is age-standardised all cause mortality (2000-2002).

Results: A total of 171,319 deaths and 42,604 output areas (average population 119) were analysed. The population in 18% of output areas increased by at least 5% whilst that in 19% decreased by at least 5%. In total, 46% of output areas remained stable with low turnover whilst 17% remained stable but had high turnover. Directly standardised death rates were calculated separately for males and females. In all four area types there was a steep mortality gradient across deprivation quintiles. Excess mortality was greatest in decreasing populations: 88% for males and 55% for females. Mortality rates were highest in all quintiles for increasing populations and lowest in all quintiles for stable populations with low turnover. In the most deprived quintile mortality rates were 1,369 per 100,000 for males in increasing populations compared with 1,071 per 100,000 for males in stable populations with low turnover; corresponding figures for females are 1,161 and 937. These differences were exaggerated when population change at the 10% level was considered.

Conclusion: Areas with net population inflow have higher mortality rates than areas of comparable deprivation. Of the remaining area types, those areas that remain stable in size whilst experiencing little turnover have the lowest mortality rates of all.

P-006 THE EFFECTS OF POPULATION GROWTH ON THE ACHIEVEMENT OF CHILDHOOD MORTALITY MILLENNIUM DEVELOPMENT GOAL IN URBAN SUB-SAHARAN AFRICA

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Introduction: Declines in child mortality have been very poor in sub-Saharan African (SSA) since the early 1990s, making it difficult for the region to meet -or at least get closer to- the target of reducing child mortality by two thirds by 2015. While the Millennium Development Goals (MDGs) for health have typically been investigated and assessed at the national level, this paper argues that focus on urban areas of SSA is crucial since the region is witnessing rapid urbanization in the context of lackluster economic performance. The goal of the study is to assess the inter-relationships between population growth, access to safe water and to health services, and child mortality in urban areas of SSA.

Methods: The paper uses data from the Demographic and Health Surveys (DHS) of all countries in sub-Saharan Africa with two surveys or more carried out from around 1990, with data on population growth from the United Nations. Correlation analysis is used to achieve the objectives of the study. The results of this macro-level analysis is complemented by a case study on Kenya using data from the Nairobi demographic and health survey carried out by the African Population and Health Research Center (APHRC) in 2000.

Results: The paper shows that as urban population grows faster, urban child mortality increases or declines only minimally, and that countries with faster improvement in access to safe water by urban dwellers is associated with faster decline in urban under-five mortality. Faster urban population growth is also associated 'though weakly- with deteriorating access to safe drinking water over time. Although improvement in access to clean water is strongly and positively correlated with improvement in access

to health facilities, there seems to be no relationship between the latter and change in child mortality. In Kenya, the poor have almost three times more children than the rich; they are nearly three times less likely to use contraceptives, and three times more likely to have unmet need for family planning.
Conclusion: With growing poverty and growing poor-rich fertility gap, failing to appropriately target the urban poor and improve their living conditions and health status -which is an MDG target itself- will result in pulling down the national averages of health indicators, and consequently, move countries away from achieving the MDGs.

P-007 FACTORS ATTRIBUTING TO POOR SELF-RATED HEALTH IN UTRECHT, AN URBAN SETTING IN THE NETHERLANDS

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Introduction: Self-rated health is considered a good predictor of mortality, morbidity and use of physician services. For public health it is important to know the impact of certain diseases, lifestyle behaviour and the environment on self-rated health on population level. This can be estimated by using the population attributable fraction (PAF). PAFs are one of the different methods to assist policymakers to prioritize specific health problems. The objective of this study therefore is to estimate the PAFs of physical illness, mental illness, unhealthy lifestyle, poor social environment and poor physical environment for poor self-rated health.
Methods: Data were used of a survey in a large communitywide representative sample of adults in the city of Utrecht, the Netherlands. The survey was held in may 2003 and consisted of a self-administered questionnaire which contained questions about self-rated health, diseases, mental health, lifestyle behaviour, and social and physical environment. Aggregated determinants were constructed for physical illness, mental illness, unhealthy lifestyle, poor social environment and poor physical environment. Data of 2,218 19-54 year-olds were used for analysis. PAFs were calculated using the formula PAF=pd(RR-1/RR), where pd is the proportion of cases exposed to the risk factor and RR is the adjusted relative risk (adjusted for socioeconomic status, sex, age and the other aggregated health determinants).
Results: The highest PAFs were observed for mental illness (49%, 95% CI 42-54) and physical illness (47%, 95% CI 41-53). A poor physical environment also seemed to have a great impact on health; after adjustment still 32% (95% CI 16-44) of the poor self-perceived health could be attributed to a poor physical environment. This was especially the case for women aged 35-54 years (43%, 95% CI 23-56). For men aged 19-34 years 73% (95% CI 53-78) of poor self-rated health could be attributed to mental health. An unhealthy lifestyle only had a significant PAF for 35-54 year-old men (43%, 95% CI 12-59). PAFs for specific factors of the aggregated determinants of health will also be presented.
Conclusion: PAFs are useful to prioritize on health aspects, but there are also some disadvantages. It is for example unknown whether the observed effects are causal and the results depend on the choice of the specific factors that form the aggregated health determinants. The advantages and disadvantages of the PAF will be discussed at the conference.

P-008 HEALTH PROFILE OF THE STREET CHILDREN OF CHANDIGARH, INDIA, 2005

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More than the half subjects were thin built. A majority i.e.88 had problems in their hair like, dandruff (57), dirty hair (53), head lice/nits (32) and 42 had problems on the face like, pimples (34), cholasma (11) etc.
The problems in lips were predominated by dryness (56) and blackish discoloration (22) whereas most common problems of gums, teeth and tongue were bluish black pigmentation (29), dental caries (43) and ulcers (17) respectively.
A total of 27 subjects had problems in their eyes, among whom 12 had dry cornea and 7 had dry conjunctiva. Among the 53 subjects with problems in ears, 43 had wax impaction, while among the 26 subjects with problems in nose, 22 had running nose.
Lymph nodes enlargement was present in 9 children whereas one subject was present with movable thyroid gland on swallowing.

Fifty-six children had problems in skin at various sites of their body and 76 had problems in nails.
Rickettsial changes in the chest were seen in two children whereas 9 had structural deformities in either extremity.
Eighty-three subjects were uncertain about their immunization status and only 32 of them had a BCG scar.
The Tuberculin test was positive among 12 subjects.
Five subjects of different age showed significant hypertension, 2 had pulse less than 60 per minute, 11 had respiration more than 24 per minute and 4 were febrile at the time of examination.
Sixty-four subjects were anaemic, one was present with positive urine albumin and 70 had intestinal parasite infection. The most common parasites in the stool were Giardia lamblia, H.nana, E.coli, roundworm and hookworm i.e. 21,19,14, 14 and 10 children.
History of illnesses was predominated by injury, pain and generalized itching i.e. 71,56 and 41respectively.
History of blood in stool, sputum, urine or vomitus was present in 23 subjects whereas 10 had history of epileptic fits.

P-009 NO DECREASE IN SOCIO-ECONOMIC AND ETHNIC HEALTH DIFFERENCES IN THE CITY OF UTRECHT, THE NETHERLANDS

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Introduction: Most studies on health inequalities show that socioeconomic status (SES) and ethnic background are important determinants of health. People with a low SES and immigrants have different health problems than people with a high SES and natives, and their health is for the majority of aspects less good. The objective of this study is to determine changes in socioeconomic and ethnic health differences in the old suburbs of the city of Utrecht (the Netherlands) during the period 1995-2003.
Method: The Municipal Health Service Utrecht has performed a serie of health questionnaires in the general population, from 1995 until 2001 yearly and in 2003. The questionnaires contained different items on physical health, mental health, lifestyle, and social and physical environment. Socioeconomic status was defined by educational level (low, middle, high) and ethnicity was categorised into Dutch, Moroccan, Turkish, Surinamese/Antillean, and other ethnicities.
Results: The health status among people with low SES appeared to be less favourable for most indicators compared to people with high SES. These differences did not show a decrease from 1995 through 2003. For the following three indicators the socioeconomic differences even increased: having a chronic disease, having a physical impairment which was perceived problematic, and a low level of physical activity.
It also appeared that Moroccans, Turks, and Surinamese/Antilleans reported a less favourable health status for most indicators compared to native Dutch inhabitants in 2003. None of the indicator variables showed a decrease in ethnic differences from 1995 through 2003. In fact, the unfavourable health status among Moroccan and Turkish immigrants increased over the years for the following variables: number of social contacts (visits), problem(s) in the neighbourhood, and having a physical impairment which was perceived problematic.
The changes over time in socioeconomic and ethnic differences could not be explained by changes in other sociodemographic characteristics of the respondents.
Conclusion: Overall both socioeconomic and ethnic health differences did not decrease from 1995 through 2003. For some indicators the differences even increased. More research is needed to study possible explanations in order to give specific policy recommendations.

P-010 MORTALITY IN URBAN NEIGHBOURHOODS: WHO ARE MOST AT RISK?

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Introduction: Urban areas have generally higher mortality risks than rural areas. These urban-rural differences might be more profound for certain cause-specific mortalities or within certain demographic subpopulation.

Aim: This paper compares all-cause and cause-specific mortality risks in urban to rural neighbourhoods and studies which demographic subpopulations of the Dutch population are most at risk.
Methods: For all individuals living in the Netherlands, data on gender, age, marital status, country of origin, and place of residence were available for the years 1995 through 2000. Mortality records from 1995 to 2000 were linked through personal identification number. Neighbourhood data, i.e. urbanicity based on address density and socio-economic level based on percentage low-income inhabitants, were linked through postcode information. Variations in all-cause and cause-specific mortality between urban and rural neighbourhoods were estimated through Poisson regression.
Results: Urban neighbourhoods have slightly lower all-cause mortality risks than rural neighbourhoods when population composition and neighbourhood socio-economic level are taken into account (RR=0.98; CI:0.97-0.99). This urban-rural pattern is the result of lower mortality risks for heart disease and external causes and higher mortality risks for cancer in urban compared to rural neighbourhoods. The beneficial effect of living in urban environment applies particularly to the younger age groups, unmarried, and individuals from non-western backgrounds. Also women, the elderly, never married, and widowed experience lower mortality risks in urban compared to rural neighbourhoods but less pronounced. In contrast, middle-aged and married people living in urban neighbourhoods experience higher mortality risks compared to those living in rural neighbourhoods.
Conclusion: Living in an urban environment seems less unhealthy as always suggested. In the Netherlands, especially young, single and non-western individuals benefit from living in an urban environment. The urban environment likely offers these specific demographic groups certain opportunities for good health, such as jobs, affordable housing, health services or social contacts.

P-011 RURAL-URBAN COMPARISONS OF HEALTH AND GROUP DIFFERENCES IN THE PROVINCE OF UTRECHT, THE NETHERLANDS.

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Introduction: Information about health differences between urban and non-urban areas assists policy makers in developing regional and local health policies. The objectives of this study are to: (1) determine the relationship between urbanicity and health; (2) examine whether health differences can be explained by socio-demographic composition of the inhabitants; and (3) investigate whether socio-demographic health differences are the same in urban and non-urban areas.
Method: Secondary data analyses were performed on health surveys performed in 2003 and 2004 in all 33 municipalities of the province of Utrecht. Besides socio-demographic information, data was obtained concerning self-rated health, lifestyle, social environment and prevalence of diseases. The study population consisted of 11,747 respondents aged 25-54 years. The communities were categorised into five levels of urbanicity, based on address density, according to the Dutch Central Bureau of Statistics. Results were analysed using logistic regression ($p<0.01$ was considered significant).
Preliminary Results: Poor self-rated health, loneliness, smoking, drug use, migraine and chronic obstructive pulmonary diseases (COPD) were reported more often in urban areas than in rural areas. There were no rural-urban differences with regard to excessive use of alcohol, obesitas, diabetes, stroke and heart diseases, and high blood pressure. In urban areas more hours of sport per week were reported. Most rural-urban health differences could not be explained by differences in socio-demographic characteristics; self-rated health, smoking, drug use, migraine and COPD remained significantly associated with urbanicity. Finally, a substantial number of significant interactions between urbanicity and socio-demographic variables were observed. Details will be given at the conference.
Conclusion: The results show that in urban areas of the province of Utrecht more health problems exist compared to rural areas. Surprisingly, socio-demographic differences do not explain these results and therefore other factors have to be important, e.g. social and physical environment, and access and quality of health care. Group differences in health are not the same in urban and rural areas (interaction effects). This emphasises the importance of local monitoring and local policy development, since risk groups for prevention and care interventions differ.

P-012 DO TURKISH MIGRANTS IN THE NETHERLANDS AND TURKISH CITIZENS IN THEIR NATIVE COUNTRY DEAL WITH THE SAME HEALTH PROBLEMS?
A COMPARISON BETWEEN TURKISH MIGRANTS IN HENGELO, THE NETHERLANDS AND TURKISH RESIDENTS IN ANKARA, TURKEY

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Introduction: In the Netherlands many problems are experienced with Turkish migrants in health care. Health care beliefs and perceived health or illness may differ between cultures and even between from origin the same populations, living in different countries.

Results of this study give an impression about the differences in health and stress between Turkish migrants in the Netherlands and Turkish natives.

Methods: Neighbourhood and population: A cross-sectional study was conducted in Hengelo in the Netherlands and Ankara in Turkey.

The Turkish cohort was matched with the Hengelo population based on socio-economical status, age, and level of education. Matching on income was not possible, because of the differences in income between the Netherlands and Turkey.

Questionnaire: A questionnaire was used concerning general questions about age, gender, work situation and education and specific questions about the presence of perceived health problems, kind of health problems, consultation of a specialist and the presence or absence of stress and the type of stress.

Data collection: Turkish migrants were asked by Turkish students to fill in the questionnaire. The same students administered the questionnaire in Ankara (Turkey).

Analysis: All statistical analyses were conducted using SPSS for Windows (version 12.0.1) computer software. Nominal data were compared between populations using Chi-square tests.

Results: 279 Men and 78 women in Hengelo in the Netherlands, and 144 men and 95 women in Ankara, Turkey, were included in this study.

Turkish native women experience more health problems than female Turkish migrants. (p=0.016)

More internal problems are experienced in male Turkish migrants (p=0.025), while more musculoskeletal problems exist in male Turkish natives (p=0.025).

Male Turkish migrants consult a specialist more often than male Turkish natives (p=0.002)

Male Turkish migrants experience stress mainly because of illness and cultural things; male Turkish natives experience stress mainly because of financial problems.(p=0.000)

One fifth of the female Turkish migrants have stress because of language. Female Turkish natives experience more than twice as much stress because of financial things compared to female Turkish migrants. (p=0.009)

Conclusion: Clear differences were shown comparing Turkish migrants' and Turkish natives' health perception. It has to be investigated whether types of stress are related to specific types of health problems, so that a health profile can be developed for Turkish migrants. This profile may help improving migrants' health management, so that health care to them can be offered in better way.

P-013 RELIABILITY AND VALIDITY OF A HOME SAFETY SURVEY AMONG IMMIGRANT AND NON-IMMIGRANT URBAN FAMILIES WITH YOUNG CHILDREN

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Unintentional injury is the leading cause of death among children and youth between 1 to 19 years of age in the United States . Non-fatal injuries are also a major concern. In 2003, there were 9 million non-fatal unintentional injuries to US children aged 1-19. Therefore injury prevention practices are an important aspect of child health in the United States.

To assess injury prevention practices, a validated and reliability-tested instrument measuring injury prevention practices is needed. A review of available instruments identified the Safety Survey (SS) of The Injury Prevention Program (TIPP) of the American Academy of Pediatrics (AAP) as a candidate instrument. TIPP is an educational program for parents of children newborn through 12 years of age. Its goal is to help prevent common injuries from the leading causes of unintentional childhood injury (motor vehicle

crashes, drowning, firearms, falls, bicycle crashes, pedestrian hazards, burns, poisoning and choking). Initially developed for young children in 1983, the TIPP SS was expanded in 1988 to include children from 5 to 12 years of age. The TIPP SS was revised again in 1994 and 2001 to better reflect leading causes of childhood injury. The TIPP SS has been in wide use since the mid-1980s, is sanctioned and supported by the AAP, is available in Spanish and offers simple language and a short format. However, there are no published data regarding its validity or reliability.
We report an evaluation of the reliability and validity of the TIPP SS in measuring injury prevention practices in a sample of 88 urban families (44 Englllish speaking, 44 Spanish speaking) with a child aged 3-5 years old. We focus on urban families with young children between the ages of 3 to 5 years of age because they are more likely to suffer in-home injuries. Secondarily, we focus on parental immigration status as a possible factor affecting the validity and reliability of the TIPP/SS. The study includes a matched sample of families with native born parents and families with foreign-born parents (Spanish speaking).

P-014 METHODOLOGICAL ASPECTS OF URBAN HEALTH SURVEYS IN DISADVANTAGED GROUPS

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Abstract: In urban areas the monitoring of public health faces different methodological threats. Respondents' understanding of the questionnaire and the differences in interpretation of identical questions can have effect on the data-quality. Non-respons can lead to selection bias, especially in marginalized groups. The study objective is to gain insight into internal validity and non-respons of health surveys in disadvantaged groups, in order to be able to improve methodology and instruments. So far the effect of these threats to internal validity and non-respons is not well-specified for specific subpopulations and specific health indicators, neither are influencing factors.
Methods: In a qualitative in-depth interview study, the internal validity and non-respons of survey results in specific disadvantaged groups such as ethnic minorities, elderly and lower socioeconomic groups are investigated. The study was embedded into a general health survey.
Internal validity: In a follow-up study, respondents of the original mailed health questionnaire are re-approached by house visits in order to compare the written answers to an additional in-depth interview. Also, the explanations of the respondents about these observed differences were recorded. This approach provides insight into respondents' understanding and interpretation of the questionnaires and the possible difficulties they have completing them. Technical, logical, and verbal aspects of the questionnaires are considered. To explore the cross-cultural validity and sensitivity of the questionnaire, interpretations of relevant words and concepts are brought together in order to compare them between different ethnic groups. Perceived health, well-being and being impaired are examples of indicators that were studied, which concern subjective concepts with an increased risk of being interpreted in different ways.
Non-respons: Possible selection-bias is studied by collecting information about the non-respondents, such as reasons for non-participation, possible incentives for participation, and socio-demographic and a short-list of health characteristics. House visits are paid to contact this group. Not only data of these short interviews but also observations of living circumstances will be registered. The focus is put on neighbourhoods with a large number of disadvantaged inhabitants.
Results: Data collection was carried out between March and July 2006. The results will be presented at the congress.
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P-015 RELATIONSHIP BETWEEN SOCIAL INEQUALITIES AND AMBULATORY CARE SENSITIVE HOSPITALIZATIONS PERSISTS FOR UP TO NINE YEARS AMONG CHILDREN BORN IN A MAJOR CANADIAN URBAN CENTER

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Background: Hospitalizations for ambulatory care sensitive (ACS) conditions are considered a marker for access to timely and effective primary care but there are few pediatric studies. Our purpose was to examine socioeconomic disparities in ACS admissions among birth cohorts in a universal health insurance setting.

Methods: We examined ACS and all hospitalizations of children born from 1993 to 2000 in Toronto, Canada by birth year, calendar year and socioeconomic status (SES). SES was evaluated using quintiles of mean neighbourhood income from the 1996 Canadian census. Cohort, age and temporal effects were described for all admissions, ACS admissions, and specific ACS conditions. Attributable risk by SES was calculated using rates for the highest and lowest SES quintiles.
Results: The major finding of this study is that the relationship between socioeconomic disadvantage and ACS hospitalization was large, consistent across many conditions, remained stable over time and persisted up to nine years of age. These effects occurred in a universal health insurance setting without direct financial barriers to physician or hospital care. Among 255,284 children born in Toronto during 1993-2001, ACS conditions were responsible for up to 30% of hospitalizations during the first two years of life and close to half of admissions during the third year. Low income was associated with 50% higher rates of ACS hospitalizations (RR=1.50, 95% CI 1.43-1.58), including asthma (RR=1.69, 95% CI 1.54-1.86) and bacterial pneumonia (RR=1.59, 95% CI 1.40-1.81), the leading causes of admission. Socioeconomic disparities in ACS and all admissions occurred in every cohort, every calendar year and every age group.
Conclusions: The relationship between socioeconomic disadvantage and ACS hospitalization in children was large, consistent across many conditions, remained stable over time and persisted up to nine years of age. These effects occurred in a universal health insurance setting without direct financial barriers to physician or hospital care.

P-016 MIGRATION AND URBANIZATION OF POVERTY IN SUB-SAHARAN AFRICA: THE CASE OF NAIROBI CITY, KENYA

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Urban population growth in sub-Saharan Africa is driven by migration of young adults seeking better livelihoods in cities. This study contributes to understanding the dynamic process of rapid urbanization amidst increasing urban poverty in African cities by describing demographic and socioeconomic characteristics of migrants, identifying push and pull factors, and determining the relative magnitude of rural-urban and urban-urban migration streams using rich data from the ongoing longitudinal health and demographic surveillance study in the slums of Nairobi covering 60,000 people. The results show that while a significant proportion of the population has lived in slums for many years, there is considerable turn-over of the population, with 40% of in-migrants coming from other rural and urban areas. Most in-migrants come to Nairobi to escape rural poverty, but end up living in slums characterized by poor environmental sanitation, overcrowding, social fragmentation, unstable livelihoods, poor health outcomes, and high levels of insecurity. Controlling for the duration of stay in the slum, the study shows when compared to long-term residents, recent in-migrants start off at a disadvantage in terms of access to economic activities. However the latter expect that with a few years of residence in this setting, chances are high that they will assimilate themselves into the community and do as well, or even better than the average long-term residents. This may explain the persistent in-migration flows in the midst of apparent poor living conditions.

P-017 CORE HEALTH INDICATORS IN THE MEGAPOLIS AREA 'RUHR-CITY' IN GERMANY

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Introduction: The Ruhr area ('Ruhr-City') with its more than five million people has for 170 years been a synonym for a megapolis of heavy industry with a high population density in Northrine-Westphalia. 'Ruhr-City' can be divided into a centre (population density > 2000 inhabitants/km2) and a peripheral zone (population density < 2000 inhabitants/km2.
For the first time, socio-economic and health indicators were brought together in a pilot health report.
Methods: The indicators used are: population density, welfare recipients per 1,000 of the population, % of foreign population, unemployment rate, life expectancy at birth, infant mortality rate, SDR, avoidable deaths by liver and ischaemic diseases. The age standardised indicators were calculated for the central area with seven cities and for the peripheral zone with eight cities and districts. The results obtained were submitted to a significance test by identifying 95% confidence intervals.

Results: The average population density in NRW is 530 inhabitants/km2, while it is 1,200 in Ruhr-City and nearly 2,500 in the centre. In NRW, 38 of 1,000 inhabitants are on welfare, in Ruhr-City 47 and in the centre 54 inhabitants, which is 44% more than the average. While the unemployment rate averages 11% in NRW, it is 13.7% in Ruhr-City and 15.4% in the centre. In Ruhr-City, the number of foreigners (117 per 1,000 inhabitants) is higher than in NRW (106). The immigrant population is concentrated in the centre with a rate 30% higher than the NRW average.
Life expectancy in Ruhr-City is 0.74 years below the NRW average. These numbers are significant in most districts and cities. The centre differs more (1.16 years) than the peripheral zone (0.29 years). Without the influence of Ruhr-City, life expectancy in NRW would be 0.34 years higher.
Infant mortality averages 5.5‰ in Ruhr-City and 4.98‰ in NRW. With an infant mortality of 5.82‰ the centre differs more from the average than the peripheral zone with 5.15‰.
In Ruhr-City, there are 14% (centre 17%, peripheral zone 12%) more avoidable deaths by ischaemic diseases and 23% (centre 35%, peripheral zone 10%) more avoidable deaths by liver diseases than in NRW.
Conclusion: The centre of Ruhr-City is characterised by elderly, unemployed, foreign, low-income citizens living closely together. Infant mortality lies above NRW's average and life expectancy is 0.74 years lower. Several avoidable death rates in the Ruhr area are significantly higher than the average in NRW.

P-018 PROFILE AND FUNCTIONAL CAPACITY OF THE URBAN ELDERLY AFTER HOSPITALIZATION RELATED TO FALLS IN BELO HORIZONTE CITY - BRAZIL

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Introduction: Significant social transformation will be required for societies to adjust to the inevitability of population aging, which has been changing the epidemiological health profile from infectious to chronic diseases. A fundamental component of elderly health is functional capacity (FC), innerly related to the neighborhood features. Its decrease or loss can be associated with falls episodes, common events among the elderly. In this study we investigated cognitive and social-demographic factors, as well as health status, practice of physical and leisure activities, and characteristics of the falls associated with the dependence levels of elderly after hospitalization.
Methods: The study base population was composed of individuals supported by the Brazilian Public Health System (SUS). About 80% of all hospitalizations in Brazil are paid by SUS. A home-based interview was conducted with 120 elderly aged > 60 years, living in Belo Horizonte City (sample size calculated with a significance level of 0.05 and power of 0.85), representing 20% of all hospitalized elderly (n = 602) due to falls between January and June/2004. To guarantee age and gender representativity, stratified random sampling based on the proportional distribution of the population was performed. FC was evaluated by a self-report to perform 15 activities of daily life (ADL) of the Brazilian OARS Multidimensional Functional Assessment Questionnaire, which was validated and has been used in studies with Brazilian elderly. The individuals were classified as independents (able to perform all ADL), light dependents (unable to perform one to three ADL), moderate dependents (unable to perform four to six ADL) and severe dependents (unable to perform ≥ seven ADL). Ordinal logistic regression analyses was carried out, including variables with a p-value ≤ 0.2 in the bivariate analyses.
Results: Out of the 120 elderly, 52 were men and 68 women, with a mean age of 74 + 9.2 years, being 17.5% classified as independents, 28.3% as light dependents, 12.5%, as moderate dependents, and 41.7% as severe dependents. In the final model, low cognition, poor self-evaluation of health, human help to perform ADL, absence of at least one leisure activity, obesity, urinary incontinence and stroke were found associated with low levels of FC. Conclusion: The identified variables demonstrated the multiple perspectives for the determination of functionality. The identification of independent factors associated with functional capacity and the exploration of interactions among individual and aggregated level health determinants, including neighborhood features, is essential for elderly health to be completely understood.

P-019 ETHNIC DIFFERENCES IN SERUM CHOLESTEROL LEVELS AND HYPERCHOLESTEROLEMIA IN THE AMSTERDAM POPULATION

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Introduction: Heart disease is the leading cause of death in the Netherlands. An elevated LDL cholesterol level is a major risk factor in the development of coronary heart disease. In this study we investigated cholesterol levels and the prevalence of hypercholesterolemia in the Amsterdam population. In addition, we determined possible differences between three major ethnic groups in Amsterdam, namely Dutch, Turks and Moroccans.

Methods: Data was collected in the context of a general health survey which was conducted by the Municipal Health Service of Amsterdam in 2004. A random sample was drawn from five districts in Amsterdam and stratified by age and ethnicity. Residents of the five selected districts were invited to a local health services centre. 1.736 Amsterdam residents were included (479 Dutch, 453 Turks, 374 Moroccans). The total response rate was 44% (Dutch: 45.8%, Turks: 49.6%, Moroccans: 38.7%).

In the survey a health interview and a health examination were combined. Of each participant blood samples were collected in which serum total cholesterol and HDL cholesterol levels were determined. Classification of hypercholesterolemia was based on either the self-reported use of cholesterol lowering medication or serum total cholesterol levels of 6.5 mmol/l or higher.

Results: We found that 22.2% of Amsterdam residents had hypercholesterolemia, in 14.8% hypercholesterolemia had never been diagnosed before (Figure 1). Hypercholesterolemia was more prevalent among Dutch (28.5%) than among Turks (12.8%) and Moroccans (9.7%).

Conclusion: In approximately 20% of the Amsterdam population hypercholesterolemia was found. In 67% of the cases hypercholesterolemia was never diagnosed before, and thus, not treated with lipid lowering medication. Hypercholesterolemia was more prevalent among Dutch than among Turks and Moroccans.

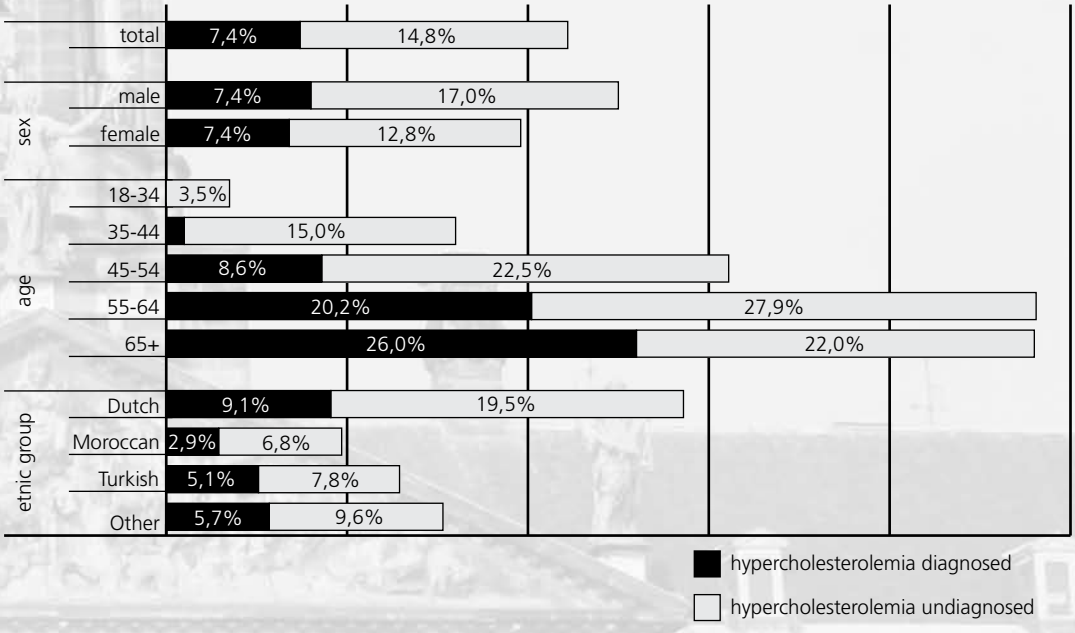

Fig.1 - Diagnosed and undiagnosed hypercholesterolemia, Amsterdam 2004

P-020 HEPATITIS C AND SUBSTANCE ABUSE IN URBAN CITIES

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This presentation will address the foreseeable impact of Hepatitis C in urban health care resulting from HCV+ persons who are drug injectors and migrate to the larger metropolitan cities in order to receive adequate health care. In this regard we will describe the research and treatment endeavors that we have initiated at the Weill Cornell Medical College to address some of the problems. Migration to urban communities in the United States has increased significantly over the past 10 years resulting in major public health concerns that include the increased prevalence of substance abuse with concurrent diseases--HCV infection in particular. Approximately 80 percent of substance abusers in New York City are exposed or infected with HCV. Hepatitis C is the leading blood-borne disease in the USA affecting two percent of the population. In the last 15 years, transfusion risk factors have greatly reduced while IVDU, the leading risk factor over the past 30 years, and sexual risk factors have grown even more significantly. Disease progression is both fast and long-term. Up to 85% of those contracted with the disease will have chronic infection after six months while up to 15% will develop cirrhosis after 20 years of infection. The only therapy currently working is PEG-IFN a-2b (12KD) + RBV Combination Therapy but it is with a significant cost to the patient both monetarily and psychologically. More than half of patients will experience fatigue, myalgia, headache and injection-site reaction. 40-70% will have psychiatric barriers to readiness. The Vincent P. Dole Treatment and Research Institute is working closely with the Hepatitis C. Clinic of New York Presbyterian Hospital Weill Cornell Medical College to treat patients in our two methadone programs. Services are focused on intensive medical and psychiatric follow-ups, supportive counseling and patient education on prevention and wellness.

P-021 SICKLE CELL DISEASE: ALLEVIATING MORBIDITY AND MORTALITY IN AFRICA

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Introduction: Sickle cell disease (SCD), a common genetic disorder characterized by the production of abnormal hemoglobin, is acquired by inheriting two mutant hemoglobin genes, one from each parent. It is one of the most common hemoglobin disorders of epidemiological importance in Africa; nearly 200,000 infants are born with SCD each year. While in parts of sub-Saharan Africa 2% of children are born with SCD, 10-40% of children are heterozygous carriers of the gene (sickle cell trait). Median survival for SCD patients in North America is 45-55 years; data in African patients suggest that the median survival is less than 5 years.

Purpose: The goal of this paper is to evaluate current public health issues related to SCD and examine the various strategies aimed at reducing morbidity and mortality associated with SCD in Africa. Further, this paper also aims to explore the association between SCD and preventable infectious co-morbid events.

Results: Strategies for reducing morbidity and mortality associated with SCD include early recognition and prevention of co-morbid events such as malaria, pneumococcal infections, HIV, Tuberculosis (TB), stroke and septicemia. The principles of management should include: rapid identification and evaluation of fever and bone pain; proper preparation of drinking water and adequate hydration; use of folic acid supplements; prevention of malaria; Bactrim prophylaxis for pneumococcal infection; TB screening and treatment; and minimal use of blood transfusions to avoid infection with any blood borne pathogens, including HIV.

Early identification of the sickle cell trait through sustainable community based genetic counseling and screening programs and early diagnosis via newborn screening will also be essential in reducing the morbidity and mortality from SCD and its co-morbid infections. The massive rural-to-urban migration experienced in many parts of Africa, such as Nigeria, makes the development of inner city sickle cell clinics and mobile health units, which can provide disease prevention and health maintenance information in multiple local languages, an appealing suggestion.

Conclusion: Simple interventions and policy changes could significantly reduce the morbidity and mortality

resulting from SCD. Widespread awareness and educational campaigns targeted at the general public and health professionals, screening and counseling of those at risk for SCD and other co-morbid infections, and the provision of an efficient primary health care system focusing on the family as a unit may all prove successful in this endeavor. Furthermore, SCD programs should be integrated into health care and HIV/AIDS prevention programs in countries across Africa.

P-022 HEPATITIS C VIRUS (HCV) AND HIV CO-INFECTION IN CANADIAN STREET YOUTH: ARE SOME MORE AT RISK?

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Introduction: Injecting drug use (IDU) is a major risk factor for HIV and other blood-borne infections especially HCV, this is of most concern in the street youth (SY) population as the rate of IDU is reported to be high. Drug using populations such as SY have a higher risk of contracting and transmitting HIV, HCV and other sexually transmitted and blood-borne infections.

Methods: The Enhanced Surveillance of Canadian Street Youth (E-SYS) is a repeated cross-sectional survey carried out in 1999, 2001 and 2003. SY aged 15-24 years inclusive, who had spent at least 3 consecutive nights away from home were recruited in 7 cities across Canada. Information was collected in a nurse-administered questionnaire, blood and/or urine samples were also collected for biological testing. Multivariate analysis was not performed because only 8 were co-infected with HIV and HCV.

Results: 4213 SY recruited from 1999 -2003 were included in the analysis. A total of 8 (0.2%) were HCV/HIV co-infected while 21(0.5%) and 131 (3.1%) were infected with HIV and HCV respectively. 4077 had no HIV or HCV infection. 38.1% (8/21) of youth infected with HIV are also co-infected with HCV while 6.1% (8/131) of youth infected with HCV are also co-infected with HIV.

Compared to SY not infected with HIV or HCV, those co-infected with HIV and HCV were more likely to be females (62.5% vs. 38.9%, p=0.2), Aboriginals (75% vs. 31.2%, p<.01), older (75% vs.39.9%, p<.05) and injecting drug users (100% vs. 18.9%, p <.0001).

Conclusions: SY are at increasing risk for sexually transmitted and other blood-borne infections, with injecting drug use a major contributing factor. Youth who were older, hence on the street longer were more likely to be co-infected with HIV and HCV. The identification of risk factors for HIV/HCV co-infection in this population allows us to properly develop and target intervention programs.

Caption 1: HCV/HIV co-infected SY comparison table

	HIV/HCV Coinfection (N=8)	HIV Mono-infection (N=13)	HCV Mono-infection (N=123)	No HIV or HCV Infection (N=8)
Female	*62,5%*	*7,7%*	*44,7%*	*38,9%*
Median Age (years)	*21,5*	*22*	*21*	*19*
Older age catagory: 20-24 years	*75%*	*100%*	*74,8%*	*36,9%*
% Aboriginal	*75%*	*46,2%*	*57,7%*	*32,1%*
IDU ever	*100%*	*23,1%*	*85,4%*	*18,9%*
IDU recent - past 3 months	*75%*	*66,7%*	*60,4%*	*39,9%*

P-023 HIV INCIDENCE ESTIMATE AMONG NON-NATIONALS IN ITALY

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Introduction: In Italy, the percentage of new diagnoses of HIV infection represented by non-nationals has increased, from 11.1% in 1992 to 31.7% in 2004. However, there are no data available on the incidence

of infection among non-nationals, in part because no national-level HIV surveillance system exists and only five of the local systems record the nationality of the individual. In light of these considerations, we conducted a study to estimate the incidence of HIV infection among non-nationals in Italy.
Methods: The data on HIV diagnoses were provided by the five Regional and Provincial surveillance systems that record nationality (the populations of these areas represent 24.1% of the national population). The incidence among non-nationals was estimated as the number of new diagnoses among adults for the years 1992-2004 (numerator) out of the number of residence permits issued for adults for the same period in the same areas (denominator) (data provided by the Ministry of the Interior). Comparison with the incidence among Italians was performed by adjusting the incidence among non-nationals by age and gender (Italian population used as standard).
Results: From 1992 to 2004, 17,040 new diagnoses were recorded in the five areas considered; 19.2% of these were among non-nationals. Nearly half were from Africa (53.8%). The most common exposure category was heterosexual contacts (51.0%). Males constituted 56.0% of the cases. The most represented age class was 25-29 years among women (13.7%) and 30-34 years among men (15.5%).
The incidence among non-nationals significantly decreased (p-value=0.000), from 88.3 new diagnoses per 100,000 residence permits in 1992 to 41.9 in 2004. The incidence standardised for age and gender was 5.5 times greater among non-nationals compared to Italians (respectively, 29.6 per 100,000 residence permits vs. 5.4 per 100,000 population in 2004).
Conclusions: The increase in the percentage of cases represented by non-nationals can be attributed to the increase in the number of non-nationals in Italy (from 650,000 legal residents in 1992 to 2,200,000 in 2004). The incidence among non-nationals seems to have decreased, though we only considered legally residing non-nationals. Nonetheless, our results clearly show that the incidence of HIV infection among non-nationals, although apparently decreasing, continues to greatly exceed that for the Italian population.

P-024 ETHNIC DIFFERENCES IN SEROPREVALENCE OF HSV1 AND HSV2 IN AMSTERDAM, THE NETHERLANDS: A POPULATION-BASED STUDY

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Introduction: Herpes simplex virus (HSV) is transmitted by symptomatic lesions and through asymptomatic viral shedding and causes oral-facial and genital infections, but also neurological damages. The majority of HSV-infected subjects are asymptomatic and unaware of their infection. Therefore, control strategies will not be effective if limited to symptom management. Since vaccine studies on HSV type 2 (HSV2) are progressing, more attention has been paid to the epidemiology of HSV. In this study we aim to estimate the seroprevalence of antibodies to HSV1 (HSV type 1) and HSV2 in the general Amsterdam population and to determine high risk groups.
Methods: From April until June 2004, serum samples were collected from 1325 persons aged 18 years and over in Amsterdam. These serum samples were tested for HSV1 and HSV2 antibodies by means of Focus HerpesSelect type-specific assay. The prevalence rate ratios (PRR) were estimated. All statistical analyses were weighted by sex, age and ethnicity to be representative for the population of Amsterdam in 2004.
Results: In Amsterdam 25.6% (95%CI: 63.5-71.0) of the population had no HSV infection; 67.2% (95%CI: 63.5-71.0) has HSV1; 21.9% (95%CI: 18.9-24.9) has HSV2 and 14.7% (95%CI: 12.1-17.2) is coinfected with HSV1 and HSV2. In multivariate analyses, HSV1 seroprevalence was associated with increasing age (PRR 1.10 per 10 years) and higher among persons of Turkish or Moroccan ethnic origin (PRR 1.69 and PRR 1.77), those with a low educational level (PRR 1.19) and homosexual men (PRR 1.36). The higher HSV1 seroprevalence among persons of Turkish and Moroccan origin was found primarily by those born outside the Netherlands. HSV2 seroprevalence was higher with increasing age (PRR 1.26) and associated with being of Surinamese or Antillean ethnic origin (PRR 1.57) and having an STI history (PRR 1.90).
Conclusion: We observed clear differences in seroprevalence of HSV1 and HSV2 among groups of different ethnic origin in Amsterdam. Prevention of HSV infection with for HSV2 emphasis on behavioural change

and sexual health education, such as consistent condom use, should be continued with special focus on ethnic groups.

P-025 STI PREVALENCES AMONG DIFFERENT ETHNIC GROUPS IN THE NETHERLANDS: RESULTS FROM THE STI SENTINEL SURVEILLANCE NETWORK

I.M. de Boer (National Institute for Public health and the Environment, Bilthoven, the Netherlands), M.J.W. van de Laar

Introduction: Individuals with non-Dutch ethnic origins play a major role in the prevalence of STI in the Netherlands. In this study, the STI prevalence among different ethnic groups in the STI sentinel surveillance network is assessed.

Methods: The sentinel surveillance network consists of five STI clinics and nine Municipal Health Services. Consultations for STI and HIV in 2005 are registered, containing demographics and diagnosed STI. Ethnic origin is based on the reported ethnicity by the client. Prevalences are based on number of positive results divided by number of tests. A chi-square test was used to compare differences in prevalences of STI.

Results: In 2005, 52.279 consultations were registered. Gonorrhoea testing was performed in 48.811 consultations, Chlamydia testing in 49.918, syphilis testing in 47.193 and HIV testing 30.322. In the table, the number of migrants and the prevalence for different STI is displayed. The STI prevalences were in general lower in women than in men in all ethnic groups; only for Chlamydia, the prevalence was higher for women in Turkish, Moroccan, Eastern Europe and other European ethnic groups.

Conclusions: The prevalence of STI is predominantly higher among non-Dutch groups in 2005, especially in men. Gonorrhoea and Chlamydia have the highest prevalence in individuals from Suriname and Netherlands Antilles. HIV is also high among these two groups, but is highest in individuals from Sub-Saharan Africa.

Ethnicity	Number of consultations	% Gonorrhoea	% Chlamydia	% Early Syphilis	% HIV
Netherlands	*39832*	*2.5*	*9.6*	*1.2*	*0.7*
Turkey Morocco/North Africa	*539* *863*	*5.4* *3.9*	*11.1* *12.1*	*1.4* *1.1*	*0.8* *0.4*
Suriname Netherlands Antilles	*3055* *966*	*6.2* *6.8*	*18.2* *20.1*	*0.8* *2.0*	*1.6* *1.2*
Eastern Europe	*978*	*3.0*	*9.8*	*0.9*	*0.5*
Sub-Saharan Africa	*1107*	*2.8*	*8.8*	*0.8*	*4.2*
Middle-South America	*1035*	*4.3*	*9.2*	*2.3*	*2.4*
Europe other	*971*	*3.8*	*8.1*	*1.6*	*0.8*
Asia	*906*	*4.3*	*13.3*	*2.0*	*2*
Unknown Other	*326* *1701*	*4.6* *5.8*	*11.0* *7.7*	*0.8* *1.9*	*0.6* *1.8*
P-values		*<0.0001*	*<0.0001*	*0.0005*	*<0.0001*

P-026 DRUG ADDICTION: CAUSE OF SOCIAL DISORDER

B. Poudyal Chhetri (Commission for the Investigation of Abus, Kathmandu, Nepal), A. Sharma

Problems: Several urban and sub-urban areas of Nepal have been affected by the drug abuse resulting into violence, unsafe sex practices, HIV Aids, hepatitis B, tuberculosis, sexually transmitted diseases (STDs), unwanted pregnancy and other social disruptions. Adolescents are the most vulnerable to drug addiction and such behavior. Low literacy rate, school dropouts and lack of awareness have been found the main factors to drug addiction and the mal-practices mentioned above.

Methods: A door-to-door survey was carried out in a sub-urban area called 'Hetauda' which is a small town located in the central part of Nepal. The purpose of the study was to see the effects of drug addiction problem. For this purpose randomly selected ninety households of known drug abusers were visited and interviewed.

Findings: More than 40 percent people of the study area have been found uneducated and very poor. A total of one hundred five drug addicts (100 male and only 5 female) were found in those 90 households. Seventy-five of them were injecting drug users. It was revealed from the study that the use of alcohol and other drugs led to violence and unsafe sex. It was found that less than 12 percent of the addicts involved in sex use contraceptives. Among the 105 drug addicts 75 started using drugs before the age of 15. The age group of the addicts was between 11 to 37 years. However, 70 of them were from 13 to 20 years of age. The abuse of alcohol and other drugs has led them to HIV Aids, hepatitis B, tuberculosis, sexually transmitted diseases (STDs) and unwanted pregnancy resulting into the birth of an unhealthy baby (low weight and even abnormal behavior in some children). The heroin addicts and injection drug users have been quite vulnerable to HIV Aids, hepatitis B, tuberculosis and STDs. It was also found that unsafe sex and drug abuse have disrupted the life of the concerned individual, family and the society.

Recommendations: As the social security is endangered in the study area, it needs to be controlled. No preventive measures have been taken so far from the government side in this overshadowed area. Therefore, awareness through education, training, interaction and publicity are highly desirable in the study area. Such programs should be carried out through NGOs, social organizations and social workers that are acquainted with the problems of that area for which the government should support them.

P-027 IMPACTS OF DRUG ABUSE IN RURAL AREAS OF WESTERN NEPAL

G. Gurung (Nepal Police, Kathmandu, Nepal), B. Poudyal Chhetri

Problems: Some of the Western Nepalese rural areas are highly affected by the illicit drug cultivation, sale and abuse. These areas are the home of the production of marijuana and other illegal drugs. However, 5 percent of the abusers are addicted to synthetic drugs. Most of the abusers are school age (13 to 18 years) boys and girls. The abuse of drugs has led the abuser to be unproductive and aggressive.

Context: Due to the illicit production, sale and abuse of drugs particularly due to the production of marijuana and homemade alcohol the society and families of the above region of Nepal are highly affected. The life of the youths of this hilly, rural and very poor area has been endangered due to the abuse of alcohol, tobacco and marijuana. As the situation is worsening, it needs to be addressed in due time. There is the need of public awareness raising program through NGOs involving local communities.

Activities: Setidobhan-Kathmandu Linkage Forum (FOSKAL) is a local NGO working in preventing the abuse of drugs in the above area. I am working as a Motivator to aware the local people about the danger of illicit cultivation and abuse of narcotic drugs.

Conclusion: Low education and ignorance towards the negative impact of drugs has led the youngsters of Western rural areas of Nepal towards the abuse of drugs. Thus the people of this area need to have knowledge about the various aspects of drug abuse, which will help to reduce illicit production, sale and abuse of drugs including alcohol and tobacco. The knowledge and techniques gained in the 6th ICUH, Conference will certainly help to control the illicit cultivation of drugs to reduce the number of addicts in the above region of Nepal.

P-028 LIFE AT NIGHT: STUDYING TRENDS, PATTERNS AND SOCIAL REGULATION OF ALCOHOL AND DRUG USE IN THE HAGUES NIGHTLIFE

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Introduction: The city of The Hague conducts an active multi-sectoral policy to prevent, reduce and manage problems arising from the use of alcohol and other drugs (AOD). As part of this strategy, in 2001 the city decided to extensively study AOD use among young people'an important focus being the AOD use among young (15-34 years old) nightlife participants.

Methods: In 2002 and 2003 Parnassia Psycho-Medical Center and the Municipal Health Service conducted a multi'qualitative and quantitative'method field study of the city's nightlife environment, while in 2004 a panel study was conducted of 'key informants' (both providers and consumers) from various corners within The Hague's nightlife.

Results: The above studies generated the following results:

- Alcohol remains extremely popular among study respondents, with 88% LMP in 2003. Cannabis come second with 37% LMP, while 17% used ecstasy and 10% cocaine in the last month;
- Price increases of alcohol in bars and nightclubs has resulted in home consumption before and after going out, in particular of the more expensive alcoholic beverages;
- Respondents often choose to ingest combinations of alcohol and other drugs;
- The use of AOD is increasingly becoming an accepted and integral part of young people's nightlife, associated with their preferential musical styles and 'scenes,' while relatively few young people worry about their own or their friends AOD consumption.

Discussion/Follow Up: These results have lead to the decision to further monitor and explore the trends in AOD use in the city's nightlife, focusing on, among others:

- The extent, nature and meaning of AOD use within various nightlife environments in The Hague, and its development over time;
- Social opportunities and risks associated with (combined) use of AOD in nightlife settings;
- Factors contributing to self-regulation (or, conversely, escalation) of AOD use among nightlife participants.

These research questions will be studied, again using both qualitative & quantitative methodologies, including ethnographic mapping, participant observation, a panel study of key informants, a quantitative survey and focus groups. In addition, results of drug samples, turned in at the local drug testing site will be included in the analyses.

Conclusion: Combining these different research methodologies and triangulation of their findings will result in a robust database, providing an as complete as possible understanding of AOD use among nightlife participants in the Hague over time, which, in our view, is an essential condition for evidence-based public health policy.

P-029 HEPATITIS B INFECTION AMONG THE DRUG USERS: FINDINGS FROM DHAKA CITY, BANGLADESH

R. Hossain (UNFPA Bangladesh, Dhaka, Bangladesh), S. Rahman

Introduction & methodology: The retrospective study was done among the drug addicts, admitted in the largest drug treatment center of one of the most densely populated city of the world, Dhaka City of Bangladesh. The study was done by review of records and analysis of the laboratory reports of five years from 1996 to 2000. The study was done with the objective to find out the epidemiological attributes in relation to Hepatitis B infection among the drug users. Data were processed and analyzed by the software SPSS version 10.0 and 2 ^{2} test, t- test, one way ANOVA and logistic regression were applied.

Result: Among the total 1497 addicts, 9.1% were found to be injection drug users (IDUs), 67.4% of the IDUs were found to share needles, 20.1% multiple drug users and 14.56% were found to have history of exposure to the commercial sex workers,.

Among the total drug addicts 4.6% were found to be Hepatitis B positive as determined by HBsAg status of the drug addicts. Hepatitis B status was positive among 19.1% IDUs, 6.8 % among multiple drug

users, 8.5% among needle sharers and 13.8% among the addicts with exposure to commercial sex. Statistical analysis found Hepatitis B infection to be largely influenced by injection drug use ($p<0.001$), multiple drug use ($p<0.05$) and needles sharing among the IDUs ($p<0.001$) and history of exposure to CSWs ($p<0.001$).
A logistic regression model was constructed to clarify the associations between HBsAg status as a dependent variable and multiple drug use, injection drug use, needle sharing among the IDUs and history of exposure to CSWs as independent variables. IDUs and exposure to CSWs showed significant association. IDUs were at more than 8 times (95% CI, 3.644 -19.628) and exposure to CSWs at 5 times (95% CI, 3.061 -8.771) higher risk to develop hepatitis B infection.
Conclusion: It can be concluded from the study that multiple behavioral factors play important roles and have influence on the HBsAg status of the drug addicts. The behavioral factors, as, injection drug use, multiple drug use, needle sharing and exposure to commercial sex, should be addressed while designing intervention among the drug addicts. though other risk factors were also found to have some effects.

P-030 CORRELATES OF CLUB DRUG AVAILABILITY IN NEW YORK CITY NEIGHBORHOODS

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Introduction: Data are sparse with respect to availability and use of club drugs among urban, economically disadvantaged, racially diverse and immigrant populations. Recent studies have examined club drug use among adolescents, reporting that ecstasy use was more common among urban youth (Wu et al. Drug Alcohol Depend, 2006). We aimed to investigate club drug use (CDU) and availability in 36 ethnographically-defined neighborhoods of New York City (NYC).
Method: A community-based sample of non-drug users, former drug users, non-injection drug users and injection drug users aged >18 years were recruited from target neighborhoods. Availability and use of club drugs (defined as ecstasy, LSD, PCP, GHB, ketamine and methamphetamine) and foreign born status was assessed through interviewer-administered questionnaires.
Results: To date, of 556 people recruited, 46.2% were Hispanic, 42.3% were Black and 11.5% were other race. The sample was 67.6% male and 20.5% were foreign born; median age was 38 (range 18-64). In terms of lifetime CDU, PCP was reported the most (37.9%), followed by LSD (30.3%), ecstasy (20.8%), ketamine (6.6%), methamphetamine (5.8%) and GHB (2.2%). CDU in the last 6 months was reported by 76 (18.9%), with PCP (6.5%), ecstasy (5.6%), and LSD (3.1%) reported most frequently. PCP was the most frequently reported drug available in the neighborhood of residence (16.7%) followed by ecstasy (16.0%), LSD (8.5%), and methamphetamine (5.6%). Those living in neighborhoods where club drugs were available were significantly more likely to have used club drugs (29.5 vs. 8.6%, $p<0.001$). Those who were younger and had used heroin, crack or cocaine in the last 6 months were significantly more likely to report club drug access. There was no significant difference in availability among foreign born participants.
Conclusion: These preliminary data suggest that club drugs are available in a variety of New York City neighborhoods and that availability in the immediate environment is related to use. There are substantial differences among substances with respect to availability and use. Less than half of those reporting availability had recently used club drugs. This may reflect a preference for other drugs in this population (e.g. heroin or cocaine), price, or lack of interest in drugs in general or club drug in particular. Despite increasing concerns about methamphetamine use in New York City, availability and use are relatively low in this sample. We did not observe significant differences in availability among foreign born participants. Additional study and analysis is needed.

P-031 GENDER, SEXUALITY AND HEALTH IN URBAN AREA

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Introduction: As a young Muslim nation with a complex anthropology, Pakistan continues to struggle with a common sense of identity. This struggle also touches our personal lives particularly amongst young people

with severe identity and gender stereotyping issues, poverty and low levels of literacy. This confusion is propounded and manifests clearly in sexual behaviors and practices. Community based sexual health /HIV/ AIDS prevention programs in Pakistan must incorporate self-reflection, self-concepts and identity issues to ensure ownership and sustainability of their programs. Working on self-encourages/ facilitates strong self-concepts, which translates to assertive behavior, negotiation skills and a sense of rights.
Gender identity refers to how one thinks of one's own, gender: whether one thinks of oneself as a man (masculine) or as a woman (feminine). Society prescribes arbitrary rules or gender roles based on one's sex. These gender roles are called feminine and masculine.
Methods/procedures: Promote Peer education, Life Skills Training's and educate public on gender sexuality-for behavior change. Exercise responsibility in sexual relationships, by abstinence addressing power imbalances, negotiation skills resisting pressure during sexual intercourse, encouraging contraception use. Gender Sexuality education must be a central component of development/reproductive health programs designed to prevent STIs/pregnancies and HIV infection.
Results: In Pakistani socio cultural framework is supremely gender and often-sexual relationships are framed by gender roles, power relationships, poverty, class, caste, tradition and custom, hierarchies of one sort of another. Here for many the term 'man' is a male gender identity not a sexual identity. The phrase males who have sex with males, or men who have sex with men is not about identities and desires it is about recognizing that there are many frameworks within which men/males have sex with males, many different self-identities, many different context of behavior. The public arena is male dominated and male-to-male friendship is expressed in the public domain.
Conclusions: To bring ownership among individual/communities to work on HIV/AIDS prevention could only be achieved by incorporating self-concepts and identity issues. Must need to explore and understand male-to-male desires, as to involve men, if we are truly to develop effective and sustainable HIV/AIDS prevention strategies amongst males who have sex with male.

P-032 REPRODUCTIVE HEALTH RISKS AND CONSEQUENCES OF UNDER AND OVERWEIGHT WOMEN IN URBAN POPULATION OF INDIA

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Body mass index (BMI) has become the medical standard used to measure overweight and obesity at the population level for adults. A number of factors have been identified as being related to lack or excess weight and many of these factors are also associated with adverse health outcomes. Several studies have reported that besides developed countries, obesity is now fast growing in many developing countries and the burden of obesity within countries is shifting towards groups with lower socioeconomic status (Manson J E, 2003; Monteiro et al. 2004). Under and overweight levels of young children and women are increasing rapidly in India and currently almost 7 percent of urban women are with obesity. Obesity during pregnancy is associated with increased risk of death in both the baby and the mother and increases the risk of maternal high blood pressure (Crawford SL, 2000), problems in labor and delivery including C-section delivery (UHFR, 2004). Being overweight may cause a girl to reach puberty at an earlier age and contribute to menstrual irregularities later in life. Higher risks of infertility have been found in both overweight and underweight women (Grodstein F, 1994), but to what extent being excessively under or overweight increases a woman's risk for infertility are unknown.
The paper examines the influence of under and overweight on reproductive system abnormalities, gynecological morbidity and fertility disorders in women in multi cultural urban societies in India. The data comes from the second phase of National Family Health Survey (1998-99) which provides a cross-sectional representative sample of ever-married women age 15-49 in India. For the first time in India, the survey includes information on women's reproductive health, and height and weight measurements. Multi level logistic regression was used to estimate the association between under and overweight and related reproductive health problems, controlling for age, gender, ethnicity, poverty status, and parental education level etc.
In this national sample, under and overweight women demonstrated an increased prevalence of

reproductive problems. Given the increasing numbers of under and overweight adolescent women and the known morbidities of reproductive system, these findings suggest the need to understand how and why the distribution of BMI is changing over various subpopulation groups of adolescents and adults and determine whether specific intervention efforts should be targeted at the more overweight adolescents and adults, who may be at the greatest risk of additional weight gain and subsequent reproductive health risks.

P-033 COMBATING FEMALE GENITAL MUTILATION IN THE NETHERLANDS

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Introduction: In 2005 a National Commitee addressed the following research questions for the Dutch government. This was done in close cooperation with two municipal health authorities (GGD-en).

1. How common is FGM in the Netherlands?
2. How can the legislation prohibiting this practice best be enforced?
3. What are the best ways to educate people and professionals in the interest of prevention?

Methodes and results (1th question): A study (survey amongt 1000 professionals and focus group discussions), carried out by the GGD of Amsterdam and Tilburg, indicated that, yearly, at least fifty girls are subjected to FGM in the Netherlands. This is probably an underestimated number as health professionals reported a lack of knowledge and skills to detect and treat FGM. Parents do not take to the most extreme form of FGM any more, but there is still a tendency to perform lesser forms of circumcision.

Methodes and conclusion (2th and 3th question): Based on extensive legal research the Commission concluded that the proposal of the Lower House of Parliament for mandatory annual check-ups for girls in high-risk groups was not feasible. Government can not force citizens to submit to a physical examination in order to detect FGM. The Commission proposed an alternative package of measures to improve surveillance and legal action:

- The augmentation of youth health care (YHC); every child under the age of 14 should be giving a yearly physical examination to detect a wide variety of healthcare problems.
- Obligation for the YHC to the Centre for Child Abuse and Neglect (AMK) if children are kept away from the check ups.
- Obligation for the AMK to report a suspicion of a case of FGM to the Public Prosecution Service (PPS).
- Obligation for all physicians and other medical staff to report any suspected cases of all forms of maltreatment (including FGM).
- The period of limitation for reporting this criminal offence should begin at the victim's eighteenth birthday, rather than at the time of the offence.

It takes education of ethnic groups and training of professionals to change behaviour and improve care. This should be coordinated at national level, but implemented locally. Key figures, religious leaders and organizations from the family's own community should get involved as well as the YHC, the GGD, healthcare professionals and police. The Commission recommends that this integrated approach should initially be tested in two pilot regions; Amsterdam and Tilburg.

P-034 PREVALENCE OF HIV, SEXUAL BEHAVIOUR AND MIXING PATTERNS AMONG MIGRANTS IN THE NETHERLANDS

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Introduction: Unsafe sexual behaviour among migrants may lead to spread of HIV and STI within migrant communities and to other groups. In the Netherlands, HIV surveys among migrants originated from countries with a higher HIV prevalence than observed for the Netherlands were conducted to assess the potential for HIV transmission.

Methods: In 2003/2006, cross sectional surveys were conducted in Rotterdam, Amsterdam and The Hague among migrants from Surinam, the Netherlands Antilles, Cape Verde and Ghana. Participants were recruited in social venues and meeting places. A questionnaire was administrated to determine

demographics and (sexual) risk behaviour. A saliva sample was collected for HIV antibody testing.
Results: In total, 2527 migrants were recruited (n=611 Rotterdam, n=799 Amsterdam, n=1117 The Hague). HIV prevalence was 1.1% (95% CI 0.2-3.5%) among Cape Verde migrants, 0.6% (95% CI 0.2-1.2%) among Surinamese, 1.2% (95% CI 0.5-2.7%) among Ghanaian and 0.3% (95% CI 0.05-1.0%) among Antillean migrants. Substantial sexual risk behaviour was reported, especially among men: Of the men and women, 10% reported unsafe sexual contacts with at least two partners in the previous six months. 17% attended an STI clinic in the previous 12 months and in 23% of these cases, an STI was diagnosed. Sexual contacts during visits in countries of origin in the past 5 years were reported by 25% of the respondents. Sexual mixing between different ethnic groups occurred more frequently in casual partnerships than in steady partnerships. Number of years living in the Netherlands, having casual partners and no visit to their home country in the past 5 years were independently associated with intercultural mixing in both men and women. Consistent condom use and anal sex practices were predictors of mixing in migrant men and reporting three of more partnerships was associated with mixing in migrant women.
Conclusion: Unsafe sex practices, concurrent partnerships, multiple partners and intercultural mixing are common among migrant groups. HIV prevalence at present is relatively low, though a substantial part of STI check ups were STI positive. Further transmission of HIV and STI is possible due to sexual contacts within and between ethnic groups in the Netherlands.

P-035 MIGRATING TOWARDS SEX WORK: PRE-SEX WORK MIGRATION PATTERNS OF FEMALE COMMERCIAL SEX WORKERS IN MANILA AND THEIR IMPLICATIONS ON THE DELIVERY OF URBAN HEALTH SERVICES

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This research characterizes the migration patterns of female commercial sex workers (FCSWs) in the City of Manila, with focus on their original place of birth or domicile, until their eventual entry into sex work as street-based women in prostitution. Thirty-six FCSWs were interviewed by trained peer-interviewers on their movements of domicile and related activities or circumstances that encouraged or 'forced' them into their current occupation. Results indicate that on the average, most FCSWs in Manila come from provinces that have low economic profiles. Nevertheless, the initial migration from their original place of birth or domicile was not directly motivated towards entry into sex work but to look for low-paying jobs as household helps or manual laborers. Poor living conditions, low salaries and traumatic events such as experiencing sexual abuse or physical violence from their original employer prompted movement towards Manila and their eventual engagement in prostitution. An interesting finding is that many FCSWs initially engaged in sex work after being encouraged by their Manila-based male partners who also act as their pimps. This research provides data that the migration towards the place current of sex work is indirect and is prompted by many other significant, albeit, non-ideal life events. Poverty is not the sole determinant of migration towards sex work. It is a result of a complex inter-webbing of many factors that spares some but creates an indelible mark on others. In terms of delivery of urban health services to this migrant population, the present research supports the need for a more holistic approach that involves partners and significant others. This could be made available through a coordinated provision of economic and social options towards a life outside of sex work, which the FCSWs themselves dream of.

P-036 ETHNIC DIFFERENCES IN BARRIERS TO SAFE SEX AMONG DUTCH YOUTH FROM PREDOMINANTLY URBAN AREAS

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To examine barriers to safe sex among Dutch, Surinamese and Antillean youth. In-depth semi-structured interviews were conducted with 203 heterosexual Dutch, Surinamese and Antillean males and females aged 14-24 years predominantly from urban areas. Participants were recruited online in internet chat rooms. Antillean youth appeared difficult to recruit online and were therefore additionally recruited at cultural events. Web cameras were used to visually ascertain the age and sex of the participants. Flexible content analysis, using four independent raters and individual open coding procedures, was used as the

analysis method. The Information Motivation Behavioral Skills model served as a theoretical reference for the interpretation of the results.
More than twice as many Surinamese and Antillean compared to Dutch participants, particularly females between 18-24 years, declared trust as their main barrier to condom use. Trust was manifested in three dimensions: trust created by exposure to the partner over time, emotional trust and trust in information provided by the partner. Other barriers to condom use were experiencing more physical pleasure from not using condoms and not having a condom at hand. The former was mentioned particularly by Surinamese and Antilleans between 14-17 years and the latter by Surinamese and Antillean females. A majority of Surinamese and Antillean males named lust as a strong sensation that overrides any rational intention for condom use. The main barrier for HIV & STI testing, particularly among females, was fear, of which we detected three themes: fear of test results, of the environment and the procedure. We found no difference in ethnic groups concerning this barrier. Other barriers were a lack of interest and laziness, which were mostly mentioned by Surinamese and Antillean males. Compared to Dutch participants, Surinamese and Antilleans lacked in the knowledge regarding testing locations, costs and procedures.
More females than males across all ethnic groups named barriers to communication about safe sex and HIV & STI testing. Females mostly reported slackness, their partner's unwillingness to communicate and shame.Most barriers regarding condom use and HIV &STI testing were mentioned by Surinamese and Antillean participants. With regard to sexual communication barriers we found no difference in ethnic groups. The barriers are used as themes in developing prevention modules for an online tailored safe sex intervention.

P-036a CHALLENGES IN PREGNANCY PREVENTION PROGRAMS FOR GIRLS IN HIGH RISK URBAN AREAS

S. Plichta, J.S. Goodman, K. Goodman, K. Adams-Tufts, M.A. Notarianni

This study seeks to explore the challenges in conducting pregnancy prevention activities with girls who live in high risk urban areas. 115 girls were recruited from inner-city community centers in a Southern city to participate in a multi-session pregnancy prevention program. Permission to attend was provided by parents/guardians. All participants were African-American, the mean age was 12.9 years (range
10-18 years)and 57% reside with their mother only (25% reside with both parents, 5% reside part-time with each parent and 13% reside with someone else). About half (52%) were in the 6th grade or lower; 51% reported getting mostly C's in school and 9% reported D's or failing. At baseline, 17% had prior sexual intercourse, 3% reported prior oral sex, 10% had been forced to have sex at least once and 8% had experienced dating violence in the past year. The pretest knowledge of pregnancy and STD prevention was poor (mean score on a knowledge quiz was 47%), a substantial minority (29%) had low self-esteem, but most (80-85%) felt they had the confidence to avoid intimate situations and to tell a partner 'no'. Challenges to program implementation included a low level of knowledge and lower literacy. One strength of this approach is that only a minority of the girls had initiated sexual activity. Programs need to address issues of violence.
Further, they should build on the girls' confidence and help them to increase their knowledge and self-esteem through an interactive approach that is not literacy dependent.

P-037 MORTALITY AMONG BOSTON'S ROUGH SLEEPERS: A SIX YEAR OBSERVATIONAL STUDY, 2000-2005

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Purpose: Rough sleepers are a subset of the homeless population who live on the streets and avoid shelters. Little is known of the health care needs of this elusive population. The multidisciplinary Street Team of the Boston Health Care for the Homeless Program (BHCHP) has provided direct care services to the urban street dwellers for over a decade and have attempted to decrease as well as describe the mortality of this at risk group.
Methods: A six-year prospective study of 119 high risk chronically homeless rough sleepers was undertaken in January 2000. Criteria for inclusion in this cohort include age over 18, living on the streets for at least

six consecutive months, and one or more of seven identified risk factors. Data sources, including BHCHPs electronic medical record, medical records at two academic teaching hospitals, a supplemental Palm Pilot street database, and death certificates, provide the team with data about the cohort's burden of illness, service utilization, housing disposition, and causes of death.
Results: After six years, the whereabouts of all but 5 individuals was known. 37 (31%) persons died: 7 cirrhosis, 4 alcohol or drug overdose, 7 cancer, and 4 AIDS. Another 15 (13%) are currently in health care facilities (hospitals, respite care, and nursing homes), while 3 are incarcerated. Over a third (34%) of this population transitioned to housing during these years of intensive care management.
Conclusion: Rough sleepers represent a vulnerable subset of the homeless population who suffer complex and chronic medical, psychiatric, and substance abuse problems and have extraordinarily high rates of morbidity and mortality. Improvement in the identification of those at risk and improved coordination of care may help reduce mortality and improve health status in this vulnerable population.

P-038 TO WHAT EXTENT DO THE URBAN ELEMENTARY SCHOOL FACULTY AND STAFF INFLUENCE THE DIAGNOSIS AND MANAGEMENT OF ATTENTION-DEFICIT/HYPERACTIVITY DISORDER (ADHD) IN STUDENTS?

M. Gregory (UMDNJ, New Ark, United States of America)

Introduction: The main objective of this study was to examine the extent of influence that urban elementary school faculty and staff have in the diagnosis and management of ADHD in students. Research of ADHD has recently revealed that amphetamines and methylphenidates have become the most popular treatment method prescribed to children given this diagnosis.
Theoretical Framework: ADHD is not a newly discovered disorder, nor has it been neglected in academic research. However, there is very little information known regarding the social and cultural determinants of the disorder. Case studies that have attempted to answer these questions have been predominantly quantitative in nature. This study attempts to answer some of these questions using a mixed methods approach. The data collection will be done using mostly qualitative techniques.
Methods: An extensive literature review was conducted using scholarly journals as well as a medical data base. The National Health and Nutrition Survey (NHANES) is a government data base that will provide the data for this study. SAS statistical software will be used to compute correlates and multi regression results. In addition, qualitative interviews taken from elementary school faculty, staff and parents in two urban schools located in Bayonne, New Jersey. Ethnograph qualitative software will be used for coding of qualitative data and analysis of constant themes. Due to the mixed method style of this study, Ethnograph was the best qualitative software choice as it is quantitative (SAS) friendly.

P-039 INCIDENCE OF PARASUICIDE IN VARIOUS ETHNIC GROUPS IN THE HAGUE

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Introduction. Disproportionately high rates of (para)suicide in a community are probably a signal of serious collective social-emotional problems within a group. For immigrants it may indicate the presence of social or cultural conflict situations.
A previous study (1987-1993) in The Hague, points out that rates of parasuicide in Suriname girls and young women (most South Asian) of 15-24 years of age are about three times higher (650-700 per 100 000) than in the same age-group in the native population (200-250 per 100 000). Slightly less remarkable results were found for the Turkish girls and young women of 15-24 years, and Moroccan girls of 15-19 years of age. In dialogue with the ethnic minorities in The Hague, several prevention efforts have been taken. Also a qualitative study on psychosocial well being of thirty South Asian young women has been carried out and some results will be presented.
Methods. In 2000 a case register study was conducted again in order to collect more recent data. At request of the Municipal Health Service, the emergency department of the mental health organization in The Hague produced data on sex, date of birth, ethnicity and date and method of suicide attempt of

all patients they contacted after parasuicide. Additionally, psychiatrists of the psychiatric department of the general hospitals were asked to report about the cases of a parasuicide of inhabitants of The Hague admitted to their hospital.
Results. The results of this study (2000-2004) confirm the common knowledge that parasuicide rates are higher among females and that the age group being most at risk are females between 15 and 24 years. However the major finding of this study is the highest incidence of parasuicide among Turkish young women: 404 / 100 000 a year in the group aged 15-19 years and 666 / 100 000 aged 20-24 years. As found earlier (1987-1993) the incidence of parasuicide among Surinamese females aged 15-24 years is still high compared with the same Dutch group. In contrast to the previous study this study shows no a high risk among Moroccan girls aged 15-19 years.
Conclusion. This study emphasizes the need for further studies on risk factors and possible preventive efforts. For the Turkish females (15-19 aged) a qualitative research has been started recently in order to understand needs, gender roles and cultural and social expectations within this group.

P-040 POSSIBILITIES AND IMPOSSIBILITIES IN POPULATION-BASED RESEARCH ON MENTAL HEALTH IN ETHNIC MINORITIES

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In Amsterdam, like other major western cities, about 50%of the population has a non-Dutch ethnicity. The largest minorities are from Morocco, Turkey and Surinam. Health research among these ethnic groups is hampered by high nonresponse rates. Language problems, lack of validated questionnaires (especially in research on mental health) and cultural differences are complicating factors. . As a result, no reliable information is available on the prevalence of psychiatric disorders among these groups in the Netherlands. In order to provide these estimates, a follow-up study of the Amsterdam Health Monitor was undertaken. This follow-up study focused on mood and anxiety disorders in different ethnic groups in Amsterdam and the care consumed by the patients. By linking the study on mental health to a study on somatic health, was expected to have a positive effect on the response rates.
Methods: Several other efforts were undertaken to improve the response and validity of the provided data: cultural, lingual and gender matching of interviewers, intensive training and guidance of interviewers, interviews at the respondents home, interviews planned at a clear date and time, taping of the interviews, use of validated questionnaires when available, including the CIDI. The questionnaire focused on mood and anxiety disorders, risk factors (such as discrimination, acculturation, socio-economic status, etc), and health care use.
Results: This resulted in a response rate that was higher than in previous research. The overall response rate in the Amsterdam Health Monitor was 45%. Of all these respondents information on mental health screening scales is available. In the second phase, the response rate was 72%. There were no major ethnic differences in response rates. In total, 812 respondents participated; of which 312 Dutch, 231 Turkish, 191 Moroccan, and 87 Surinam/Antillean. There were no indications for a selection on mental health or general health in the response of the second phase. All results will be weighted by age, gender and ethnicity according to the Amsterdam population.
Conclusion: Population based research on mental health in a city where a large part of the population is of non-Dutch origin is feasible, when the researchers pay attention to language difficulties, interviewer-capacities and approach of respondent.
We would like to share our experiences with other researchers, from other cities, with other populations.

P-041 STUDY OF VIOLENCE AND WOMEN`S HEALTH, CASES REPORTED FROM MUNICIPAL AREA AT YASHWANTRAO CHAVAN MEMORIAL HOSPITAL, PIMPRI,PUNE

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Introduction: Urban population is heterogeneous in nature having complex problems of industrialization, migration, slums, housing conditions, pollution and lack of health care delivery system.

In urban areas also violence on women is severe, widespread, forms a large burden of illness and has a serious impact on women's health. Violence against women is the most pervasive yet least recognized within health sector.
Methods:
1) A study was undertaken to assess the magnitude of violence against women that reaches a central public hospital of municipal corporation areas.
2) A retrospective analysis of cases of violence reported by women over 15 years of age during July 2003 to June 2004. The nature of injury and causes of injury were analyzed for its co-relation with violence.
3) Analysis of census report 2001 of Pimpri-Chinchwad Municipal Corporation.
4) Analysis of causes of death of women 15-34 yrs. in Maharashtra State 2001.

Results:
* Causes of death among women in Maharashtra state (Rural) age 15-34 yrs. in 2001 were due to violence contributes to 25.37% of all death in the reproductive age group.
* Present study reveals total 1335 cases of violence reported by women over 15 yrs. of age during July 2003 to June 2004.
* Assault (physical injuries) forms major part of reported cases of violence is 55.33%.
* 13.85% cases of poisoning were reported in one year.
* Accidents other than road traffic accidents were reported 13.40% and other injuries were reported 11.08%, which could be possible, cause of violence.
* Burns cases reported 5.91%
* Pimpri-Chinchwad Municipal Corporation urban population has sex ratio 864 females per 1000 males.

Conclusion: Violence is serious public health issue affecting women's health. It needs special attention.
Decrease in sex ratio of females indicates women face violence right from before birth.
Present study during July 2003 to June 2004 reveals that total 1335 cases of violence reported by women. It indicates that 3 to 4 cases of violence reported per day. It is the tip of iceberg. Unreported and hidden cases of violence may be more prevalent in community. Social structures where women are economically dependent on men also tend to have higher level of gender violence.
Physician should suspect possibility of gender-based violence in cases of women visiting to clinic. He/She can play a significant role in early recognition of cases to reduce morbidity and mortality due to violence against women.

P-042 ETHNIC DIFFERENCES IN BIRTHWEIGHT AND PRETERM BIRTH: RESULTS OF THE AMSTERDAM BORN CHILDREN AND THEIR DEVELOPMENT STUDY.

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Introduction: To determine whether ethnic differences in birthweight and preterm birth exist, and to what extent these differences can be explained by relevant determinants.
Methods As part of the prospective multi-ethnic Amsterdam Born Children and their Development (ABCD)-study, differences in birthweight (> 37.0 weeks of gestation) and preterm birth between immigrant's and Dutch newborns were analyzed using respectively multivariate linear regression and multivariate logistic regression. Analyses were adjusted for physiological (gender, maternal height, weight, age, parity, hypertension and vaginal problems) and environmental factors (education, marital status, smoking, alcohol use, depression, work stress). Only singleton deliveries were included (n=7494).
Results: All immigrant groups had on average smaller babies than the Dutch group. After adjustment the Surinamese, Antillean and Ghanaian newborns were smaller (B (SE): -97.7 (24.7); -114.1 (48.9); -133.4 (37.9)), the Turkish newborns were heavier (B (SE): 57.5 (27.7)), and the Moroccan newborns had a similar weight (B (SE): 8.9 (22.2)) compared to the Dutch newborns. The physiological factors were mainly responsible for reducing the differences in birthweight. The adjusted risk for preterm birth was higher in the Surinamese (OR: 1.8, 95% CI: 1.3-2.7), Antillean (OR: 1.9, 95% CI: 0.9-4.0) and Ghanaian (OR: 2.7,

95% CI: 1.6-4.7) groups compared to the Dutch group. The Turkish and Moroccan groups did not have a higher risk on preterm birth.
Conclusions: We conclude that birthweights and preterm births differ among ethnic groups, which is mainly explained by physiological determinants. The Surinamese, Antillean and Ghanaian newborns are at higher risk for low birthweight and preterm birth.

P-043 STRESS AND MOOD DISORDERS DURING PREGNANCY AND EXCESSIVE INFANT CRYING

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Objective: To determine the association between stress and mood disorders during pregnancy and excessive infant crying.
Methods: Prospective cohort study of pregnant women living in Amsterdam, the Netherlands, and attending obstetric care providers for their first antenatal visit. From an initial sample of 8,267 pregnant women, a follow-up sample of 5,009 women and their 3-5-month-old babies was examined.
Results: Depressive symptoms, pregnancy related anxiety, parenting stress and job strain during pregnancy were all univariately and multivariately associated with excessive infant crying (adjusted odds ratios between 1.66 and 2.18). Women with 3 or 4 of these antenatal risks were the most likely to have an excessive crying infant (21.4%) and women with no antenatal risks were the least likely (2.8%), with an adjusted odds ratio between these two groups of 4.87.
Conclusions: Stress and mood disorders during pregnancy enhance the chances of giving birth to an excessive crying baby. Especially women with multiple antenatal risk factors are at greater risk.

P-044 USING 'PERINATAL PERIODS OF RISK' TO MEASURE HEALTH EQUITY

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Introduction: U.S. infant mortality (IMR) increased in 2000 for the first time in nearly 50 years. Local health departments and their community partners have relied upon traditional analyses of vital statistics to assess this disproportionately urban challenge. U.S. health disparities commonly are defined by race; 'success' is when black infant survival equals white. With increasing IMR, including among whites, urban communities are asking: Is eliminating the Black-White gap sufficient?
Methods: CityMatCH has worked with the CDC and others since 1997 to validate, apply and evaluate the Perinatal Periods of Risk Approach (PPOR) as a community-based means for addressing perinatal health. Phase I PPOR analysis examines feto-infant mortality (FIM) by age at death and birthweight; communities sort FIM events into four 'periods of risk' within the PPOR matrix. Local FIM rates overall and within each period of risk are compared with selected reference group(s) whose current outcomes are optimal. Rate differences and estimates of excess deaths are based on an equity question: why can't all babies experience similar best outcomes as some already are? This Phase I 'opportunity gap' drives targeted inquiry using PPOR Phase II methods (cause of death, fetal-infant mortality review, Kitagawa analyses, health systems review). Community-driven solutions are based on new understanding of perinatal data. We examined the 'opportunity gap' for U.S. cities overall using NCHS data and for localities participating in CityMatCH practice collaborative activities since 2000 to identify patterns and trends in perinatal disparities.
Results: Using a U.S. reference group of white mothers age 20+ and 13+ years education, all cities found widest opportunity gaps and greatest excess deaths in the Maternal Health/Prematurity [MH/P] (<1500g or very low birthweight [VLBW]) period of risk for both blacks and whites, albeit higher among blacks. The MH/P disparities are driven by birthweight distribution. Most practice collaborative cities had similar findings using local reference groups. Understanding the distribution of excess deaths and underlying causes shifted has empowered multiple urban communities to shift focus to preconception health. Redefining disparity in terms of the gap between observed vs. actual best outcomes also shifted community goals from only eliminating black-white differences to achieving equity for all infants.
Conclusion: Reframing IMR and its disparities in terms of equity and social justice through PPOR is empowering U.S. cities to better address health disparities, target subsequent investigations, and shift emphasis to women's health prior to pregnancy.

P-045 URBAN HEALTH-CURRENT ISSUES AND HEALTH SCENARIO:GUJARAT (A STATE OF INDIA) PERSPECTIVE

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Introduction: With increased industrialization, urbanization& migration in Gujarat, urban populatio has increased(37.67%).Provision of assured and credible primary health services of acceptable quality in urban slums has emerged as a priority thrust area for the state govt.Focus till now has been on development of rural health sytem having three tier health delivery structure and no specific efforts have been made to create a well organized health infrastructure in urban area especially for poor people living in slums.
Methodology:Multi-Indicator Cluster survey in urban slums and rural areas of Gujarat state.
Results: BCG coverage 63% in urban slums while 84% in rural area.DPT3 coverage 57.3% in urban slums and 77% in rural areas.30.2% children were fully immunized in urban slums and 57% children found to be fully immunized in rural area. 43% of Dipthteria cases from urban areas.75% of Measles cases were from rural area.Health Problems in Urban areas result from overcrowding residential areas and air pollution, Migration of poulation results in slum like conditions which increases burden on the municipalities for providing basic preventive services to mothers and children such as immunization, maternal care and nutrition.
Conclusion: Urban Health is a growing need,so urban health infrastructure should be strengthened. Linkages and coordination between health networks of district panchayat and municipalities should be formalized.Municipalities are required to be strengthed with additional manpower for outreach services.

P-046 UTILIZATION OF PRIMARY HEALTH CARE SYSTEM - CASE STUDY ON THE URBAN SLUMS IN JAIPUR

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The Government has invested significant amounts of money to create a comprehensive primary health care system. While in principle the primary health care applies the same principles in both rural and urban population, the urban situation has certain special features that need to be considered, including rapid population increase, a high concentration but limited accessibility of health facilities and services, and the diversity of urban communities. Even though the system is supposed to be working similarly both in the rural and urban areas, our hypothesis is that the poorest urban residents are not benefiting from this system. According to a study made by N.K. Singhi there is a little thinking about urban poor in Jaipur area while planning services for the urban population. Left outside the primary health care the urban poor suffer from bad health and thus their right to live is endangered. The main questions this study wants to answer are:

1. What primary health care services are available in the urban slums?
2. How the health care services are utilized?
3. How the primary health care services provided by the government could be improved?

The main outcome of the study is this Study Report which includes a review on related literature, an introductions of the current primary health care systems in the rural and urban areas, an assessment of the availability of the primary health care services in the urban slums as well as an assessment of the level of awareness the residents of the urban slums have on the services available in their living area. The Study Report also provides a general description of the most common health and reproductive health problems of the residents of the urban slums and of their economic impact on the residents. Based on the primary and secondary data some conclusions and general recommendations are made in order to improve the current primary health care system in the urban slums.

P-047 WHY 'MEDICAL HOMES' ARE IMPORTANT: FINDINGS FROM THE OHIO FAMILY HEALTH SURVEY

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While considerable attention has been given to expanding health insurance coverage in the United States, less has been accorded to facilitating 'medical homes,' which we define as a usual source of care, other than a hospital emergency department, and making the structural and policy changes to encourage their use. This study analyzes findings from the 2003-04 Ohio Family Health Survey (OFHS), a telephone survey

of nearly 40,000 households throughout Ohio, to delineate the prevalence and distribution of children and adults who have no medical home, and to determine the effect on health care utilization and health status.
The OFHS collected information about individual and household demographic and socioeconomic characteristics, health insurance coverage, access to care and financial burden, utilization of health care services, chronic conditions, current health status, personal risk factors, and unmet health care needs from an adult in the household. When the household included one or more children, similar information was collected from the adult about the child with the most recent birthday. The sample design of the OFHS includes stratification and over-sampling of selected counties, as well as over-sampling of African-American households across the state, and households with children and Hispanic households in selected urban counties. Census tracts are identified for most respondent households. We used logistic regression to identify the demographic, socioeconomic, environmental, and other geographically-linked determinants associated with having a medical home, as well as determine correlates, including health care utilization, health risk behaviors, unmet health care needs, and health status, while controlling for predisposing and enabling characteristics. As Ohio has a large (11.4 million) and diverse population, findings should have relevance elsewhere.
In summary, a number of demographic and socioeconomic factors influenced the likelihood of having a medical home, but clearly health insurance had the most impact. We found that medical homes appeared to reduce unmet needs and emergency room (ER) visits, and lead to improved quality of care, even when respondents had health insurance. Clearly, we must continue to emphasize universal coverage, but encouraging medical homes will improve health outcomes in the mean time.

P-048 HEALTH SITUATION OF ASYLUM SEEKERS AND REFUGEES HOUSED IN FRENCH NATIONAL ACCOMMODATION SERVICE

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The national accommodation service includes 237 structures called « CADA » dispatched in the whole french territory. Medical take-in charge of asylum seekers, singles and families is enforced by local GPs. Every CADA profits of a social team whose main purpose is to fulfil asylum seekers social coverage.
The population housed in CADA is not representative of the applicants of asylum globality : european-origin people (ex-USSR and ex-Yugoslavia) are most numerous, but sub-saharan africans are proportionally sicker. Unspecific pathologies (digestive, cutaneous, ORL etc.) are most numerous. Health situation is strongly improved during the stay in CADA. Tuberculosis prevalence is high at the entry. It is significantly reduced during the time of stay. Mental pathologies or disorders, and at lower degree handicaps, constitute two important and specific problems. Except for these concerns, housing in CADA brings to asylum seekers an important improvement of their health, as well for the care of their diseases itself as for the prevention, especially vaccinations, and a significant improvement of their social coverage either. It is confirmed as the question of the psychological diseases and disorders, whatever their matters, is likely the greater concern in this population, especially because of the absence of solutions of care. This study made it possible to improve appreciably and to refine knowledge about the medical situation of the applicants of asylum. However, the medical supervision set up by the ANAEM as an element of national accommodation service since 2003 shows both relevance and quality.

P-049 EXPLORING AND ORGANIZING PATTERNS OF HOSPITAL PROVISION FROM THE STANDPOINT OF LOCATION IN SHIRAZ, IRAN: A GIS-BASED STUDY

S Darabi (Shiraz University, Tehran, Iran)

Introduction: Health care has an effective role on the citizens' welfare. Regarding this issue, Shiraz city (capital of Fars province) in the southern part of Iran has some problems for hospital provision throughout the city. In spite of the unsuitable land uses which are in the vicinity of hospitals (e.g. small industries, …) ,the major problem is the concentration of hospitals in the northern part of shiraz for economic and political reasons such as low land value and historical tendency. Therefore, the concentration creates

problems for the main part of the city such as lack of the necessary and immediate hospital care for the major population of city who are settled on the eastern and southern parts of the city. The main objective of this research is to identify underserved areas on the basis of central place theory (Christaller, 1933). For this purpose GIS technique is applied for standard catchment area for each existing hospital and finally, identifies suitable zones for future public hospitals in underserved areas.
Methodology: In order to evaluate the existing location of a hospital or to prepare a new hospital site location, this research has captured six major maps (GIS Coverages) and then added to them their relevant attribute (non-spatial) data. The non-spatial data which are linked to those coverages include the hospitals size (capacity), 47 districts of population density and 34 districts of land value in the city which are provided by Shiraz University, noise and air pollution zones on the basis of standard criteria. In addition, locations of existing green spaces (like parks) and high ways are applied on base map which each of them had standard buffers for hospitals. All of these data are then used for the modeling process of hospital accessibility.
Results: First of all, ARCVIEW software identifies underserved areas by bed index (a = 1.5 / 1000 person) and number of beds for each existing hospital which shows southern and eastern parts of the city are out of hospital service area. Then, the second step is weighting factors (6 factors mentioned above) with AHP process in the Model builder extension of Arcview. The model portrayed the classification of zones for future hospital locations.
Conclusion: These zones have fairly equal geographical access to people in the underserved areas and so have benefits for investors and users because of consideration of six factors introduced above.

P-050 FROM PUEBLA TO EAST HARLEM: SERVING THE HEALTH CARE NEEDS OF NEW YORK CITYS EMERGING MEXICAN COMMUNITY

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With 11% of the U.S. foreign born and projections rising to over 14 % by 2010, newcomer populations bring numerous health care challenges. Although Mexican immigration to bordering American states has been widespread for well over a century, New York City (NYC) did not encounter this wave until the late 1990's. In 1998, a primary care clinic, part of NYC's public hospital system, located in the predominantly Puerto Rican and Dominican enclave of East Harlem, began greeting Mexican families. As this population grew and found their way to this health center, it became clear that its staff was unprepared to offer the highest quality of health care to them. Familiarity with Mexican heritage, cultural/health issues and expectations was critical; to fulfill this, the clinic found a willing mentor and ally in New York's Mexican Consulate. Over the next few years, the Consulate, Casa Puebla (a NYC-based organization representing some 40 Mexican agencies) and the site sponsored a rich and varied series of inreach as well as community health education and outreach events. In addition, the Consulate arranged visits for the clinic's medical director, to California's La Clinica de la Raza and Chicago's Alivio Medical Center (both serving Mexicans), and the National Institutes of Health in Mexico City. First hand knowledge and understanding was brought back to East Harlem. By hearing how rapid migratory transitions from the sparse villages of Puebla to the frenzied, urban pace of NYC represented a disruptive process causing anxiety and depression, such mental illness in these patients was appreciated. Learning about the lack of preventive medicine, roles of traditional medicine, stoicism and exceedingly long wait lines at Mexico's public hospitals, expectations were clarified. Witnessing the sudden epidemic of obesity and discovering that asthma was relatively rare and mild in Mexico were helpful in assessing trends in NYC. By 2002, the Mexican population in NYC surpassed ¼ million, and nearly one-third of the East Harlem clinic population was Mexican. An active clinic- Consulate partnership continued, and in recognition and celebration of these newest New Yorkers, the facility was rededicated and renamed La Clinica del Barrio. With nearly one million Mexicans currently residing in NYC, 'La Clinica' continues to thrive, responding to the needs of this growing community.

P-051 INCREASING MINORITY INVOLVEMENT IN DISABILITY AND REHABILITATIVE RESEARCH

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Introduction: Disability research, outreach, and education are fast growing areas in health service research. Texas Southern University's College of Continuing Education's Center for Minority Training and Capacity Building for Disability Research (The Center) was founded to increase the number of people of color successfully engaged in the fields of disability and rehabilitation research. In collaboration with Baylor College of Medicine, the Center was designed to recruit, train, and mentor scholars of color with an expressed goal of increasing private Historically Black Colleges and Universities (HBCUs) capacity to conduct independent research while developing pedagogy in the areas of disability and rehabilitative research.

Objective: The Scholar/ Champion Research Training Project is designed to enhance scholars at small HBCUs potential to work as change agents for capacity building within their home institutions. Thus, we hypothesize that participation in the Scholar/ Champion Project will enhance the abilities of scholars at HBCUs to develop research proposals and manage grant funds. More specifically, the goals of the Scholar/ Champion Project are to: (1) enhance the ability of minority researchers and institutions of higher education to identify and overcome barriers to conducting disability and rehabilitative research; (2) provide technical assistance to those researchers and institutions applying for disability and rehabilitative research funding; (3) supply training and information on emerging disability and rehabilitative issues and related research efforts; (4) encourage collaboration between minority and majority researchers interested in or involved in disability and rehabilitative research; and (5) create an awareness of the need for disability research for minorities who are disabled.

Methods: This project funded by the U.S. Department of Education's National Institute of Disability and Rehabilitative Research. The overarching goal of the Scholar/ Champion Training Project is to increase research capacity and build an institutional infrastructure that is accommodating to facilitating sponsored programs via a train-the-trainer model. Project participants are made up of five faculty members from various private HBCUs in Texas. Study is progress.

P-052 HEALTH PROMOTION FOR COMMUNITY-DWELLING ELDERLY: PROS AND CONS OF A PREVENTIVE HEALTH CENTRE FOR THE ELDERLY

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Introduction: The increasing number of elderly has important consequences for our society, not only for economic outcomes, but also for medical outcomes. The particular increase of the number of older people from the ethnic minorities, elderly with a low socioeconomic position, and the eldest elderly amplify this problem, since these groups have higher risks on chronic diseases, disability and diminished quality of life. National and local stakeholders in the Netherlands have pleaded preventive health centers for the elderly. At some places these centers have been established. However, there is no evidence that these initiatives are an appropriate solution to the described problem, in terms of costs, effects, acceptance and feasibility. The present study will answer the following questions: What are the health needs and demands of elderly that we have to meet (including somatic, psychological and social issues)? Which of these can be met with some kind of preventive care? What type of preventive care is most appropriate for the elderly, especially for people with a low socioeconomic status, older migrants and elderly with a chronic disease? What are the pros and the cons of a preventive health centre?

Methods: The first stage of the study consists of a needs assessment, using the technique of Intervention Mapping. Main instruments will be literature review, questionnaires, focus group interviews and in-depth interviews. This stage will also give insight into the question which preventive strategy or strategies is/are most likely to be successful. In the second stage a pilot study will be performed in order to evaluate the various ways in which preventive strategies will take into account which (subgroups) of the elderly are best reached with specific preventive interventions. In addition, barriers to implementation on personal, financial and organizational level will be studied.

Results: Each phase of the study will result in products like manuals for conducting the Intervention Map-

ping study, knowledge of factors to be addressed to reach specific target groups, up-to-date and state-of-the-art reviews on effectiveness of preventive interventions on selected topics in elderly, and an evidence-based balance of pros and cons of the most often applied intervention strategies based on a pilot study comparing three strategies.
Conclusion: This study will give more insight into models for evidence-based strategies for preventive healthcare services for older people, which can be used by other Municipal Health Services to develop or stimulate preventive care for the elderly.

P-053 FUTURE PROJECTIONS OF HEALTH PROBLEMS AMONG THE POPULATION OF UTRECHT AGED 20 YEARS AND OLDER

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The aim of our project is to gain insight into the present en future demand for primary health care of the citizens of Utrecht, the fourth largest city in the Netherlands. The local authority of Utrecht uses this information to evaluate whether the supply of primary health care is sufficient. Furthermore, care providers can use this information to adapt their specific supply to the demands of the population. A substantial part of the demand for primary health care is caused by health problems. Therefore, the Municipal Health Service Utrecht (GG&GD Utrecht) and the National Institute for Public Health and the Environment (RIVM) investigated the present and future health status of the population of Utrecht. Information about the prevalence of health problems is obtained from local health surveys of the Municipal Health Service Utrecht from 1995 to 2003. We estimated future prevalence of health problems by applying demographic (gender, age and ethnicity) projections until 2015 and 2020 and by studying changes in the health situation of the population in the past (epidemiological trends). Because of the construction of a new district in Utrecht, its population will increase until 2015 by 30%. Consequently, the prevalence of all investigated health problems will increase in the future. However, demographic projections indicate a relatively large increase of stress, depression, anxiety, allergies, cold/sinusitis and diabetes. In contrast to the rest of the Netherlands, the population of Utrecht is not ageing. Therefore, the increase of health problems with a high prevalence among 20-55 year olds will be relatively large until 2015. Between 2015-2020 demographic projections show an increase of 65-79 year olds. In this period a larger increase of geriatric diseases like diabetes, high blood pressure and arthrosis is expected. Based on epidemiological trends, the prevalence of mental health problems, diabetes and high blood pressure will increase even more in the future. There is an increasing trend of depression and stress in Utrecht. The increases of diabetes and high blood pressure will be the result of an increasing trend of overweight. The occurrence of diabetes and mental health problems will also be influenced by earlier detection of and more familiarity of the general public with these health problems. Future projections of health problems are feasible and useful. They add additional information to cross-sectional studies. The relatively large increases of mental health problems, diabetes and high blood pressure have implications for the primary health care organisation in Utrecht.

P-054 HEALTH STATUS AND HEALTH SERVICES UTILIZATION AMONG OLDER CHINESE IMMIGRANTS IN NEW YORK CITY

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Introduction: Older immigrants present a growing challenge to policy makers concerned with optimal resource allocation to promote healthy aging in urban neighborhoods. Among the many complex and multidimensional health issues facing immigrants, those related to access to services and health care coverage are the most pressing. Yet, it is striking how little is known about health care access and utilization patterns among Asians, who comprise the fastest growing immigrant population. This paper will report results from the first population-based assessment of health status, utilization characteristics, and health care access of Chinese immigrants in New York City (NYC) as they differ by age.
Methods: Data are from a NCI-funded longitudinal study that involves a multi-stage sample of Chinese immigrants residing in two communities in NYC. In-person household-based interviews were conducted with 2,537 adults aged 18-74 years, constituting the largest probability-based sample of Chinese immigrants,

focused on health, in the US. Bivariate and multivariable logistic regression analyses were conducted to examine the relationship between younger and older Chinese adults and the outcome variables of interest, including aspects of health status, utilization patterns, and access to care.
Results: Our study demonstrates sharp differences by age. Older (age 55+) vs younger adults were more likely to be less educated, unemployed, less acculturated, and have annual incomes of less than $10,000. Furthermore, older vs younger Chinese adults were also more likely to report poor health status (47% vs 29%; p< .001) and significantly more chronic conditions, including diabetes and heart disease. By contrast, smoking prevalence decreased with age and measures of access to care improved. Age-specific analyses indicated that the observed differences of the effects of demographic characteristics, acculturation measures, and insurance status varied across younger and older Chinese immigrants. For example, several demographic and economic predictors, including gender, marital status, and educational status were significantly associated with having health insurance for younger Chinese adults. Yet among older adults, the only independent effect on health insurance was the proportion of time in the US: increased time in the US was associated with greater odds of having insurance.
Conclusion: As new immigrant populations age, it becomes increasingly important to understand and address the complexity of social determinants of healthy urban aging. Our findings can inform public health practice targeting effective health initiatives among urban immigrant populations over the lifespan.

P-055 PREPARING PHYSICIANS FOR POPULATION MOBILITY IN A GLOBALIZING WORLD: A QUALITATIVE ANALYSIS OF MIGRATION HEALTH EDUCATION IN THE MCMASTER UNIVERSITY MD PROGRAM

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Introduction: Global human migration to, from and between Canadian cities continues to create new and diverse health care challenges. As a result, Canadian medical schools also face a new challenge: to prepare future physicians to understand and address the complex relationships between population mobility, clinical care, and urban population health. Critiques of existing medical curriculae have identified the need to better equip physicians-in-training for the transnational clinical encounters that occur as a result of population mobility. At least one new set of transnational competencies for clinical curriculae has been elaborated (Koehn, 2005). Some medical educators (Frank & MacLeod, 2005) - speaking to the need to engage medical students in the complexity of difference, marginalization and health inequalities - advocate a critical, 'insurgent' approach in which carefully considered pedagogical strategies inform curricular substance, with the integral support of institutional language and policy. How are Canadian medical schools beginning to face the challenge to develop pedagogy and curriculae that attend to the unique intersections of migration and health? This qualitative analysis will explore migration health education at one Canadian medical school, McMaster University's Undergraduate MD Program. McMaster is part of the urban community of Hamilton, Ontario, which receives the third largest number of immigrants to Canada each year, after Toronto and Montreal. McMaster's MD Program, world-renowned for its innovation in medical education, is currently introducing the new COMPASS curriculum, and continuing to attract medical students from a diverse range of undergraduate disciplines and professional backgrounds.
Methods: This paper will present a critical review of the literature on migration health and medical education, applied to a critical review of the new McMaster MD Program curriculum. Data collection and analysis will take place in July-August 2006.
Results and conclusions: Discussion of results will problematize and raise new questions about the integration of migration health into medical education at McMaster University, as well as other Canadian institutions.
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P-056 THE REPRODUCTIVE HEALTH NEEDS AND HIV/AIDS-RELATED KNOWLEDGE AND PRACTICES OF STREET DWELLERS IN MANILA: IMPLICATIONS TOWARDS EFFECTIVE URBAN HEALTH SERVICE DELIVERY TO A MIGRANT POPULATION

G.V. Ferrer (University of the Philippines, Diliman, Quezon City, Metro Manila, Philippines)

Introduction: Homelessness is growing urban health concern that has remained under-studied and under-addressed in many parts of the world primarily because it involves migrants. This research aims to identify the reproductive health needs and HIV/AIDS-related knowledge and practices of street dwellers in the City of Manila.

Methods: Semi-structured interview interviews of 462 street dwellers from various districts in Manila were utilized in this pioneering study on a subgroup of migrant populations. The research approach combines qualitative and quantitative strategies to characterize the current state of knowledge and practices of street dwellers in the context of HIV/AIDS.

Results: Findings show that in terms of their overall needs, health needs were not identified as a primary concern by the street dwellers. Related to this, when directly asked to identify their health needs, a full 27 percent of street dwellers interviewees claimed to have none. For those who did identify health as a concern, needs specifically related to reproductive health were not of prime importance. Not a single respondent claimed to have had an STI. This could be due to their very low level of knowledge of STI symptomatology in general. The risk for STI exposure is, however, evident because more than 60% have or have had sexual partners. Condom use was less than 5%. Additionally, this was inconsistently practiced and only when their partner is a sex worker. The urban street dwellers still hold many wrong beliefs related to HIV/AIDS transmission and treatment. These beliefs include AIDS being a disease that affects only male homosexuals, that AIDS already has a cure and that it could be transmitted through casual contact such as through kissing, hugging or sharing of eating utensils.

Discussion: The very low level of correct knowledge on HIV/AIDS among urban street dwellers implies a need for specific programs to reach this highly mobile group. Utilizing strategies in grassroots level AIDS education may work towards improving their current state of knowledge and lessening their risk of transmission. To promote better service delivery to this migrant population subgroup, the current research also identifies areas and strategies to increase access to the urban street dwelling groups in developing country contexts.

P-057 OCCUPATIONAL HEALTH HAZARDS IN URBAN HOME HEALTH CARE WORKERS

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Introduction: Home healthcare is the fastest growing segment of the healthcare industry with nearly one million current employees and an anticipated growth rate of 40% over the next 8 years. Given the density of patient populations in urban settings, home healthcare growth is proportionally greater in cities. Along with rapid industry growth, the acuity of care in the home healthcare setting is increasing, potentially putting these workers at increased risk for workplace injuries/exposures. Yet risk assessment data for occupational health hazards in this setting are sparse. To assess risk in this population, we recently began a large scale study of home healthcare workers, including registered nurses and aides, in several major urban settings. The first stage of this multi-phase, four-year study, involved qualitative data collection; the results from this stage are presented here.

Methods: Home healthcare workers were recruited from our collaborating agencies, Visiting Nurse Service of New York and the Jewish Home & Hospital LifeCare Services, to participate in one of three qualitative procedures, including: shadowing, in-depth interviews, and focus groups. Altogether, 26 Registered Nurses (RNs) and 25 Home Health Aides participated. All procedures had prior approval of the Columbia and Agencies' Institutional Review Board and signed inform consent was required.

Results: A wide range of potential health hazards were identified. These were grouped into the following main areas: biological (e.g., blood borne pathogens), chemical (household disinfectants), environmental (household related allergens, vermin, etc.), physical (slips, falls, trips, heavy lifting, extreme noise, poor

lighting), and psychosocial interpersonal problems (with patients, patients' families, and friends), violence, excessive commuting and commuting difficulties. These hazards and potential risk factors for exposure were the focus of two job-specific questionnaires (RNs and Aides) which will be used for the quantitative assessment phase of the study.
Conclusion: Home healthcare workers appear to be at potential risk to a wide range of occupational health hazards. Given the growing population of home care workers and the increasing acuity of care, it is important to document this risk as an important first step in risk prevention and management.

P-058 PERCEIVED RISK OF DIABETES MELLITUS AMONG A LOW-INCOME, URBAN US POPULATION

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Introduction: While it is well known that African-Americans suffer disproportionately from Hypertension and Diabetes Mellitus (DM), a paucity of data exists regarding personal perceptions of risk for DM among low -income urban populations. The purpose of this preliminary study is to evaluate the relationship between perceived risk of DM and measured risk of developing DM among a low-income, inner city population.
Methods: A culturally appropriate, noninvasive, chronic disease Health Risk Assessment (HRA) was developed and administered to urban adults seeking care at a free clinic for the uninsured, a community-based health center, and local soup kitchens. Measured risk was based on the presence of widely recognized risk factors including Minority Race/ethnicity, Body Mass Index (BMI) > 24.9, Blood Pressure > 120/80, Family History of DM, and Past Medical History of DM. Perceived risk was based on the existence of a current or past report of a medical problem or complaint attributable to DM. Individuals were then categorized into Perceived risk and no perceived risk categories as well as highest, medium and lowest measured risk categories based on the number of risk factors reported.
Results: 461 clients completed HRAs. The mean age was 44 years (age range 15-92); 90% African-American, 55% female. Overall 55% of the population had 3 or 4 major risk factors for Diabetes. Approximately 36% were at lowest or moderate risk (0-2 major risk factors), while 64% were at highest risk (3+ major risk factors) for DM. 72% of clients had elevated blood pressures, (>120/80) and 65% were overweight or obese (BMI > 25.0). However, only 16% of the population and 23% of those at highest measured risk sought assistance for complaints related to Diabetes ($p < 0.000$).
Conclusion: Despite high levels of measured risk in the population, relatively few individuals chose to seek assistance for problems attributable to Diabetes. This may be because the need did not yet exist or the client chose to seek assistance for another problem perceived as being of greater importance (i.e. obtaining health insurance, etc.). This preliminary study of perceived risk among the urban poor suggests that a gap exists between perceived risk and actual risk of developing Diabetes among this high risk urban population. These findings suggest that more work needs to be done to understand perceived risk and its implications among urban populations.

P-059 COMPREHENSIVE STIS/HIV/AIDS PREVENTION FOR COMMERCIAL SEX WORKERS IN URBAN SETTINGS IN PAKISTAN

R.G. Ahmad (AMAL Human Development Network, Quetta, Pakistan)

Introduction: Some individuals and groups of people are especially vulnerable to HIV/AIDS due to their social status, particular behaviour patterns, or other special characteristics. For example the social and economic disadvantages experienced by women in Pakistan sometimes results in their involvement in livelihood strategies which enhance their vulnerability to HIV and other STIs. Female commercial sex workers sex workers (CSWs) and female migrant workers/ Afghan Refugee Women are often exploited and abused and have little recourse due to their low social status and limitations in legal protection. Other Pakistani women of all economic and social classes face varying degrees of discriminatory and repressive behaviour, which not only reduce their life chances, but also make them vulnerable to HIV infection.
Objectives: To study changes in the behaviour of FSWs: seeking STIs treatment and consistent condom use in Urban Settings of Pakistan.

Methodology: Baseline study and situation assessment of Health problems particularly HIV and STIs among Female Sex Workers of Quetta, Pakistan.
Findings: Behaviour change in response to the risk of HIV/AIDS can be seen as a sequence of stages linking the opportunity to change, the ability to change and motivation to change. The opportunity comes when quality care is available and appealing. The ability comes in an enabling environment of supportive social norms, affordability and self 'efficiency. The prerequisites of motivation are awareness of HIV/AIDS, personal risk assessment, trust, a desire to take preventive measures and outcome expectations.
Our ongoing project focused on two changes in the behaviour of FSWs: seeking STIs treatment and consistent condom use. Baseline data shows a fairly good understanding of STIs, low condom use, a belief that condoms are tools of family planning and reported embarrassment at buying them. The project demonstrated that increased self-esteem is a pre-requisite of behaviour change, that both access to condoms and training in condom negotiation are conditions for their use and that the entire neighborhood should be involved. Recommendations:
- Make preventive health care and treatment affordable preferably free
- Sex workers need complete and accurate information on STIs/HIV/AIDS, condom use, sex and sexuality and reproductive health
- Target both female sex workers and their clients with prevention and treatment interventions
- Use female sex workers as peer group educators and advocates
- Focus on raising awareness among the police and legal/ law enforcing agencies to reduce stigma, discrimination and violence among CSWs
- Make HIV/AIDS testing free and subsidized the cost of ARVs

P-060 STREET CHILDREN IN DELHI, INDIA: VULNERBAILITY TO STDS AND HIV

A.K. Sharma (University College of Medical Sciences, New Delhi, India), T.C. Chhabra, H.S. Singh, D.N.S. Srivastava, S.S. Sikri

Background: New Delhi and other railway stations in National Capital Region are a home to large number of children and adolescents who runaway from home indifferent parts of north and eastern India. Being homeless, they try to make ends meet commonly by rag picking, shoe shining, begging and stealing. Lack of parental support and peer pressure from senior street children force them into substance abuse and high risk sexual behavior. All these activities act as trigger for their physical and mental ill health including STI and HIV. This study examines some of the health problems of these children.
Methods: Salam Balak Trust and Youth Reach NGOs run a health post at the New Delhi Railway Stations. Besides Primary Health Care, it also provides counseling, referral and shelter facilities. The data are based on records of the health post in six months period between June and December 2005.
Results: During the six month period, 517 children visited the health post of which 17% were girls. Of these 72 (13.9%) were treated for STI and 27 were tested for HIV, of which 1 was found to be positive. About 30% children reported history of high risk sexual behavior.
Conclusion: The risk of STDs and HIV infection among these chldren is high. Interventions directed at rehabilitation and cmapaigns towards sex education may be required to reduce the risk of infection among these children.


Caption 1: Street life. Photo by T Chhabra


Caption 2: In search of future? Photo: T Chhabra

P-060a SUSCEPTIBILITY AND VULNERABILITY OF URBAN REFUGEES TO HIV/AIDS IN KENYA

C. Kiliko (University College of Medical Sciences, Delhi, India)

Issues: AIDS is devastating the socio-economic fabric of Kenya. By June 2000, it was estimated that 1.5million people had died of AIDS. This had been projected to rise to 2.6 million by the end of 2005. International prevalence monitoring data and statistics indicate that Kenya is ranked the ninth in terms of high prevalence rates worldwide. This portends serious health and socio-economic consequences for the country since HIV/AIDS constitutes an important component in the overall approach to health services provision in urban areas. This is because the effect of prolonged morbidity associated with proliferation of HIV infection is particularly dangerous as medical costs are high, and stretch out for as long as the patient lives.
Description: The existing social position of urban refugees - greater sexual violence, or increased risky sexual activity, psychological stress, the collapse of health services exacerbate the risk and vulnerability environment for HIV/AIDS. Their lack of effective physical protection rights, economic and social rights, settlement and integration arrangements, lack of productive resources, education and to overall good health result in the increased vulnerability to poverty and HIV infection. This paper therefore presents an assessment of the susceptibility and resistance of urban refugees (if any) to the spread of HIV and their vulnerability and resilience to the impact of the epidemic.
Lessons: Urban refugees in Kenya, have at best, become highly vulnerable to HIV/AIDS, at worst, now form the majority of those living with and affected by the HIV/AIDS pandemic. The dynamics that define urban refugees' way of life do greatly weaken their resilience to HIV/AIDS. They are increasingly at high risk for HIV infection due to increased rape cases, physical assaults, prostitution, growing number of street urchins, child labour, impoverishment and a breakdown of social order, which contribute directly to the spread of HIV/AIDS. Sex for survival, also contributes to higher transmission and increased newly reported cases of infection.
Recommendations: Overall response to HIV/AIDS pandemic as well as efforts to establish anti HIV/AIDS intervention strategies among urban refugees in Kenya requires significant rethinking of development strategies and policies. The rationale should be to mainstream anti-HIV/AIDS programs into long-term livelihood development programs for minorities groups like urban refugees. Humanitarian and relief programmes should now shift to prioritising and determining how best to deliver effective anti-HIV/AIDS interventions among urban refugees within the larger sustainable livelihoods framework.
The Organisation: The Centre for Integrated Community Development and Outreach, (CICDOT) is a not-for-profit organization founded in February 2004. It is committed to building and strengthening sustainable socio-economic livelihoods of AIDS orphans and those affected and infected by HIV/AIDS by pursuing different, but complimentary integrated, multi-faceted livelihood activities. It partners with several grassroots organizations that work in various areas of social service to empower vulnerable boys and girls to be proactive in sustainable community based health projects for behavioural and attitude change on sexuality to address STIs and HIV/AIDS.
The Research Project: This research was carried out to assess and determine how emergencies, armed conflicts social, behavioral and economic science impact on vulnerability and risk of the HIV/AIDS epidemic. Thus this paper presents an assessment of the susceptibility and resistance of urban refugees to the spread of HIV and their vulnerability and resilience to the impact of the epidemic.

P-061 STREET AND WORKING CHILDREN IN URBAN HEALTH-VERY HIGH-RISK GROUP AND VERNABILITY IN HEALTH ON THE RAILWAY STATION AND STREET IN URBAN

S. Dev Anand (Salaam Baalak Trust, New Delhi, India)

Introduction: INDIA (New Delhi Railway Station and in street in National capital region are a home to large number of children and adolescents who runaway from home in different part of north and eastern India. children being homeless, they met to old children and involved in Rag picking, Recycling Bottle, Pick pocketing, shoe shining, begging, stealing, Gambling. Because of that alcoholic parents, poverty, lack of education and very big peer pressure by the peer group force for substance abuse and very high-risk sexual behavior. They face very big challenges on the street and involve in all the activities as trigger for their physical and mental ill health including STI / HIV and Tuberculosis Drug user. New Delhi Railway Station

handles about 500000 commuters a day. At any given time, about 500 children live on the platforms at its neighborhood. This study examines some of the health problems of these children.
Method: -Salaam Baalak Trust and Youth Reach NGOs Run a OPD Health Post at the New Delhi Railway Station. Primary Health Care, Life Skill Session, Mental Health Services, counseling, refferels and shelter facilities. The data are based on records of the health post in ten months period between June 2005 to March 2006.
Result: -In this ten-month period, 751 children visited the health post 20% were girls. Of these 95 (12.01%) were treated for STI and 54 were tasted for HIV, of which 1was found to be positive and 15 were found for tuberculosis, about 30% children reported history of high risk sexual behavior.
Conclusion: the children require health care and social support services and rehabilitation efforts in order to protect their lives.

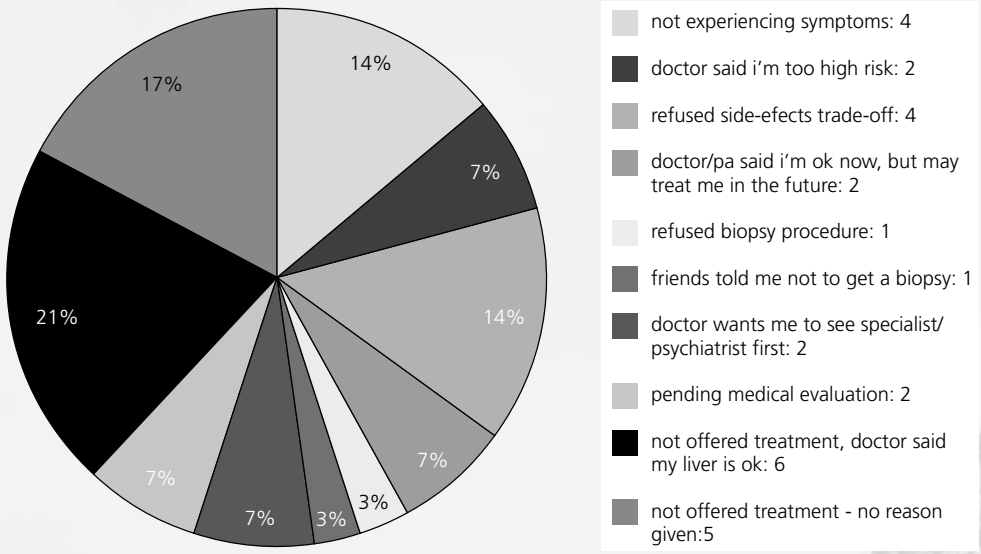
P-062 OFFER AND ACCEPTANCE OF TREATMENT FOR CHRONIC HEPATITIS C BY URBAN METHADONE AND HIV CLINIC PATIENTS

B.R.S. Schackman (Weill Medical College Cornell University, New York, United States of America), P.A.T. Teixeira

A June 2002 NIH Consensus Conference recommended that chronic hepatitis C (HCV) treatment be considered for injection drug users (IDUs). IDU patients in methadone maintenance treatment (MMT) and HIV clinical settings are potentially attractive candidates for initiating HCV treatment because they are already engaged in care. We initially interviewed 69 HCV patients in HIV and MMT clinics between September 2002 and November 2004, and subsequently assessed their HCV treatment rates and reasons for not being treated. Follow-up interviews were conducted after a mean of 18 months with 31 patients; 30 were lost to follow-up; 6 died; and 2 refused to be re-interviewed. Among those re-interviewed, 20 (65%) were offered treatment, of whom 13 reported being told they might experience 3 or more side effects, and only 2 (7%) were treated. Reasons for not initiating treatment among those offered included patients' perceptions about lack of symptoms, fear of side effects, or fear of biopsy (10); provider recommendation (6); or delay pending a medical evaluation (2). Among patients not offered treatment, 6 reported being given a reason by their provider and 5 did not. There are opportunities to improve continuity of care and patient-provider communication regarding HCV treatment in this population.

	Offered HCV Treatment (N=20)	Not Offered HCV Treatment (N=11)
Female	*7(35%)*	*4(20%)*
Male	*12(60%)*	*7(35%)*
Transgender	*1(5%)*	*0*
African-American	*11(55%)*	*3(15%)*
Latino	*5(5%)*	*8(40%)*
Non-Hispanic White	*4(2%)*	*0*
HIV co-infected	*11(55%)*	*10(50%)*
On Methadone	*14(70%)*	*6(30%)*
Mean age	*49.5*	*48.1*

Caption 1: Comparison of Patients by Treatment Offer



Caption 2: Reasons For Not Getting Treated

P-063 TARGETING HARD-TO-REACH POPULATIONS FOR A COMMUNITY-BASED INFLUENZA VACCINE DISTRIBUTION STUDY

D.C. Ompad (New York Academy of Medicine, New York, United States of America), S. Blaney, M. Coady, K. Glidden, D. Vlahov, S. Galea, VIVA Intervention Working Grp

Data are sparse on interventions targeted to individuals outside of the health care and social service sectors for influenza vaccine distribution. In order to reach those without health insurance or connection to social services, interventions outside these settings are needed. Project VIVA aimed to target hard-to-reach (HTR) urban populations (drug users, homeless, elderly shut-ins, immigrants), who are likely to be disengaged from traditional health and social services. We targeted urban HTR individuals using venue-based, door-to-door, and capture-recapture sampling techniques between January and August 2004 in 8 neighborhoods of East Harlem and the Bronx for a community-based influenza vaccine distribution study. When comparing the different targeting methods, we found that: a) venue-based targeting identified more middle-aged and economically-disadvantaged individuals, with more males, Hispanics (particularly new immigrant Mexicans), homeless and uninsured; 2) door-to-door targeting identified a higher proportion of older people, women, Dominicans, Central Americans and African Americans; and 3) the capture-recapture method enumerated a higher proportion of young people, Puerto Ricans, West Indians/Caribbeans, and fewer uninsured and economically-disadvantaged individuals. Assuming a total population of 31,000 in target neighborhoods (per census data), door-to-door sampling techniques suggested that there were approximately 3,300 individuals > 65 years old; 20,100 economically-disadvantaged individuals; 14,400 immigrants; 1,400 homeless; and 8,500 uninsured. There were approximately 4,000 non-injection drug users; 200 injection drug users and 1,200 HIV seropositive individuals in the neighborhoods. In a study to evaluate efforts to improve vaccination, denominators are needed with which to calculate vaccine rates. Each targeting technique resulted in a different demographic profile, highlighting the complexity in targeting and enumerating different hidden populations. These techniques can supplement the US Census and other national enumeration efforts, providing estimates that likely include those less likely to respond to an official census. Street-based targeting methods like venue-based targeting appeared most effective for mobile populations (e.g. homeless) while door-to-door methods were more effective for reaching women and the elderly. This project has important implications for reaching vulnerable populations during an influenza epidemic (or pandemic) and other widespread health emergencies.

P-063A DEFINING QUALITY OF HEPATITIS C HEALTH CARE FROM THE PATIENT'S PERSPECTIVE: A QUALITATIVE STUDY

P.Brunings (British Columbia Centre for Disease Control, Vancouver, Canada), J.A. Buxton, M.D. Nijkamp, G. Butt

Background: Between 1992 and 2003 approximately 50,000 persons infected with the hepatitis C virus were reported in the province of British Columbia (BC). The BC rate is approximately double the Canadian rate. We have explored and described patient's perspectives on quality of hepatitis C virus (HCV) health care in viral hepatitis clinics in British Columbia (BC). Quality assurance in health care is developed mostly from the provider's perspective. However, previous research has shown little agreement between the patient's and the physician's perspective regarding priorities in health care services.
Methods: We organized focus group interviews with HCV infected patients from four clinics in BC to gain insight into patients' views on quality of care. We performed a qualitative data analysis and developed a Theoretical Model of Quality of HCV Care from the Perspective of the Patient. Items formulated through the data analysis were categorized and rated by study participants.
Results: The data show that quality of HCV health care from the perspective of the patient consists of nine primary themes with several corresponding sub-themes. In further analyses, these nine themes were weighted. The following five were identified as the most important features of quality of HCV care: (1) professional competence, (2) courtesy, (3) education/information, (4) continuity of care, and (5) autonomy.
Conclusions: Traditionally the patient's needs have been determined by health care providers. However, an understanding of the patient's views is a vital part of quality assurance in health care. Our study gives important insight into the specific health care needs of people living with HCV, and therefore promises to be useful in providing better health care to this vulnerable population.

P- 063B DEVELOPMENT AND PSYCHOMETRIC PROPERTIES OF THE HEPATITIS C VIRUS QUESTIONNAIRE: AN INSTRUMENT FOR ASSESSING QUALITY OF HEPATITIS C CARE FROM THE PATIENT'S PERSPECTIVE

*P.Brunings (British Columbia Centre for Disease Control, Vancouver, Canada
), J.A. Buxton, M.D. Nijkamp, G. Butt*

Background: We have inductively developed a questionnaire to measure the quality of hepatitis C virus (HCV) care from the perspective of the patient. Quality assurance in health care is developed mostly from the provider's perspective. However, previous research has shown little agreement between the patient's and the physician's perspective regarding priorities in health care services.
Methods: We organized focus group interviews with HCV infected patients (n=21) to gain insight in patients' views on quality of care. We carried out a qualitative data analysis and developed a Theoretical Model of Quality of HCV Care from the Perspective of the Patient. Items formulated through the data analysis were categorized and rated by study participants (n=20) using the Concept Mapping method. The questionnaire was pilot tested (n=12), and internal consistency (n=28) and test-retest (n=24) analyses were performed. Finally, data assessment was carried out (n=28).
Results: Forty-four items relating to quality of HCV care and seven socio-demographic items were included in the Hepatitis C Virus Questionnaire (HCVQ). The HCVQ assesses quality of HCV care in five domains: (1) nursing care, (2) specialist care, (3) general care before treatment, (4) general care during treatment and (5) general care after treatment (cleared, not cleared and aborted treatment). Pilot-tests showed the HCVQ scores high on feasibility and readability. The HCVQ has excellent psychometrics with a high internal consistency and high test-retest reliability over a two-week period.
Conclusions: An understanding of the patient's views is a vital part of quality assurance in health care. Our study gives important insight into the specific health care needs of people living with HCV and resulted in a pioneering questionnaire to measure quality of HCV care from the patient's perspective. The HCVQ is a reliable, valid and user-friendly questionnaire, and promises to be useful in the development of strategies for delivery or improvement of HCV health care services to this vulnerable population.

P-064 ABSCESS AND CELLULITIS TREATMENT INITIATION ASSOCIATED WITH THE USE OF A SUPERVISED INJECTING FACILITY AMONG INJECTION DRUG USERS

E. Lloyd-Smith (BC Centre for Excellence in HIV/AIDS, Vancouver, Canada), T. Kerr, W. Tyndall, C. Lai, S.G. Montaner, E. Wood

Background: North America's first medically supervised, safer injecting facility (SIF) for illicit injection drug users is located in Vancouver, Canada. We examined factors associated with the time to abscess or cellulitis treatment initiation at an emergency room (ER) among a representative cohort of SIF users.
Methods: We evaluated the time to abscess or cellulitis treatment initiation at an ER among 1055 injection drug users recruited from within the SIF using Cox proportional hazards regression.
Results: In the unadjusted model, SIF treatment, having an abscess, injecting in the muscle or under the skin, using puddle water to inject, requiring help injecting, being homeless, living in the downtown eastside and being HIV-positive were all associated with abscess or cellulitis treatment use. In the adjusted Cox proportional hazard model, SIF treatment (relative hazard = 2.28 [95% CI: 1.66 ' 3.12]) having had an abscess (relative hazard = 1.96 [95% CI: 1.40 ' 2.75]) and homelessness (relative hazard = 1.66 [95% CI: 1.05 ' 2.63]) were independently associated with abscess or cellulitis treatment use.
Conclusions: Treatment initiation at an ER for an abscess or cellulitis after the opening of the SIF was associated with treatment at the SIF, having an abscess and being homeless.

P-065 WESTERN ABORIGINAL HARM REDUCTION SOCIETY AND THEIR PROJECT 'BUILDING THE CAPACITY OF ABORIGINAL PEOPLE IN VANCOUVER'S DOWNTOWN EAST-SIDE MOST AT RISK TO CATCH AND/OR SPREAD HIV'

C.L. Livingstone (Western Aboriginal Harm Reduction Society, Vancouver, Canada)

In 2001 the Vancouver Area Network of Drug Users started a new caucus group. Out of all the active participating members nearly half of all members are First Nations Canadian Aboriginal people. After several meetings the group of First Nation Peoples from all corners of North America named the Society the Western Aboriginal Harm Reduction Society. WAHRS Mission Statement - As urban first nations people we celebrate our inherent strengths as indigenous people that has empowered us to resist cultural extinction. We agree to improve the lives of people who consume illicit substances through user based peer support and harm reduction. In 2002 W.A.H.R.S. was successful in gaining a two year project grant funded by the then Health Canada now Public Health Agency of Canada). The project was entitled 'Building the Capacity of Aboriginal People in Vancouver's Downtown East-side Most at Risk to Catch and/or Spread HIV. Over the two years WAHRS identified many needs in the community examples of subjects discussed; HIV and migration (urban to rural); HIV Stigma (demographic); Homelessness; Harm Reduction; Community Networking; Social Entrepreneur(ism); Municipal Drug Strategy; Enforcement (training in regards to how police engage street entrenched drug users); Treatment Issues; Genocide Access to Treatment; Personal Addiction Stories; Walking City Pound dogs as Therapy; and many more...
My assistant and I would like to present our findings. We are open to making a poster as well as use a PP presentation or participate on a panel presentation/discussion. Just recently won a J. Rowlston award organizing the Canadian Congress of Drug Users with the Drug Users Advisory Group, 17 members. presented at the 17 International Conference on the Reduction of Drug Related Harm. The perspective I will discuss will be mainly my own. I am a founder of the Society WAHRS as well as a former smoker of rock cocaine. I would like to share my journey from the streets as an addicted first nations person to now, how it was done from the street up....

P-066 FACTORS ASSOCIATED WITH HIV PROVIDER ENDORSEMENT OF BUPRENORPHINE TREATMENT IN HIV CARE IN A VIGNETTE STUDY

H.V. Kunins (Albert Einstein College of Medicine, Bronx, New York, United States of America), N.L. Sohler, R. Roose, C.O. Cunningham

Background: Buprenorphine is a medication with proven efficacy in treating opioid dependence. Since 2000, U.S. physicians with addiction treatment certification or who undergo buprenorphine training may

certify to use buprenorphine to treat opiate-dependent patients in general medical practice. Despite the availability of buprenorphine, however, the incorporation of opioid treatment into primary- and HIV-care has been sparse. To determine training and attitudinal factors associated with physician endorsement of buprenorphine treatment in HIV care, we undertook a vignette study of U.S. HIV providers.
Methods: We surveyed physicians attending 3 International AIDS Society ' USA conferences in 2006 about their demographic and clinical practice characteristics, experience with buprenorphine, and attitudes towards treating opioid-dependent patients. In response to patient vignettes, participants were asked to endorse treatment with buprenorphine in primary care, buprenorphine in substance abuse treatment, methadone, or other treatment. One vignette portrayed a heroin-dependent patient; the other portrayed a heroin-dependent patient with crack-cocaine use and depression. We conducted bivariate analyses examining factors associated with endorsing buprenorphine treatment in the HIV care setting among attending physicians.
Results: Of 593 physicians, 272 completed the survey (46% response rate), including 260 attending physicians. Of attending physicians, 144 (57%) were general internists or family physicians, 100 (39%) infectious-disease trained, and 16 (6%) had other specialty training. 82% reported currently caring for at least 1 patient with opioid abuse. Fifteen (5%) reported having prescribed buprenorphine. Eighteen percent endorsed treating the vignette patient with buprenorphine in HIV/primary care. A greater proportion endorsed this treatment for the heroin-only user than the polysubstance user (26% vs 12%, p= 0.008). Additional factors associated with endorsement of buprenorphine treatment were generalist versus infectious-disease training (23% vs 6%, p = 0.002); agreement that opioid dependence is a treatable illness (25% vs 11%, p=0.008); feeling responsible for screening for substance abuse (20% vs 3%, p = 0.02), confidence in screening for (22% vs 9%, p = 0.02) and counseling about substance abuse (23% vs 13%, p = 0.045); and interest in treating patients with buprenorphine (29% vs 10%, p= 0.001).
Conclusions: Despite the availability of buprenorphine for treating opioid-dependence, only 5% of surveyed HIV providers are doing so. Generalist physicians with positive attitudes towards and confidence in screening and counseling about substance abuse, and belief in efficacy of substance abuse treatment were more likely to endorse HIV/primary care based buprenorphine treatment. These physicians may be optimal targets to promote adoption of buprenorphine use in HIV care.

P-067 REASONS FOR ATTENDING NORTH AMERICAS FIRST MEDICALLY SUPERVISED SAFER INJECTING FACILITY: THE PERSPECTIVES OF INJECTION DRUG USERS (IDU)

W. Small (St Paul's Hospital, Vancouver, Canada), E. Wood, N. Fairbairn, S.G. Montaner, T. Kerr

Background: Supervised Injecting Facilities (SIF) have been implemented in many urban settings to provide a sanctioned environment for consuming illicit drugs, in order to address the health and community impacts resulting from injection drug use. This study sought to identify the reasons why injection drug users (IDU) use Vancouver's SIF and explore the perceived benefits of this supervised environment.
Methods: Fifty semi-structured qualitative interviews were conducted with IDU participating in the Scientific Evaluation of Supervised Injecting (SEOSI) cohort. Audio recorded interviews elicited discussion of IDU's reasons for using the SIF and the perceived benefits of the facility. Interviews were transcribed verbatim and a content analysis was conducted.
Results: Issues of health and safety were central among drug users' reasons for attending the SIF. Increased ability to avoid HIV risks, injection related infections and overdose were reported as perceived health benefits of utilizing the facility. IDU perspectives also emphasized that the sanctioned supervised environment was attractive as it provides a haven from police scrutiny and street violence. This dimension of enhanced personal safety was reported to alleviate the need to rush injections, thus increasing opportunities to follow safer injecting techniques that reduce risk for infectious diseases.
Conclusions: While previous research has emphasized the potential of SIF to address the public health risks stemming from injecting illicit drugs, drug user's perceptions of risk emphasize that safety concerns encompass the health hazards of injecting as well as the threat of criminal prosecution and violence. While facilitating safer injecting, SIF also address important social and environmental factors which contribute to health risks among IDU by fostering safety.

P-068 INTEGRATED OPIOID ADDICTION TREATMENT WITH BUPRENORPHINE IN THE PRIMARY CARE SETTING

C. Cunningham (Montefiore/Albert Einstein, Bronx, New York, United States of America), A. Giovanniello, P. Mund, S. Whitley, S. Beil, M. Sacajiu

Introduction: The recent approval of buprenorphine in the United States has the potential to improve access to opioid addiction treatment. In contrast to highly regulated treatment with methadone, buprenorphine can be prescribed outside of the traditional substance abuse treatment setting. However, little is known about patients who chose opioid addiction treatment in the primary care setting, and characteristics associated with treatment success in this setting. The goal of this report was to evaluate buprenorphine treatment in the primary care setting, specifically evaluating factors associated with treatment retention.

Methods: We conducted a retrospective chart review of the first consecutive 24 patients initiating buprenorphine treatment at a community health center in the Bronx, NY. The eligibility criterion included opioid dependence, with exclusion of alcohol and benzodiazepine dependence, following national treatment guidelines. Treating physicians were general internists without specialty training in addiction medicine. Data collection included sociodemographic information, drug use, drug treatment experiences, and other clinical information.

Results: From September 2004 to June 2006, 24 patients initiated treatment with buprenorphine. The mean age was 45 years, and the majority were male (62.5%), black or Hispanic (91.6%), unemployed (65.2%), and Medicaid recipients (82.6%). At the time of referral, 41.7% were already patients of the community health center, while others came from the affiliated hospital, substance abuse treatment program, harm reduction organization, or were self-referred. Most were actively using heroin (56.5%) or crack/cocaine (52.2%), 33.3% were injecting drugs, and nearly all had previously been in drug treatment (95.8%). Of the 24 patients, 19 (79.2%) were retained at 30 days, and 10 (41.7%) at 90 days (range 1-668 days). Reasons for treatment discontinuation included: disliking buprenorphine, transferring to other facilities, incarceration, moving, and pain management issues. Compared to those retained in care, patients appeared to be less likely to be retained for 30 days if they used heroin, cocaine, crack, or injected drugs within 30 days of initiation of buprenorphine, or were unemployed.

Conclusion: Opioid addiction treatment with buprenorphine in the primary care setting can be a successful treatment option for some patients. In an inner-city community health center, patients who were treated with buprenorphine were referred from a variety of facilities, and many were polysubstance users. Of these patients, 41.7% who initiated treatment with buprenorphine remained on treatment for 90 days. Understanding factors related to successful treatment with buprenorphine in the primary care setting can help guide policy and program development.

P-069 NEIGHBORHOOD FACTORS ASSOCIATED WITH HOSPITALIZATION FOR PERSONS LIVING IN AREAS PROXIMAL TO AND INCLUDING NEIGHBORHOODS WITH HIGH RATES OF ILLICIT DRUG USE IN VANCOUVER, BRITISH COLUMBIA: A MULTILEVEL ANALYSIS

A. Palepu(University of British Columbia, Vancouver, Canada), C. Lai, T. Ishida, R. Zhang, T. Kerr, W. Tyndall

Past research has focused on hospitalization has focused on individual-level characteristics and risk factors. We sought to examine the whether neighborhood level characteristics in four neighborhoods proximal to and including a neighborhood with high rates of illicit drug use are related to hospitalization. We used individual-level data from the Community Health and Safety Evaluation (CHASE) project, which administered 3484 questionnaires to persons residing in the five communities or neighborhoods of the Downtown Eastside of Vancouver in 2003. Individual-level factors included age, gender, ethnicity, unstable housing (living in a single room occupancy hotel, shelter or homeless), education (> grade 10), self-reported HIV and HCV status, frequent heroin use, and frequent cocaine use, with both defined as drug use daily or most days. Neighborhood level characteristics included income assistance defined as the average percent per population for each community and crime rates defined as counts adjusted by the population of each community for 2003. Methods of multilevel logistic regression were used to identify which of these charac-

teristics were associated with hospitalization in 2003. Among the subjects who were hospitalized, multilevel Poisson regression were used to examine the factors associated with the number of hospital admissions. There was variability in the crime rate and proportion of persons on income assistance between the five neighborhoods. There were 2411 subjects included in the analysis and 429 reported hospitalization. Female gender (adjusted odds ratio [AOR] 1.82; 95% CI 1.45- 2.29) and HIV-infection (AOR 2.42; 95% CI 1.82-3.21) were associated with hospitalization. The number of hospitalizations was independently associated with only the neighborhood level variable crime rate (rate ratio per 10% 1.04; 95% CI 1.00-1.08). Neighborhood level crime rate is independently associated with the number of hospitalizations among persons who reported hospital admission. This finding suggests that attributes of a neighborhood such as criminality and civil disorder may have an adverse influence on health resulting in more frequent hospitalizations. Further research is needed to examine the mechanisms of this relationship.

P-070 USING PHARMACISTS TO LINK INJECTION DRUG USERS TO MEDICAL AND SOCIAL SERVICES IN NEW YORK CITY

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The 'Expanded Syringe Access Demonstration Program' (ESAP) is a New York State public health law passed 2001 that permits non-prescription syringe sales in pharmacies to help decrease HIV and HCV transmission among injection drug users (IDUs). Given the increased HIV morbidity and mortality among IDUs, particularly black and Hispanic IDUs, connecting IDUs to care is critical. The extent to which pharmacies can serve beyond mere sales to more actively engage IDUs in HIV prevention remains an open question. With preliminary data indicating interest for an expanded role among pharmacists and noting the central role of facilitating pharmacists in ESAP to be community-engaged, the Harlem Community and Academic Partnership (HCAP) propose an outcome evaluation of a community based participatory research (CBPR) project in New York City's Harlem community to [1] evaluate the extent to which community-involved ESAP-pharmacies are more likely than standard ESAP-pharmacies to demonstrate (a) an increase in access and use of social/medical referrals; (b) an increase positive attitudes toward pharmacists as community health providers; and (c) an increase safe injection/ syringe disposal; and determine if these outcomes sustain over time among IDUs; and [2] evaluate the extent to which community-involved ESAP-pharmacies are more likely than standard ESAP-pharmacies to demonstrate an (a) increase in CBO contacts; (b) an increase in positive attitudes toward ESAP, drug users and CBO's; and (c) an increased ability to maintain and increase syringe customers, and determine if these outcomes sustain over time among pharmacists. To meet these aims, we are conducting an educational campaign using a CBPR multilevel intervention that includes targeting IDUs to increase use of pharmacies as a syringe source, and training and 'connecting' pharmacists with local CBOs to support delivery of referrals. Use of a drug-user specific Web-based Resource Guide (www.harlemresourceguide.com) (designed by HCAP) will be also used to aid pharmacists in linking IDUs to services and CBO's. To evaluate the impact of this intervention, IDUs who attend intervention and control pharmacies and enrolled pharmacists are surveyed at baseline and follow-up. Preliminary analysis of baseline data are currently underway for October 2006.

P-071 DRUG ABUSE AND HIV/AIDS PREVENTION IN NEPAL

P. Adhikari Chhetri (Nepal Association for Drug Abuse Prevention, Kathmandu, Nepal), T. Jung Pandey

Background: Nearly 80,000 drug users are in the country and 60,000 people are infected with HIV in Nepal. Many Nepalease women and children affected and infected by HIV/AIDS feel uncomfortable joining them. HIV transmission is often associated with needle sharing behaviors among IDUs and they also function as a 'bridging population'. Further sexual relations with different sexual partners also have risk of transmitting HIV to their spouse.

Project Description: The Nepal Association for Drug Abuse Prevention (NEADAP) was established I 1989, and Muskan Deep Batika: Drug Rehabilitation and AIDS Program was established in 2004 as a collaborating agency of NEADAP and have been extending its services for drug users and their sexual partners

who are at risk of HIV/AIDS and other harmful consequences. The program has been consisting in four areas: Community based outreach program, drug treatment and rehabilitation, preventive education in the schools and communities and social care unit. The project has established a Social Care Unit at Western Regional Hospital where many drug users and their sexual partners visit to this unit for counseling services. The program has been managed two counselors one men and one women every day. Besides, that the organization has been implementing drug treatment and rehabilitation services for drug users who are highly motivated for the treatment, it is based on therapeutic community concept.
Lesson Learnt: Women feel comfortable talking about issues in groups run by women. HIV+ve women will come forward when provided with the opportunity and encouragement. Women should be further empowered to access resources, gain recognition, and ensure their effective participation in the HIV/AIDS policymaking process. There are some women hidden drug addicts in the country but due to social stigma, discrimination and social dignity they are not to be exposed.
Psycho-Social Impact: Lack of awareness and stigma deter PLWHA attain normalcy Challenges Ahead: Economic burden, stigma and discrimination, the major challenges for PLWHA. Stigma and discrimination, can be challenged however, the fundamental rights of the PLWHA have to be guaranteed.
Conclusion: HIV/AIDS are still not accepted by communities, which poses tremendous impact to community system and to health care as well, rehabilitation of drug users and their families is essential and continuous counseling is needed to change the attitude of people towards drug HIV/AIDS.

P-072 AMPHETAMINES: FRIEND OR FOE?

M. Gregory (UMDNJ, Newark, United States of America)

Introduction: Recent trends have shown that amphetamines and methylphenidates have become the choice drugs for treatment of ADD/ADHD in both children and adults. In particular, the urban school environment seems as comfortable with amphetamine/methylphenidate use among students as it is with (asthma) inhaler use among athletes. The main objective of this investigation is to uncover the ramifications of long term use of amphetamines and to inform the community of our findings. Secondly, we have made the distinction between the amphetamine/methylphenidate and cocaine. A common fallacy is that both the former and the latter share the same rate of addiction. Finally, an analysis regarding the adverse cardiovascular effects associated with amphetamine/methylphenidate use is discussed.
Methods: An extensive literature review was conducted using scholarly journals as well as medical data bases. In addition, interviews taken from elementary school teachers in two urban school districts in New Jersey.
Results: It is clear that many individuals simply cannot function without medication. In these cases, medication (amphetamine/methylphenidate) usage was generally supported by teachers. In reference to addiction rates, the literature indicated that when under proper physician care the patient taking the prescribed dosage is less likely to become addicted, or abuse substances. Adverse cardiovascular events including elevated blood pressure and tachycardia are common side effects of this medication. The FDA insists that this information is disseminated along to the patient with every prescription. The FDA does acknowledge that benefits of the drug are at least as strong if not outweighing mal consequences.
Conclusion: While it is the FDA's obligation to serve and protect the patient against possible adverse outcomes pertaining to medication use, it is the duty of the epidemiologist to investigate the populations whom are at risk, and solve the puzzle. We have identified the product (drug); the price: (topic of research), and the place: (the city/urban school). However, in the '4 Ps of Marketing'; promotion is lacking. Promotion or distribution of knowledge is the crucial piece to any successful research project. The general public, (the city in particular), should be informed of their options regarding treatment for ADD/ADHD, as well as what we have discovered regarding medication and reactions. Dissemination of this knowledge through community interventions is the recommended long term solution. Multi-lingual information sessions that will be presented in an informal environment is the choice method. Removal of the 'white coat' hopes to attract a larger audience.

P-073 HOMELESS HEALTHCARE IN NEW YORK CITY: ADAPTIVE RESPONSES TO A CHANGING CONSUMER AND POLICY LANDSCAPE

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This qualitative study describes the efforts of the New York Providers for Health Care for the Homeless (PHCH) to bring critical health services to homeless New Yorkers and to influence policy making. PHCH is a coalition of homeless health care providers whose members represent distinct organizations, individual disciplines, and various health settings. Nevertheless, policy changes at the municipal, state, and federal levels have had a direct impact on their ability to reach and serve homeless clients. Furthermore, these clients increasingly have more health and behavioral health concerns and fewer safety net resources. Hence, the policies put into place over the last decade have diminished the likelihood that clients will seek health services or engage in preventative care and have increased the pressures and constraints under which services are provided. The New York Providers for Health Care for the Homeless (PHCH) has been critical in facilitating organizational and industry adaptations. In particular, mobile medical services have engaged highly mobile clients in health care and have been used to target non-urgent health conditions. As well, the coalition has increased access to resources and influenced policy makers. The study will demonstrate the value of coalitions in bringing disparate interests and disciplines together to identify a common public interest ideology and give voice to vulnerable consumers in a turbulent health environment.

P-074 FACTORS RELATING TO QUALITY OF HOME-BASE CARE GIVEN TO AUTISTIC CHILDREN AT AN URBAN CHILDREN PSYCHIATRIC HOSPITAL IN THAILAND

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Introduction: Autism is a psychiatric disorder in children. The number of newly diagnosed autism at Yuwaprsart Waitayoprathum Children Psychiatric Hospital in Thailand has been increasing with the rate of 20% per year since 1990. On the other hand, there are still demands for enough service centers to meet their exact need. However, in addition to expert's support, mother and other caregivers can play a significant role in taking care of these children at home.

Methods: The purpose of this cross-sectional study was to find out the relationship between caregiver's knowledge, perception, family and social support to quality of home base care for autistic children. The sample consisted of 183 caregivers who were attending Children Psychiatric Hospital with autistic children. Caregivers answered the self-administered questionnaires from January 30 to February 17, 2006. Statistics using in this study were number, percentage, mean, median and chi square test with significant level at 0.05.

Results: Study result showed 72.7% of the caregivers were women, 50.9% was between 30-39 years of age. Only twenty-five percent hold bachelors or higher educational degree, 65.6% had income between 10,001-20,000 baht, 83.6% was married and 69.4% was mother. Most of respondents who had moderate perception had good level of home based care (p=0.04), children who were above age 36 months and had good autistic status tend to had good quality home-base care (p=0.01)

Conclusion: The results of this study suggest that the accurate perception and knowledge of autism of their caregiver, combined with family and social support for caregivers would assist them providing a better quality care for the children. Caregivers should have the opportunity to know their children's nature and problem. In addition, health service providers might play a significant role by supporting, assisting and educating the caregivers to have rectified perception of autism and child care.

P-075 PREVALENCE OF MOOD AND ANXIETY DISORDERS AND MENTAL HEALTH CARE USE IN ETHNIC MINORITIES IN AMSTERDAM

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Introduction: In order to provide insight in the mental health of ethnic minorities in Amsterdam, a population-based study was added to the Amsterdam health monitor of 2004. The study aims were to estimate

the prevalence of mood and anxiety disorders among Dutch, Turkish, Moroccan and Surinam/Antillean inhabitants of Amsterdam. In addition, the use of primary mental health care and non-urgent clinical mental health care for these disorders were mapped.
Methods: The methods of this study are described in different abstract.
Results: Overall, the prevalence of mood disorders was 23% (lifetime), 10% (last year) and 5% (last month). The prevalence in the last month was highest among respondents from Turkish descent (15%), followed by Moroccan (7%), Dutch (4%) and Surinam/Antillean (1%). The prevalence of anxiety disorders showed a similar, though less distinct ethnic pattern (Turkish 8%, Moroccan 8%, Dutch 3%, Surinam/Antillean 1%). Among Moroccan respondents, prevalences were higher for men than for women.
The use of primary mental health care was comparable among respondents with mood or anxiety disorders of the different ethnic groups (40%), as was the use of non-urgent clinical mental health care (23%). Mental health care use among those with disorders is higher for men than for women (61% versus 37%)
Conclusion: Mood and anxiety disorders are more frequent among persons of Turkish and Moroccan descent than among persons of Dutch and Surinam/Antillean descent. There are no indications that the use of mental health care among persons with a disorder varies by ethnic origin. A remarkable gender pattern is observed in this study that needs further investigation.

P-076 DIFFERENCES BETWEEN FACE TO FACE PSYCHIATRIC EVALUATIONS IN A SPECIALIZED PSYCHIATRIC EMERGENCY SERVICE VERSUS COMMUNITY EMERGENCY DEPARTMENTS

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Patients with severe mental illness create challenging treatment issues in busy urban emergency departments (ED). Inpatient psychiatric hospitalization is the most restrictive and expensive level of psychiatric care. It limits patient freedom and choice. Limited inpatient bed availability contributes to long ED waits for many patients.
Here we report the result of a retrospective chart review of patients who were clinically determined to require inpatient psychiatric admission by ED physicians and were transferred to an urban specialized Psychiatric Emergency Service (PES) for face to face evaluation.
Method: This is a retrospective chart review of 346 patients for whom ED physicians recommended inpatient admission. ED diagnosis was obtained from the ED discharge summary. PES diagnosis and disposition was obtained from the chart.
Results: 31% were homeless. 85% were diagnosed as having one or more type of substance use disorders which also could include alcohol problems.

Table 1. Diagnostic differences between ER and PES

Diagnosis	ER	PES
Depression	160	49
Bipolar	21	6
Schizophrenia	36	36
Psychosis or psychosis NOS	58	23
Borderline	8	1
Comorbid Substance use and psychiatric diagnosis	44	182
Substance use disorder	0	27
Dementia	1	1
Other disorders	11	19
Total	346	346

After psychiatric evaluation and initiation of psychiatric treatment, only 38 or 11% of the transferred patients were admitted to psychiatric inpatient settings. The remainders were assigned to lower levels of care as shown in table 2.

Table 2. Differences in disposition between ED and PES

Disposition	E.R.	PES
Inpatient	346	38
Shelter	0	32
Transitional House	0	59
Medical Inpatient	0	1
Nursing Home	0	2
Substance abuse residential	0	4
Home	0	210
Total	346	346
Hospitalization rate	100%	11.0%

Only 4% of those not admitted sought admission via community or psychiatric emergency rooms within 30 days of discharge (according to encounterdata).
Discussion: This review indicates differences in diagnosis, disposition, and treatment cost between regular emergency room visits and psychiatric evaluations in emergency psychiatric services.
As shown above psychiatric emergency services can significantly reduce hospitalization rates without comprising clinical outcomes (as measured by readmission rate within 30 days).

P-077 EVALUATION OF 24-HOUR HOSTELS FOR HOMELESS DRUG USERS IN UTRECHT, THE NETHERLANDS

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Introduction: In 2000 the city council of Utrecht, the Netherlands, decided to expand the existing services for homeless drug users with low-threshold 24-hour hostels. Homeless drug users were not allowed to use drugs in traditional night shelters. In the newly established hostels illicit drug use is permitted. Until 2000 most homeless drug users were concentrated in the city centre. To divide up the burden of nuisance the city council decided to plan a hostel in each of the nine neighbourhoods. As these services were unprecedented in the Netherlands the Municipal Health Service Utrecht (dept. of Epidemiology) was asked to evaluate the effect of the hostels.
The main research questions of the evaluation study were:
- What is the best way to organize a 24-hour hostel for homeless drug users?
- What is the effect of living in a hostel on the drug use, health and quality of life?

Methods: Three methods were used in this study: open interviews with staff and residents, structured interviews with residents only and observations of the daily routine in three hostels. The study design was longitudinal. The open interviews took place 6, 12 and 24 months after intake and the standardized questionnaires were administered at intake and 6, 12 and 24 months later. The questionnaire included sections of the Europ-Asi, the Lancashire Quality of Life Questionnaire and the GHQ-12.
Results: During the study period the initial organization of the hostels turned out to be sub-adequate. In the beginning the emphasis was on housing only and basic care, but later medical and social services were added. Nuisance in the direct vicinity of the hostels was limited. Short term effects on the residents were stabilization of illicit drug use, improved quality of life and contact with drug treatment. Long term effects were similar. No changes in physical and mental health were found.
Conclusion: The hostels are a positive addition to existing services for homeless drug users in Utrecht. The initial emphasis on housing only was unsatisfactory and adding medical and social services was an improvement. Although positive effects on drug use, quality of life and treatment utilization were found, attention should be focused on improving the physical and mental health of the residents.

P-078 MENTAL HEALTHCARE AMSTERDAM SOUTHEAST CHOOSES COLOUR: A SUCCESSFUL CO-OPERATION PROJECT FOR EMPOWERMENT AND MENTAL DISORDER PREVENTION AIMED AT NON-WESTERN COMMUNITIES, 2004-2006

C. Hulshoff (De Meren, Amsterdam, the Netherlands)

Introduction: 23 participants felt the need to co-operate because of the signals from the local ethnic communities were pointing to a threat of separation in the 'chain of mental-healthcare'; part of the communities did not get nor seek the appropriate help needed. If seeking help they turned to the ethnic-organisations and or cultural/spiritual healers. These organisations were increasingly confronted with problems they felt not equipped for and could not refer them to the social/mental healthcare-institutions because of lack of information, (mis)conceptions and distrust. And because the provided help offered by many institutions did not always meet up with the specific needs/expectations. Also research showed that the existing information activities/materials are only reaching part of these groups because their form, content and approach are not suitable.

Project-goals: creating structural working-relationships between the various organisations to improve the provided care, to improve the accessibility of these institutions and increasing resilience and advancing early recognition and prevention of psychological disorders.

Methods: The project developed a tailor-made prevention-method to improve the knowledge about; risk and protective factors of psychological problems and the western healthcare-system. One activity was developing four films (an Afro-Surinam, Hindu-Surinam, Antillean and Ghanaian and a mixed one), all in the mother tongue of the specific group and subtitled in Dutch. Another activity was organising meetings per group where the visitors could interact with different mental healthcare-experts about the topics in the film: what are psychological-problems, risks, protections, early recognition, coping and the western system. The ethnic organisations co-operated in composing the form, content and approach of the films and meetings. In addition to the meetings the project used the local ethnic radio and television channels for the prevention-activities.

Results: 5 films, manual, method-publication. The attendance of the meetings was very high and the reactions indicate positive results, visitors say a/o; the film is very informative (84%); I will recognise symptoms better (88%); I know more about the western system (90%); I will seek help more easily (85%); this meeting is useful (97%), more meetings needed (98%); speaking in mother tongue is important (71%).

Conclusion: We made good progress, the targets are reachable but not in only 2 years. All partners are committed to continue the project phase 2 with the targets: maintaining the working-relationships and to continue the path to structural co-operation, implementation of the developed method and products of phase 1 and developing a multi-ethnic team of mental healthcare consultants.

P-079 HEALTH AND HOMELESSNESS: THE OUTCOMES OF A PARTNERSHIP BETWEEN AN URBAN ACADEMIC ACUTE CARE HOSPITAL AND A MEN'S HOSTEL.

C. Valentini (St. Michael's Hospital, Toronto, Canada), K. Grootveld, R. Gambell

Introduction: The Canadian Federal Government supports a 'Population health' model that focuses on the broad determinants of health, for example: income and social status, social support networks, employment and working conditions, physical environment, personal health practices and coping skills, and health services. Many of the determinants are likely to be absent for the majority of homeless people. Poverty, unemployment, mental illness and geographic dislocation are among the leading causes and results of their condition (Chenier, 1999) . For the purpose of this study homeless is defined as, 'those who are absolutely, periodically, or temporarily without shelter' (Daly, 1996) . The city of Toronto has a densely populated census with a diverse ethno cultural population. (over 17% not Canadian Citizens) and has the majority of Metro's hostels and shelter beds (approx. 75% men & 25% women) .

In an attempt to respond to the identified need to address the determinants of health for the homeless population living in the City of Toronto, a partnership was developed between St. Michael's Hospital and Seaton House Men's Shelter. An overview of the partnership includes: clinical pathway standard documentation forms, case conferences to plan care, 'harm reduction' model of care continued while in hospital, standardized education sessions to staff, consistent communication between medical staff and counsellors at hostel regarding patient care needs.

Methods: A qualitative retrospective study is in progress focussing on the key areas of the partnership. The study examines the determinants of health outcomes specific to the prevalent health problems of the homeless in urban centres. For example, increased risk of contracting tuberculosis (71 per 100000; about 10 times the average Ontario rate), frequent skin and foot problem, high prevalence of chronic respiratory symptoms, prevalence of Mental illness and the health effects of alcohol use.

Specific methods for study include: interdisciplinary team outcome questionnaire, client satisfaction study, data review related to readmission rates, resource utilization and health outcomes.

Results: Study is near completion, to date the results show that the partnership has indicated a decrease in health resource utilization with decreased readmission rates, increased client satisfaction and improved communication between hospital and community.

Conclusion: There is a definite link between health and homelessness that requires collaboration and creativity. The interventions implemented in the partnership between St. Michael's Hospital and Seaton House has proven to demonstrate the effectiveness in targeting the determinants of health throughout the continuum of care.

P-080 PATTERNS OF MATERNITY AND NEWBORN CARE IN URBAN SLUMS IN MUMBAI

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Introduction: India's commercial capital, Mumbai has a population of over 16 million, more than half of whom reside in slums. Basic amenities in the slums are either non-existent or at a high premium, with attendant risks to health, particularly for mothers and infants. Despite a huge public health care infrastructure, uptake of health care and resultant health indicators compare unfavourably with rural indicators. The daily arrival of migrants, and their movement to and from villages across India or across the city, disrupts continuity of health care and makes choice of care complex.

The City Initiative for Newborn Health is a collaboration between municipal, government, a non-government organisation, the social initiatives group of a private bank, and a university research group. The Initiative's objectives are to institutionalise quality in the public health care system and to reduce neonatal mortality and morbidity by impacting the care-seeking behaviour of mothers in vulnerable slum localities. This paper attempts to answer three research questions: (1) What are the patterns of uptake of antenatal, delivery, postnatal and neonatal care in vulnerable communities within urban slums in Mumbai? (2) What or who are the prime influences on decision making in these contexts? (3) Are there differences in patterns of care between new migrants and established slum residents?

Methods: The study is based on a vital registration system for births in about 50,000 households across 48 vulnerable slum localities in six city wards. Surveillance began in October 2005, and is conducted by local women who identify pregnancies and births in their home areas. After confirmation of births, mothers are interviewed by trained cadres at about six weeks after delivery. The interview schedule includes questions on demography and care in the antenatal, intrapartum, postpartum and neonatal periods.
Results: We present an analysis based on 1000 interviews, which describes (a) patterns of uptake of antenatal care: registration of pregnancy; timing and number of visits; type of care provider; reasons for not accessing antenatal care; and choice of care provider in the event of illness. (b) Delivery care: place of delivery; choice of care provider in the event of illness. (c) Postnatal and neonatal care: routine care; breastfeeding practices; choice of care provider in the event of maternal or newborn illness. We examine the influences on decision making at each stage, and compare the results for recent migrants and longer-term slum residents.

P-081 THE CITY INITIATIVE FOR NEWBORN HEALTH, MUMBAI: A CROSS-SECTORAL PARTNERSHIP FOR EFFECTIVENESS, SUSTAINABILITY AND SCALE

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Background: The UN Millennium Development Goals mandate improvement in maternal and child survival and in the situation of slum dwellers. Although daunting, the targets for India are not out of reach. The urban population will reach 610 million by 2025, and within a decade much of the burden of childhood disease will fall on the urban poor. India's most populous city, Mumbai has 16.4 million inhabitants, more than half of whom live in slums. Women and children in slum communities face health risks associated with poverty, migration, shelter, tenure, water, sanitation, pollution, and physical space, as well as limited access to health care. Health care around birth is particularly compromised by migration.
Methods: The City Initiative for Newborn Health is a novel cross-sectoral collaboration between four partners: SNEHA (a non-profit organization working to improve maternal and child health in urban slums), the Municipal Corporation of Greater Mumbai (responsible for civic amenities, primary health care and primary education), the International Perinatal Care Unit, UCL (an academic research unit), and the Social Initiatives Group of ICICI Bank (which invests in maternal and child health with a view to improving human capacity). The Initiative's goal is to improve the survival and health of mothers and newborn infants in underprivileged communities. The primary strategies are to encourage change through participation, self-sustaining group activities, ownership, and appreciative inquiry. There are three axes of intervention: (1) Work with community members in urban slums to improve maternal and newborn care; (2) Work with public sector health service providers to strengthen decentralised primary care at health posts; (3) Institutionalisation of continuous quality improvement in maternal and neonatal services at maternity homes and hospitals, with particular emphasis on inter-facility communication and referral chains.
Results: A series of impacts is being evaluated. In the community: improvements in home care and health service utilisation. At health facilities: provision of quality maternal and newborn care services. Overall: improvements in client access to appropriate facilities, and reductions in maternal and newborn illness and mortality.
Conclusions: The coming decades will see an upswing in the relative importance of urban health, and it is likely that the public sector will find the attendant problems overwhelming. It is vital that we begin to test new models of collaboration between communities, government, non-government organisations and the private sector. If effectiveness is demonstrated, the most pressing concern is the potential to go to scale.

P-083 STUDY OF HEALTH CARE SERVICES FOR URBAN POPULATION WITH RESPECT TO MCH SERVICES AT URBAN HEALTH CENTRE BHOSARI HOSPITAL, PIMPRI CHINCHWAD MUNICIPAL CORPORATION

K.M. Khillare (PimpriChinchwad Municipal Corporation, Pune, India), N. Kunchagi

Introduction: Present study explores exact nature and the extent of the problem of health care services in

urban population with respect to maternal and child health service at Bhosari hospital of Pimpri Chinchwad Municipal Corporation .It also shows administrative and operational setup for urban health services.
Methods:
1) To study effect of MCH services to population covered by Bhosari Hospital is divided into three group i.e. urban Bhosari, Rural Bhosari (rural area merged into municipal corporation) and slum area coveringapproximatly 200000 populations.
2) Analysis of 3 years (2000, 2001 &2002) ANC registration and average values drawn.
3) To study prevalence of anemia, institutional and home delivery, prevalence of low birth weight babies.
Results:
* Total average ANC registration is 39.9% in which urban Bhosari contribute 40.65%, rural Bhosari 27.73% and slums 67.53%.
* Total average early 16 weeks registration was 16.17% in which urban Bhosari contributed 15.13%, rural Bhosari 10.80% and slum 28.66%
* Prevalence of anemia was 87.36% in which urban Bhosari shows 88.92%, rural Bhosari 89.09% and slum 85.89%.
* Institutional delivery at PCMC Bhosari Hospital was 43.57%; private institutions 52.59% and home delivery was 7.34%
* Total average percentage of low birth weight babies delivered at PCMC Bhosari Hospital was 31.81% in which urban Bhosari contributed 38.72%, rural Bhosari 42.71% and slum 26.73%.
* Utilization of MCH services of municipal corporation Bhosari Hospital for delivery among total expected ANC registrations was an average 35.60%

Conclusion:
* Present study shows unequal health care delivery system. Even though Bhosari Hospital covers population approximately 1/5th of total population but there is no peripheral health institutes (PHI) affiliated to Bhosari Hospital to provide outreach services.
* There is unequal distribution of PHI

Which may affect health services'
* ANC registration is marginally reduced in 2002.
* Early 16 weeks ANC registration is poor. It is lower in urban and rural Bhosari area.
* Prevalence of anemia of 80% to 90% needs special attention.
* Percentage of home delivery is declined from 10.89% to 4.86% indicate preference for institutional delivery.
* Percentage of low birth weight babies was 30%, which is higher and needs good prenatal care and intervention programme.
* Urban population needs effective health care delivery system.

P-83a DECISION MAKING FOR OBTAINING AN INDUCED ABORTION AMONG THE URBAN WOMEN IN INDIA

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Introduction: In India, though unwanted pregnancies are likely to go down as the reproductive goals are declining and the proportion of acceptance of family planning methods more specifically that of sterilization after two living children is increasing; only a small proportion of the unmet need for the spacing methods among low parity couples is satisfied. The NFHS report indicates that fertility level in Kolkata (capital city of West Bengal) has already reached below replacement level and wanted fertility level among the women in Kolkata is considerably much lower than the national average with a very higher level of induced abortion rate in India. This study attempts to explore the linkage between reproductive intention, contraceptive use and decision-making process of induced abortion among in Kolkata, where contraceptive service is widely available.
Data and Method: The study is based on the primary data collected from three MTP centers where majority of women obtained MTP. Data was collected in the year of 2003 from the period of January to March.

The total sampled women were 235. Both quantitative and qualitative methods were used for data collection.
Results: Result shows that a majority of the MTP seekers wanted no more additional children and majority of them obtained MTP within first trimester of conception. Contraceptive awareness of these women was almost universal, though less than half the respondents were not using contraception at the time of conception. The study reveals that around thirteen percent of respondents did not have any communication with their husbands about their fertility preferences. Economic pressure was another main cause of these women for obtaining a MTP services. A considerable proportion of women opted for MTP because conception occurred out of wedlock. The spouse is the main decision maker for terminating a pregnancy for one third of women; some of the women took the decision by themselves or jointly with their spouses. However, mother or mother in law also plays an important role in decision-making for an MTP.
Conclusions: The study concludes that urban exposure made women possible to access medical termination of pregnancy within a safe period of time, however still they are not very much progressive in the question of exercising their reproductive rights.

P-084 CHILD SEXUAL ABUSE IN URBAN AREAS & WHAT WE CAN DO TO PREVENT OUR CHILDREN

M. Wasim

Introduction: Every day, an average of three children dies as a result of child maltreatment. Thousands more are abused or neglected in some form. Child abuse hurts on many levels, and no child is immune, but it can be prevented.
Method and Findings: A cross section study in Pakistan.
More than one thousand reports of suspected child abuse were made, concerning the welfare of approximately five hundred children. Of those five hundred children, 300 were abused. Majority of victims experienced neglect, 20% were physically abused, 15% sexually abused, and 9% were found to be victims of emotional abuse.
Results and Rcomendations: Child abuse is harm (or risk of harm) caused to a child by a parent, teacher, caretaker, or another person responsible for the child's safety. There are four major types of child abuse: neglect, physical abuse, sexual abuse, and emotional abuse. Neglect is failure to provide for a child's basic needs. Physical abuse is physical injury as a result of punching, beating, kicking, biting, burning, shaking, stabbing, choking, or otherwise harming a child. Sexual abuse includes fondling a child's genitals, penetration, incest, rape, sodomy, indecent exposure, and commercial exploitation through prostitution or the production of pornographic materials. Emotional abuse includes constant criticism, threats, or rejection, as well as withholding love, support, or guidance. Data shows that this type of child abuse is very common in Schools and Deni Madarass of Pakistan.
Everyone can provide a Gateway to Prevention, and everyone can play a role in preventing child abuse. Remember the 'Five R's,' courtesy of Prevent Child Abuse: raise the issue, reach out to kids and families in community, remember the risk factors, recognize the warning signs, and report suspected abuse or neglect. Child abuse and neglect occur in all segments of our society, but the risk factors are greater in families where parents abuse alcohol or drugs; are isolated from their families or communities; have difficulty controlling their anger or stress; appear uninterested in the care, nourishment, or safety of their children; and seem to be having serious economic, housing, or personal problems.

P-085 CROSS-BORDER COOPERATION IN THE EUREGION MEUSE-RHINE TO DECREASE RISKY BEHAVIOUR BY ADOLESCENTS

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Introduction: The Euregion Meuse-Rhine (EMR) is an area with 3.9 million inhabitants, three countries (Netherlands-Germany-Belgium), and several different regions, regarding language, culture and law. Organisations and institutions received frequently signals about an increasing and region-related consumption of addictive drugs and risky behaviour of adolescents, probably related at leisure-time and cross-border activities. As a reaction 11 institutions from four regions of the EMR started a cross-border cooperation

project 'Risky Behaviour Adolescents in the EMR'.
Methods: Through cross-border cooperation the project partners intend to improve the efficiency of prevention programmes, by:
- Investigating the prevalence of risky behaviour and pre-conditional aspects related to (prevention of) risky behaviour, and
- Developing a methodology for good-practice-public-health in cross-border areas.

The project included two phases, namely: Phase of study. Two cross-border (epidemiological) studies where realized: a quantitative study of the prevalence of risky behaviour (46000 pupils) and a qualitative study mapped pre-conditional aspects of risky behaviour and possibilities to preventive programmes.
Phase of implementation. This served bringing about recommendations on policy level as well as on prevention level. During this phase the planning and realisation of cross-border prevention programmes and activities started (good-practice-public-health methodology).
Results: There is region-related variance of prevalence in risky-behaviour of adolescents in de EMR. Also there are essential differences in legislation and regulation, (tolerated) policy, prevention structures, political and organizational priorities and social acceptance toward stimulants in the EMR areas. The efficiency of (local) prevention programmes can improve by using this information and 'learning from each other'.
Conclusion: Cross-border studies and cooperation between institutions have resulted in good-practice-projects in (border) areas of the EMR to decrease risky behaviour of the adolescents.

P-086 AN EVALUATION OF A COMMUNITY HEALTH CENTERS ENHANCED SERVICE DELIVERY MODEL FOR CHRONIC CARE MANAGEMENT: STOP-GAP PRESCRIPTION MEDICATION ACCESS AND HEALTH SERVICES UTILIZATION

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Introduction: According to the Centers for Disease Control and Prevention, such chronic diseases as asthma, diabetes, cardiovascular conditions, hypertension and hyperlipidemia pose a significant burden in mortality, morbidity, and cost. Currently one of the most prevalent and costly health problems in the US, these conditions impact the lives of approximately 25 million people, account for 70% of the $1 trillion that finances health care annually, and require on-going medical management such as prescription medications. Patient health behavior reports show that patients are taking less medication, sharing medication, or alternating days. Accounting for these behaviors, patient prescription medication compliance rates are significantly impacted by prescription medication costs. The proposed study's purpose is to examine the usefulness of the Andersen and Aday model of health service utilization in predicting self-reported healthcare utilization and change in clinical outcomes.
Proposed Methods: The proposed study's design is longitudinal, quasi-experimental as there exists no random assignment or random selection and employs mainly convenience sampling. Underinsured, uninsured and self-pay new patients seeking care at a community health center in Hampton Roads with a physician-diagnosis of one of five chronic disease states of asthma, high blood pressure, diabetes, high cholesterol or heart disease and require a prescription to control the condition will complete health-assessment surveys at baseline and three months after intervention. Medical records will be reviewed for laboratory results and physician recommendations. It is hypothesized that patients in the treatment group with access to the stop-gap program will show improved health status as measured by clinical outcomes and have fewer utilization encounters as a result of immediate prescription access.
Anticipated Results: Andersen and Aday propose that utilization behavior is related to such pre-disposing factors as demographics and prior 12 months utilization history; such enabling factors as personal resources, personal factors and prescription access; and such need factors as self-reported health status, disease status and physician diagnosis. This study will model the effect of an enabling factor, a stop-gap medication program that provides immediate access to prescription medication for eligible uninsured patients, on healthcare utilization. A secondary aim of the proposed study is to describe alternate ways in which those without stop-gap medication access meet their prescription medication needs.

Conclusion, Policy Planning: Currently there exists no simple solution to all of the problems that surround the under- and uninsured nor the medically underserved in Virginia, but improved prescription access is necessary for effective community-based chronic disease management models.

P-087 URBAN HEALTH PROGRAMS IN KATHMANDU, NEPAL: A REVIEW OF EFFECTIVE HEALTH PROGRAMS FOR POOR MIGRATING POPULATION

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Nepal is an under developed country with fast expanding urban centers. Nepal's average annual growth rate of the urban population is 6.65% compared to the national population growth rate of 2.25 %. The plethora of employment opportunities and recently, the Maoist insurgency has compelled the rural population to migrate to Kathmandu. It is estimated that about 23 % of the total urban population in Kathmandu are urban poor.

The rapid rate of urbanization and high influx of migrants has led to the segregation of poor migrants in slums with poor housing conditions with poor access to clean drinking water, sanitary toilet facilities and health services which lead to high incidences of diseases and increased death rate. At present there are about 63 squatter settlements in Kathmandu and the population of this group is growing at the rate of 25 % per year. Most squatters are located along the flood prone polluted river banks. Poor rural migrants illegally squatter in the public buildings and public lands and do not improve their living environment due to poverty and the potential threat of eviction. Thus, they are prone to health risk and also, the services available in the market are unaffordable if not inaccessible to them. Although the health challenges in these areas are substantial, the city has also experienced local community health development programs which aim to address the growing urban health problems in slum areas (higher rate of poor migrants live in these areas) and provide preventive educational programs and health services to them at minimum charge. For example, there are community health programs organized by medical universities at the community level. They organize effective behavior change communication programs with the active participation of local community to raise public awareness in such areas as sanitation, clean drinking water provision, use of sanitary toilets, immunization and reproductive health. Since migrants may develop communicable and chronic diseases this program motivates such migrants living in slum areas to undergo screening for disease conditions during health campaigns and encourage them to undergo medication if diagnosed of any illness. This program is considered one of the most effective urban health programs. This paper will review effective urban health programs such as the one noted above and others in Kathmandu. The paper will provide an introduction to the health conditions of the urban poor people and an overview on the effectiveness of the community based programs.

P-088 CHOOSING AN APPROPRIATE SCALE TO MEASURE YOUTH MENTAL HEALTH: A CASE STUDY FROM A COMMUNITY BASED INTERVENTION IN LEBANON

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Introduction: An assessment of social, economic and environmental factors influencing health of youth (13-19 years) in a Palestinian Refugee camp in Beirut pointed to a critical need for intervention to improve the lives of these young people. A community coalition was formed to develop, implement and evaluate an intervention program. The first step was the identification of a priority outcome, and mental health was chosen based on a variety of related indicators. However, to be able to assess the effectiveness of an intervention program, the identification of a specific mental health measure was perceived to be necessary. A variety of possible measures are available, and the selection of any particular measure depends on the objective of its use. This paper describes how the research team went about choosing an appropriate measure.

Methods: A total of thirteen mental health scales were identified for review. In discussing the appropriateness of a measure, the team considered criteria based on compounded professional experience and discussions among members. Each researcher looked over the thirteen measures separately and rated them according to the preset criteria of suitability; structure; and appropriateness. In rating suitability, the team

considered local camp and cultural context. For structure, recall period, number of items, and response scale and for appropriateness, the potential of understanding various questions was considered.
Results: 7/13 scales were found to be suitable, whereas the structure of 3/13 scales was found to be acceptable. In addition, 5/13 scales were rated as appropriate. Taking into consideration the ratings based on the three criteria, the center of epidemiological studies-depression score (CES-D) was identified as the most appropriate for our purposes.
Conclusion: There is clearly no single perfect measure, however the aim was to select a measure that most closely matched the intervention objectives and was fitting to the context of youth in the camp. The research team went about this process mainly because of the scarce research available on youth mental health and its measurement, in our region and more importantly among Palestinian youth. The process was practical and valuable in ensuring consistency in the analysis process. A major strength of the process was the familiarity of the research team members with the target group, the intervention, and the community context where the intervention is to be conducted. This process coupled with qualitative pilot tests and quantitative psychometrics will most likely lead to robust and relevant measures.

P-089 UNIVERSITY-BASED NURSE MANAGED URBAN HEALTH AND WELLNESS CENTER: IMPLEMENTATION AND SUSTAINABILITY

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Introduction: This paper describes a multiyear effort to develop, implement, and sustain a university-based nurse-managed Urban Health and Wellness Center (UHWC). The information presented is based on our experiences of the challenges of working with faculty, community-based organizations, community members, university administration, and health care organizations to establish an Urban Health and Wellness Center. The UHWC is a unit under the School of Health Professions and Studies (SHPS) at the University of Michigan-Flint.
Planning and Development Phase: Consistent with its mission, SHPS embarked on a project to establish the UHWC. The planning for UHWC started in 1998 with the goal of providing opportunity for faculty and students to work with community organizations to provide health promotion and disease prevention to the residents of Genesee County.
In 2003, SHPS obtained a grant from a local foundation to conduct a series of focus group and community dialogue discussions. The purpose of the exercise was to obtain community input necessary to shape the strategic direction of the UHWC. The feedback obtained was used to shape the mission and activities of the Center.
In May 2006, the UHWC entered into a contractual relationship with the Genesee Health Plan to provide primary care and physical therapy services to un-insured residents of Genesee County. This arrangement has enabled the School to accomplish two goals (a) implement a nurse managed clinic aimed at improving access to health care for urban populations, and (b) secure funds needed to sustain the Center.

P-090 THE SCIENCE AND POLITICS OF IMPLEMENTING CHILD SURVIVAL INTERVENTIONS IN AN URBAN DEMOGRAPHIC AND HEALTH SURVEILLANCE SITE

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This paper describes the experiences of the Nairobi Urban Health and Poverty Partnership (NUHPP) in implementing a package of child survival pilot interventions in an urban demographic surveillance site by examining the challenges, lessons learned and the interactions of science and local politics in implementing in the Korogocho and Viwandani slums of Nairobi, Kenya. NUHPP is a child survival project that was set up to define and evaluate a package of health service upgrade and environmental sanitation interventions to reduce the excessively high infant and child mortality rates among slum residents of Nairobi city to levels prevalent in rural areas of Kenya. The interventions aim to tackle the major determinants of child morbidity and mortality based on the Integrated Management of Childhood Illnesses strategy, but with substantial emphasis on preventive strategies at community level.
The NUHPP interventions are being piloted in the Nairobi Urban Health and Demographic Surveillance

System that is managed by the African Population and Health Research Center. They are based on a three-pillar approach: improving personal hygiene and environmental sanitation within communities; improving home-based care of ill children; and strengthening capacity of health facilities in the integrated management of childhood illnesses.
Local politics is shown to play a crucial role in the implementation of health interventions in urban informal settlements in sub-Saharan Africa. In the slums of Nairobi, a key challenge in the implementation of the interventions relates to the identification of land spaces for the construction of water and sanitation facilities. The structure/land owners demanded payment for the spaces which brought in a set back in the process. The politics of land ownership in the urban slums of Nairobi remains unresolved and neither the Nairobi City Council nor the provincial administration has a firm grip and direction on this matter. This revelation was much unexpected and significantly delayed the process of identification of appropriate spaces for physical facilities. Effective rrecognition of the informal community structures apart from the official government administration was also very crucial to the effective implementation of the interventions. Another challenge relates to difficulties in effectively mobilizing the intervention communities to collaborate in the project. Residents would rather place their own individual gains before those of the larger community. The management of existing water and sanitation facilities has remained a challenge and it will therefore be prudent to invest resources in strengthening management structures for community health interventions to ensure sustainability.

P-091 EXAMPLE OF A NEW HEALTH CARE PROGRAM: 'HEALTH, MUMMY AND ME'

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Introduction: Healthy children and their mothers are one of the priorities of the Health Policy of the Mayor of Warsaw. A decreasing number of natural births at Mazovian Voivodeship is strictly connected with the growing older population. Infant mortality rate has been gradually decreasing, however, its decrease rate is different in different periods of time. Infant mortality is associated to a large extent with prematurity and a low birth weight - quite common in Poland.
The 'Health mummy and me' program aims at ensuring health safety of a mother and her child during pregnancy and after birth, by improvement of the health care and due to early detection of illnesses.
Key elements of the program are the following:
- well defined health care standard for each pregnant woman,
- a list of indispensable tests in every month of pregnancy,
- a unified information system for a doctor, a pregnant woman and the financing institution being responsible for the program.
- free health care program for pregnant women.

Methods: The program is based on the pan of tests and diagnostic examinations providing a good health care offer to a pregnant woman. Program is executed by doctors ' the 1st and 2nd degree of specialization in gynecology and obstetrics, as well as highly qualified midwifes. Health care in is provided in dedicated health service units. Each trimester of pregnancy is divided into month periods:
- qualification visit,
- 1st trimester (0-13 week of pregnancy) ' two medical visits,
- 2nd trimester (14-26 week of pregnancy) ' three medical visits,
- 3rd trimester (27 ' 39 week of pregnancy) ' four medical visits.

Medical exanimations, amongst others, ultrasonography (USG), cardiotocography (CTG), toxoplasmosis tests, HIV antibodies, breast test, cytology, HBs antigen, VDRL test, measures and control tests are provided during the program.
Results: Program, which started in the second part of 2005, was addressed to the population of 7.190 pregnant women. 3.821(53,14%) pregnant women participated in the program.
Conclusion: Program was well received by pregnant women and is continued in 2006. For details see http://www.zdrowa.warszawa.pl.

P-092 PARTICIPATIVE ACTION RESEARCH TO STIMULATE AND MOTIVATE FOR INTERSECTORAL COLLABORATION AND COMMUNITY PARTICIPATION. THE EXPERIENCES WITH THE COMMUNITY BASED INTERVENTION FOR HEALTH PROMOTION IN EINDHOVEN, 1999-2006.

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Introduction: In 1999 the municipal health authority in Eindhoven started implementating a community-based programme to reduce socio-economic inequalities in health in two deprived neighborhoods. In the second phase, starting in 2004, the programme is extended with four neighborhoods. The programme is accompanied by Participatory Action Research (PAR). Based on the results gained in the first phase, the focus of the project is on structure building in which activities to promote health and wellbeing can be embedded. The pillars for structure building are intersectoral collaboration and community participation, both processes to be monitored and stimulated by PAR.

Methods: The PAR until now consists of five evaluation rounds, in which data are gathered about both the processes of collaboration and participation in two neighborhoods. In the first two rounds, qualitative data were obtained by interviewing all stakeholders to the programme and share and discuss the results with the stakeholders. New decision making and action followed immediately. In the latter three rounds also quantitative data were gathered by using the so called participation measure instrument by Rifkin and Pretty's ladder of participation. Those instruments make the level of participation of stakeholders visible and visualize changes in the quality of participation in time, thus serving as both an evaluation and action function.

Results: The first round of PAR enabled and facilitated stakeholders to discuss about aims, objectives, goals, tasks, roles and finance at all levels. Intersectoral collaboration started and expanded throughout the project. In following rounds, the PAR enabled stakeholders to reflect both on the intervention as a whole and on their own contribution and role in the intervention. Different aspects of the collaboration were examined and discussed and action could be taken to improve when needed. As a result, intersectoral collaboration increased considerable in the neighborhoods. Community participation has started. Many different activities are organized by and for community members.

Conclusions: The experience in Eindhoven is that PAR contributes to the effectiveness of an intervention programme. This success is attributing to PAR's potential for identifying problems, solutions and opportunities in a relatively short time. PAR is optimized by the use of both qualitative and quantitative data.

P-093 IS THERE A SCHOOL EFFECT ON PUPIL OUTCOMES? - A REVIEW OF MULTILEVEL STUDIES

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Study objective: The school environment is of importance for child outcomes. Multilevel analyses can separate determinants operating at an individual level from those operating at a contextual level. This paper aims to systematically review multilevel studies of school contextual effects on pupil outcomes. Design: Key word searching of five databases yielded 17 cross-sectional or longitudinal studies meeting the inclusion criteria. Results are summarized with reference to type of school contextual determinant.

Main results: Four main school effects on pupil outcomes were identified. Having a health or anti-smoking policy, a good school climate, high average socio-economic status (SES), and urban localization had a positive effect on pupil outcomes. Outcomes under study were smoking habits, well-being, problem behaviour and school achievement.

Conclusions: There is an apparent need for standardized presentations of results from multilevel studies. Intraclass correlation (ICC) and explained between-school variance focuses attention on whether interventions should be directed at schools or whether they should be directed at pupils, and should be included in all multilevel studies. Despite the different pupil outcomes and the variety of determinants used in the included papers, an independent school effect was evident. Consequently, there is a potential for school-based prevention of negative pupil outcomes.

P-094 HEALTH AND HOMELESS PEOPLE: AN EXPERIENCE IN SOCIAL INCLUSION IN THE CITIES OF VALPARASO AND VIA DEL MAR, CHILE (SOUTH AMERICA)

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During the last few decades the South American country of Chile has undergone significant economic and social development. Nevertheless, there is one segment of the population which has been historically excluded from this development: the homeless. Homeless people are characterized by progressive deterioration of their physical and mental health. They generally do not utilize health services and when they do, they are often subject to discrimination. Furthermore, there is no public health policy addressing the specific problems of this sector of the population. Given the negative situation for people living on the street in Chile, the objective of our work was to design an alternative health service for homeless people. Field work was conducted in the cities of Valparaíso (Patrimony of Humanity) and Viña del Mar (tourist capital of the country). The first stage of our project consisted in performing a biopsychosocial diagnostic on 100 homeless people, utilizing a personal history form that included variables regarding physical and mental health, consumption of substances, family history, and length of time living on the street. We analyzed this data to identify the most frequently reported variables, and then selected the focus group for intervention based on the incidence of these variables in individual diagnoses. The focus group included 30 individuals presenting psychiatric disorders including psychosis (n=5), schizophrenia (n=2), alcoholism (n=21), drug consumption (n=1), and mental retardation (n=1). We developed individual work plans for each person in the study, with three levels of intervention: basic, intermediate and advanced. At the basic level each individual obtained a health service card, linking them to a healthcare service, as well as a general medical evaluation. At the intermediate level each person received psychiatric attention and appropriate pharmacological treatment. At the advanced level, each person was integrated into two social programs: Protected Homes (Hogares Protegidos) from the National Health Service and the Daytime Mental Health program (Programa Diurno de Salud Mental) provided by a religious foundation (Fundación Hogar de Cristo). These programs were oriented towards the development of labor skills, specifically a bread-making workshop. The results from our project demonstrate that it is possible to resolve the complex physical and mental health problems of homeless people'leading to improvement in their quality of life and their inclusion in society'through the optimization of existing resources, efficient coordination of healthcare networks, and a personalized intervention strategy.

P-095 THE MOTIVATIONAL FACTORS LEADING TO PARTICIPATION OF LOWER SOCIO-ECONOMIC GROUPS AND MIGRANTS IN AN EXERCISE PROGRAMME

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Introduction: Physical activity is a Public Health priority in many European Countries. About half of the Dutch population is physical inactive and among migrants and groups with a lower socio-economic status the levels of physical inactivity are even higher. In 2002 an intervention was developed to stimulate physical activity in deprived neighbourhoods in the city of The Hague, The Netherlands in close collaboration with general practitioners and social workers. The intervention consists of an exercise referral scheme in which patients are being referred by a GP and other health care workers to a 20 weeks during exercise programme. In 2005 an evaluation study was carried out to obtain insights into the motivational factors that trigger the lower socio-economic groups (and specifically migrants) to participate in this intervention.
Methods: First we collected participant's characteristics by using a registration form, containing questions about demographic features, health perception and social support, attitude towards physical activity and self-efficacy. Second, we conducted in depth interviews with sportinstructors (9) and participants (39) with a Dutch, Moroccan, Turkish or Surinam background. The interviews with Moroccan and Turkish participants were conducted by bilingual students. The interviews were audio-taped, transcribed verbatim and analysed in MAXQDA.
Results: Most of the participants are migrants and female and do not have a paid job, about 50 % finished primary school only and 67% suffer of obesity. At intake most of the participants show a positive attitude towards physical activity, about half of the participants feel themselves supported by their social network

and most have a moderate self-efficacy if it comes to be physical active in moments of fatigue or feeling stressed. The motivation of the interviewees to participate in the intervention mainly lies in six factors. The first two relate to physical activity in general and concern the already existing desire to be physical active or willingness to sport and the assumed psycho-social advantages of exercising. The other factors relate to this specific intervention; the perceived obligation character of the referral by the general practioner, the availability of separated male-female groups as well as guidance by sportinstructors.
Conclusion: This study demonstrates that within this referral scheme a group can be reached that suffers from inactivity and obesity. Most of them show a positive attitude and are willing to sport, but experience a number of barriers to do so in actual life. This intervention has been demonstrated to take those barriers away.

P-096 HEALTH LITERACY AS A PUBLIC HEALTH GOAL: A MAJOR CHALLENGE FOR CONTEMPORARY HEALTH EDUCATION AND COMMUNICATION STRATEGIES INTO THE 21ST CENTURY

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Health literacy is a relatively new concept in health promotion. In this paper it is used as a composite term to describe a range of outcomes to health education and communication activities. From this perspective, health education is directed towards improving health literacy. This paper explores the place of health education in contemporary health promotion, before examining in greater detail the definition and usefulness of the concept of health literacy. In doing so, this paper attempts to promote renewed attention to the role of public health education and communication in health promotion and Public disease prevention, and advocates improvements in the sophistication of contemporary Public health education strategies.
Health literacy is a relatively new concept in health promotion. It is a composite term to describe a range of outcomes to health education and communication activities. From this perspective, health education is directed towards improving health literacy. This paper identifies the failings of past educational programs to address social and economic determinants of health, and traces the subsequent reduction in the role of health education in contemporary health promotion. These perceived failings may have led to significant underestimation of the potential role of health education in addressing the social determinants of health. A 'health outcome model' is presented. This model highlights health literacy as a key outcome from health education. Examination of the concept of health literacy identifies distinctions between functional health literacy, interactive health literacy and critical health literacy. Through this analysis, improving health literacy meant more than transmitting information, and developing skills to be able to read pamphlets and successfully make appointments. By improving people's access to health information and their capacity to use it effectively, it is argued that improved health literacy is critical to empowerment. The implications for the content and method of contemporary health education and communication are then considered. Emphasis is given to more personal forms of communication, and community-based educational outreach, as well as the political content of health education, focussed on better equipping people to overcome structural barriers to health.

P-097 COMMUNITY COMPUTING INTERVENTIONS IN MULTIPLY DEPRIVED URBAN AREAS: AN EFFECTIVE VEHICLE FOR HEALTH PROMOTION?

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Introduction: UK strategies to tackle health inequalities stress self-care and community care in management of long-term conditions. There is synergy with recent strategies to combat 'digital exclusion' which link to broader neighbourhood renewal projects. This paper draws on evidence from two community computing interventions in multiply deprived areas of the cities of Paisley and Salford, where health indicators are particularly poor. Both involved the provision of free home computers and Internet access and the development of a community portal. One (local authority run) targeted a small neighbourhood, aiming to build capacity in various spheres of action, including learning, employment, culture and local issues. The other (a university run research project managed by the authors) targeted a specific health community spread across a city. It involved a portal for mutual support among older people suffering from heart disease.

Methods: The paper describes the recruitment phase of both projects on the basis of: interviews with the project manager and outreach workers (project 1); the authors' own notes and recollections (project 2). It utilises the results of a questionnaire and focus group of non-participants in project 2 subsequently added to the research design to investigate reasons for a low response rate. Promotional materials, conditions for participation, acceptable use policies, marketing strategies, press coverage and the involvement of stakeholders are systematically compared, and demographic data is analysed to assess the representativeness of project participants against the local populations.
Results: Project 1 exceeded its recruitment targets. Success was due to geographical compactness, coordination of the project from a well-used community facility, targeting families with children, and an intensive outreach strategy using local residents. Although the project was not about health, health information searching was one of the most popular online activities. Allowing for the project's prioritisation policy, participants were broadly representative of the local population.
Project 2 had severe recruitment problems common to conventional health promotion initiatives (rehabilitation services, dietary advice or exercise classes) in the same city. Participants were not generally the most deprived among the target population. Non-participants declared an unwillingness to focus on their health problems, while others lacked confidence with or interest in computers.
Conclusion: The deployment of ICTs to combat health inequalities may be more effective if it takes a community development approach and targets settings and applications which do not relate explicitly to health care. Virtual mobility, paradoxically, often requires the mobilisation of pre-existing family-centred and place-based social networks.

P-099 PROMOTING THE HEALTH OF NEW YORK CITY PUBLIC SCHOOL STUDENTS AND FAMILIES THROUGH A PUBLIC-PRIVATE PARTNERSHIP

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The New York Academy of Medicine is a non-profit organization founded in 1847 that is dedicated to enhancing the health of the public through research, education and advocacy with a particular focus on disadvantaged urban populations.
In 1977, the Academy's Committee on Medicine and Society created an Advisory Committee on Health Education to advance the Academy's mission to improve the health of the public in New York City. The Advisory Committee convened physicians and representatives of major voluntary and public health agencies and developed the vision of providing New York City public school children with dynamic, hands-on classroom learning activities that would teach them about protecting their health for the rest of their lives. As is often the case, health instruction was not a school priority due to the focus on reading, math and other basic skills acquisition. The Office of School Health Programs was created in the belief that New York City students from kindergarten through high school needed to have the knowledge and skills to make decisions to protect and enhance their physical, emotional, and social well being.
To accomplish this, the Office of School Health Programs and its Advisory Committee has built and maintains a coalition of more than forty-five private foundations, corporations, voluntary agencies and individuals -- the largest public-private sector supported comprehensive health education program in the United States. Today the training and education offered has helped more than 20,000 teachers and hundreds of administrators, school staff and parents in more than 1100 public schools in New York City acquire the knowledge and techniques to teach young people to be healthy and academically successful. After twenty-five years of continuous expansion, the Office of School Health Programs initiatives go beyond the classroom, using technology and involving students, teachers, school staff, parents, families, community based organizations, and academic medical centers.
Marshalling resources through the partnership, the Office of School Health Programs is in a unique position to meet the changing needs of New York City public school students and their families. For example, in response to the events of September 11, 2001, the Academy developed a multidimensional program that partners with nationally recognized mental health specialists to rebuild the well-being of schools and

move children and families beyond the crisis. This presentation will inform participants about the process of building a coalition to galvanize private-sector resources to institutionalize comprehensive health education in their public school system.

P-100 AN EXPLORATION OF THE FACTORS THAT IMPACT HEALTH LITERACY LEVELS IN AN URBAN COMMUNITY

A. Agho (The University of Michigan-Flint, Flint, United States of America), M. Deason

Introduction: Approximately 90 million American adults have problems with understanding and acting upon health information. In April of 2004, the Institute of Medicine (IOM) released a report titled, Health Literacy: A Prescription to End Confusion. The report found that low health literacy adds as much as $58 billion a year to health care and people of all ages, races, incomes and education levels are challenged by low health literacy. Health literacy, defined as the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions, has been linked with (a) patients' adherence to medical regimens, (b) utilization of potentially life-saving screening, (c) poor patient-physician communication, (d) ability to understand prescriptions, instructions and consent forms, (e) participation in health promotion and disease prevention activities, (f) ability to understand and use information on food labels, and (g) self-management of chronic diseases.
Methods: Two focus groups were conducted with health and social service professionals in order to assess their perceptions of the scope and nature of the health literacy problems in Genesee County and shed some light on how low health literacy impacts taking medications and acting on health information, determine how health literacy is assessed, and identify what factors facilitated and impeded improving health literacy skills. A total of 13 professionals participated in the focus groups. The focus group data was then examined in order to identify the themes and patterns that emerged.
Results: The participants' perceptions of the magnitude of the health literacy problem in Genesee County ranged from 30 ' 80 percent of the clients/patients they served. The participants in the focus groups used various methods for assessing their clients'/patients' health literacy levels. The participants also identified some of the specific health literacy issues that their clients/patients have with understanding and acting on health information. Various barriers that could impede improving the participants' clients/patients were provided, including: clients/patients, physicians/staff, access to preventive medicine, insurance and community programs, transportation, culture, and income. The participants' suggestions for addressing some of the issues raised and improving their clients'/patients' health literacy skills included working with clients/patients, physicians, and health educators/community health workers/outreach workers.
Conclusion: Low health literacy, in this study, was linked with several factors at the client/patient and physician levels. Interventions for improving health literacy in this community will require changing attitudes, knowledge, and skills of the medical providers and the clients/patients.

P-101 CHILDREN AND YOUTH PLACE IN HEALTHY CITIES OF CZECH REPUBLIC CITY OF LITOMERICE SUBTITLE: YOUNG PEOPLE FREE TIME ACTIVITIES IN THE CITY INSTRUMENTS OF NEW GENERATION OF SELF-CONFIDENT AND ENVIRONMENTALLY RESPONSIBLE CITIZENS

E.C. Cermakova (Brno University of Technology, Brno, Czech Republic)

As a practical service to its member cities, Healthy Cities of the Czech Republic (HCCZ) offers assistance in attaining the quality standards required by the European Union. Through HCCZ Methodology (being developed in co-operation with Charles University Prague), a city is purposefully working on arguments that it can use both for quality local development in the long term.
In the Increasingly Individualistic 21st century society, we have come to appreciate any initiative to get people involved in public life ' particularly if it concerns young generation and prepared to respect a different opinion, such attitude preventing ubiquitous xenophobia and radical hatred. This is why educational, sporting, cultural and entertainments events and activities for young people that develop and cultivate these qualities are an important part of life in Healthy Cities, Municipalities and Regions of Czech Republic. Litomerice's Board of Children Representatives (BoCR) was established in 2002. Over the years, it has

become a real partner for the city hall officials. Children councillors have organised a number of events for schools and the general public, for instance A city Friendly Dog Owner or Recycling with EU. Another establishment, the reputable Rychory Centre of Environmental Education and Ethnics (SEVER), founded in Litomerice in 1994, has an influential position in the city, particularly in the area of education. SEVER is a non-profit organisation teaching young people to live sustainably and informing them about renewable sources of energy as the actual use of such sources. SEVER focuses on specific projects and learning through experiences, which includes first-hand experience with particular environment, active work and learning by example. The presentives projects are designed for pupils and students (such as School of Sustainable Living, a German and Czech environmental school project, or School without Waste), teachers and other pedagogues (fellowships, consultation, thesis tutoring) as well as for the general public on local, regional and national level. Free time activities play an important part in preventing sociopathological phenomena that put at risk today's young generation, be it drug addiction, chicane, physical and mental violence or criminality; The level of primary prevention of such phenomena shows how the respective municipality, city or country values the young people living in it. HCCZ evolve every year in Czech Republic a number of community campaigns (Injuries Prevention Days, Earth Day, No Tobacco day) not only in communication with young generations, whereby supports a new generation of health «city live production».

Caption 1: Map of NCZM (Healthy Cities of Czech Republic)

Caption 2: City of Litomerice

P-102 HEALTH CARE, UTILISING OF HEALTH SERVICES, AND PEOPLE WITH GOOD HEALTH, HEALTH SERVICES WHICH ARE OFFERED TO THE PEOPLE IN AREAS LIKE URBAN AND RURAL.

S.R. Pulla (AMEWS Andhra Medical Educational Welfare, Kakanida, India), R. Pulla

Introduction: By the coparision of earlier and ancient days, how the health services are devoloped and in what way they are available for the people who are living in urban and rural areas.Comparitively the health care taken in rural areas by peaople, were so much better than urban areas.

Methods: By the following of the several steps, these health facilities are available for the people who are in urban areas. In the busy life, we must spend one or two days in month for health checkups.many metods are also introduced in health care.All people who are living in society are communicated with each other.
Results:Many results were seened in health of urban areas. They achieved their goal in their health practices by the following of communicational differences, people who are living in urban areas were healthy.By taking many health cares like the facilities offered by the health research institutes.
Conclusion:At the end of the part, it makes the people with free of diseases and feelings.But one is important, whenever hospitals and health institutes are reduced the mankind is growing on.

Caption 1: health rally in india.

Caption 2: health education foe rural and urban womans

P-103 TABAS – A BRAZILIAN STRATEGY TO COMBAT AN URBAN HEALTH'S ENEMY: TOBACCO

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Background: For many years, smoking has been seen as a lifestyle option. Today, however, science acknowledges the habit as an illness caused by the addiction to nicotine. Such addiction, can be responsible for major damage to one's health, and waste years of good quality of life getting exposed to more than 4,700 toxic substances that can cause severe fatal diseases, such as cancer, cardiovascular disease and chronic obstructive pulmonary disease. According to the World Health Organization - WHO, each year 4 million people die around the world, because of tobacco use. WHO also estimates that if trends of current consumption are kept for the next 30 to 40 years, when young smokers of today reach middle age, tobacco epidemics will be accountable for 10 million deaths in each year. In Brazil, there's an estimate of 200,000 deaths caused by addiction of nicotine. Overlooking last year's periodic health examination of our population we came across 647 tobacco users in a total of 6063 employees in Rio Grande do Sul, Brazil. Taking this scenario into consideration, we have focused our efforts in TABAS, a series of meetings that desire to quit their habit.
Approach: The objective of this Health Program is to control or eliminate the use of tobacco among our users and their families. The activities are organized by teams of family health technicians, through 4 meeting a month for 2 hours each and a maintenance group once a month for smokers that have quit and need accompaniment of health professionals. The meetings are based in a participative methodology used by the National Institute of Cancer in Brazil (INCA), and suited to these employees. At these meetings the following subjects are approached: understand why you smoke and how this affects your life, the first days without smoking, how to overcome craving and the benefits you get after quitting smoking. Other than this Cognitive Behavioral Therapy approach we also offer when necessary the use of medications for craving. The follow-up is made in regular consultations with family doctor, social worker, psychologist, registered nurse and nutritionist.
Lessons Learned: These actions are presented as strategies to combat tobacco use. At the same time, this is an opportunity to enhance self-care towards our population's health, as all participants are invited to

other groups, like Weight Control Group and Healthy Diet Group. The enrollment in these activities facilitates the employees bonding to our Family Health Strategy.

P-103a GO: A COMMUNITY-BASED CHILDHOOD OBESITY INTERVENTION IN A DEPRIVED NEIGHBOURHOOD; WHAT CAN RESEARCH OFFER?

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Overvecht is a multicultural neighbourhood in Utrecht with more than 30.000 inhabitants. Almost a quarter of its population is younger than 20 years, of which 1250 are overweight and 500 are obese. Almost 75% of the children is of an ethnic origin. To tackle this problem a community-based demand-oriented project, 'GO: Gezond Gewicht (Healthy Weight) Overvecht' was started in 2005. The aim of this project is to prevent overweight and obesity amongst children (0-19 year) by improving daily breakfast and consumption of fruits and vegetables, decreasing the consumption of soft drinks and candies, and improving physical activity. A working group of local professionals (in the field of health care, nutrition, school, welfare and sport) is coordinating the project. The group will be enlarged during the project as more organisations in the community will become involved. To guide and evaluate the first four years of the project a part of the budget was set aside for research. Traditional epidemiological research alone is not sufficient, given the diverse population in Overvecht, the mix of interventions and the complex problem of overweight with its determinants. Therefore, a more diverse spectrum of methods is needed and a new research design has been developed. The research design for guidance of GO consists of four different approaches:

- Monitoring outcomes: Body mass index and its main determinants are monitored over the years. These data are mainly provided by the school doctor consults.
- Monitoring of interventions: it is important to monitor the activities that take place within the scope of GO. Aims, results, participation etc. are collected in a database.
- Community diagnosis and process evaluations: local key persons were interviewed about possible causes of and interventions for overweight children. During the project they are consulted on a regular bases concerning the progress of the project.
- Evaluation of specific interventions: innovative interventions are evaluated on process and effect to offer insights into the possible successes or failures. Meanwhile, it also offers insights into the backgrounds and demands of target groups.

For this research design a mix of qualitative and quantitative methods is necessary. Questionnaires, registration forms, open and in-depth interviews, diaries, participant observation, etc. are used for data collection. Together these types of investigation and the use of different methods offer the project valuable information on the understanding of overweight, promising interventions, the progress of the project and measurement of effects.

P-103b LONGITUDINAL ASSESSMENTS OF PERCEIVED COALITION FUNCTIONING IN THE CONNECT TO PROTECT PARTNERSHIPS FOR YOUTH PREVENTION INTERVENTIONS STUDY

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Introduction: Community coalitions play an important role in addressing complex US public health concerns. Connect to Protect, a study designed to mobilize communities around youth HIV prevention, is grounded in this approach. Initiated at 15 city sites, the six-year study involves three phases. Phase I (completed): sites used epidemiologic data to identify youth and neighborhoods of highest risk. Phase II (completed): sites established partnerships with relevant community-based organizations (CBOs) as a first step toward building local coalitions. Phase III (recently started): coalitions identify and work toward structural-level changes that may reduce youth HIV rates. This abstract focuses on Phase II.

In Phase II, the sites and their CBO partners held a series of formal working group meetings over the course of 12-18 months where the goals and objectives for Connect to Protect were discussed, epidemiologic data were shared and plans for community-based needs assessment were developed. We hypothesized

that these on-going discussions would help shape the partnership into a coalition that could engage in strategic planning and collective problem solving in Phase III. The objective of this abstract is to describe how partnership functioning changed over the course of Phase II.
Methods: Partners in each of the 15 cities were surveyed every 3-4 months over the course of Phase II. We used a modified version of the Wilder Collaboration Factors Inventory (Mattessich, Murray-Close & Monsey, 2001) that assessed purposefulness (understanding the coalition's purpose/importance), communication, membership (coalition composition), and process (decision making; management). Each domain consists of 4-10 items (1 = strongly disagree; 4 = strongly agree) for a total of 30 questions. We computed the mean domain scores within city at each time point and then examined how time was associated with mean score using linear regression and generalized estimating equations to adjust for repeated measures.
Results: The items within each domain created reliable scale scores: purposefulness (m = 24.9; range = 9-30, = .80); membership (m = 35.1; range = 12-45, = .78); communication (m = 20.5; range = 5-25, = .81); process (m = 38.1; range = 9-50, = .85). Longitudinal analysis (Table 1) showed that the process domain increased over time; the other domains remained changed.
Conclusion: Over time, perceptions of coalition 'processes' such as decision-making opportunities and strategies, workload management, and member understanding of roles and responsibilities improved. This provides evidence that Phase II prepared our partners for Phase III collective problem solving.

Dependent Variable	Parameter Estimate	SE	95% CI	ZPr > IZI
Purposefulness	*.14*	*.08*	*-.02 .31*	*1.69 .0904*
Membership	*.0009*	*.09*	*-.17 .17*	*.01 .9914*
Process	*.31*	*.13*	*.05 .57*	*2.39 0.0170*
Communication	*.02*	*.06*	*-.10 .14*	*.37 .7140*

P-104 IDENTIFYING CHALLENGES AND ADVANTAGES OF PEER EDUCATIONAL IN STIS AND HIV PREVENTION EDUCATION WITH PLWHA AND HIGH RISK YOUTH IN PAKISTAN

R.G. Ahmad (AMAL Human Development Network, Quetta, Pakistan)

Introduction/Objective: One percent of the newly diagnosed STIs and HIV cases in Balochistan, Pakistan are individuals/youth at risk 8-17 years of age. Our epidemiologists indicate that STIs and HIV cases among Youth increased. While clearly an at-risk demographic, youth are rarely targeted with STIs and HIV prevention education. To empower youth the pilot project at the Youth Empowerment Skills fills that gap by utilizing youth at risk/street children as peer educators administering STIs and HIV prevention programming.
Methodology: In thirty-minute Life Skills education sessions, peer educators provide out of school going youth sound, reality-based information that increases their awareness about STDs/HIV and the spread of the virus. Sessions encourage vulnerable youth to recognize how the virus impacts their lives and gives them a forum to discuss the issue with people of their own age.
Findings: Launching a Peer Education program, which includes awareness of self and body protection focusing on child sexual abuse and STDs/HIV, life skills, gender and human rights/children rights awareness, preventive health measure, and care at work. Opening care and counseling center for these working and street children and handling these centers over to local communities.
During awareness sessions, Youth are informed about the nutrition, physical and psychological changes, masturbation, menstrual cycle, family planning and STDs/HIV.
It was determined relationships among HIV related knowledge, beliefs and sexual behavior of young adults and found that reason for unsafe sex included, misconception about disease etiology, conflicting cultural

values, risk denial partner pressures, trust and partner significance, accusation of promiscuity, lack of community endorsement of protective measures, and barrier to condom access. In addition socio economic pressure, physiological issues, poor community participation and attitudes, and low education level limited the effectiveness of existing HIV prevention education.
Conclusion: Presentations at centers by peer educators have demonstrated that audiences over 12 years of age typically have only basic information about STIs and HIV. Confusion regarding the difference between HIV and STIs and the specifics of risk related behaviors generated interest in the presentations. Additional conclusions will be drawn as the pilot progresses and administrators tabulate survey results and conduct focus groups with peer educators and participants.

P-105 HOW CAN YOUTH WORK TO STOP HIV/AIDS AROUND THE WORLD

M. Wasim (Balochistan Association for Development, Quetta, Pakistan)

Introduction: As poverty continues to grip Pakistan, the number of urban street children grows and has now reached alarming proportions, demanding far greater action than presently offered. Urbanization, natural catastrophe, drought, disease, war and internal conflict, economic breakdown causing unemployment, and homelessness have forced families and children in search of a 'better life,' often putting children at risk of abuse and exploitation.
Methodology: Baseline study and situation assessment of Health problems particularly HIV and STDs among street children of Quetta, Pakistan.
Activities & Conclusion: The program launched a peer education program, including: awareness of self and body protection focusing on child sexual abuse, STDs/HIV/AIDS, life skills, gender and sexual rights awareness, preventive health measures, and care at work.
It also opened care and counseling center for these working and street children and handed these centers over to local communities.
Relationships among AIDS-related knowledge and beliefs and sexual behavior of young adults were determined. Reasons for unsafe sex included: misconception about disease etiology, conflicting cultural values, risk denial, partner pressures, trust and partner significance, accusation of promiscuity, lack of community endorsement of protective measures, and barriers to condom access. In addition, socio-economic pressure, physiological issues, poor community participation and attitudes, and low education level limited the effectiveness of existing AIDS prevention education.
According to the baseline study the male children are exposed to knowledge of safe sex through peers, Hakims, and blue films. Working children found sexual information through older children and their teachers/ supervisors (Ustad).
Recommendations: It was found that working children are highly vulnerable to STDs/HIV/AIDS, as they lack protective measures in sexual abuse and are unaware of safe sexual practices. Training of adolescent as peer educators is recommended. Ours being an Islamic society, such information should be given to youth in a way that does not challenge local norms and values. Problem-based learning and participatory education for improving knowledge and condom use and community-based interventions should be considered for STDs/HIV/AIDS prevention.

P-106 MOTHER TO CHILD TRANSMISSION OF HIV IN AFRICAN WOMEN: BARRIERS TO WIDESPREAD PARTICIPATION IN PREVENTIVE MEASURES

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Background: Many factors influence the development and implementation of programs designed to prevent mother to child transmission of HIV (PMTCT). Sub-Saharan Africa, the area most greatly affected by the HIV/AIDS epidemic, has over 25 million people infected with the virus; 2 million of those people are children who were vertically infected. This study evaluates the socio-demographic factors influencing the acceptance of preventive measures of MTCT, including voluntary counseling and testing [VCT], and identifies barriers to participation in these programs.

Methods: We reviewed 2006 data published by UNAIDS, the WAAG Survey of Pregnant Women in Eastern Nigeria, and the 2003 Nigerian Demographic and Health Survey. Using data collected from the Nigerian Surveys, logistic regression identified socio-demographic correlates demonstrating knowledge of HIV infection and prevention, and desire for counseling and testing. Level of education, marital status, years in relationship, previous pregnancies, maternal age, residence and wealth quintile were all significant correlates.
Results: Logistic regression identified the psychosocial and socio-demographic determinants of beliefs towards PMTCT programs. Based on WAAG Data, Nigerian women with secondary education were more likely to accept VCT and less likely to breastfeed if infected (64%), when compared to women without secondary education (29%). Within married couples, most women would accept VCT if both partners were tested simultaneously. We also concluded that 57% of rural dwellers had limited knowledge of ART as a means of PMTCT, as compared to 40% of urban-dwelling women. Similarly, 66% of women within the lowest socio-economic group had limited knowledge of ART in PMTCT, as compared to 26% women in the wealthiest socio-economic group.
Conclusions: Education level and involvement of a male partner were the two factors that significantly affect the acceptance of VCT and other PMTCT measures. Social stigmatization of HIV'infected individuals appears to be a major barrier to the acceptance of PMTCT measures. Strategic campaigns for preventative measures of mother to child transmission should be better emphasized on radio and television programs in local languages. Universal primary and secondary education will help support the success of PMTCT.

P-107 A COMMUNITY-BASED APPROACH TO INCREASING FLU VACCINATION RATES AMONG HARD-TO-REACH POPULATIONS: LESSONS LEARNED FROM PROJECT VIVA

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Introduction: Low vaccination coverage among minorities and persons living in urban areas in and near poverty is a persistent problem, especially among those who are 'hard-to-reach,' such as undocumented immigrants, elderly shut-ins, homeless, and substance users. Community-based programs such as needle exchanges have been able to reach members of these populations, although their role has traditionally been circumscribed to limited functions. Interventions that can broaden these efforts and improve vaccination rates may reduce population morbidity and mortality, and are especially relevant with growing concern about the potential for influenza pandemics.
Methods: Project VIVA (Venue-Intensive Vaccination for Adults) was developed and implemented by members of the VIVA Intervention Working Group (VIWG) of the Harlem Community and Academic Partnership. The project was developed to respond to low vaccination rates in local areas of need, specifically East Harlem and the Bronx neighborhoods of New York City, and to assess whether expanding the role of community-based programs to include vaccine delivery was effective and sustainable. This community-based intervention which offered free door-to-door and street-based flu vaccinations was designed to increase adult access to influenza immunization and test a rapid vaccination protocol.
Results: VIWG members, representing health facilities, harm reduction programs, social service centers, the health department and researchers, met regularly to contribute to project development, including developing project materials that addressed common myths about flu shots. The VIWG also determined appropriate intervention settings which included areas of high foot traffic where our target populations tended to congregate. During the 2004 flu vaccine shortage, the VIWG dealt with the crisis by determining an alternate vaccine to distribute (Pneumovax), proposing changes to the survey instrument, and re-creating and distributing educational materials. The 10-day rapid distribution phase in the Fall of 2005, in which all vaccine doses (n= 1,648) were delivered, exceeded expectation. Neighborhood residents were receptive to receiving influenza vaccination, particularly in street-based settings. VIWG oversight in protocol development enhanced receptivity to the project, and initial community outreach facilitated a positive response to project activities. Staff selection, which emphasized the importance of knowledge of our communities, was also necessary for successful intervention.

Conclusions: This organizational model represents a successful method of implementing a community-based multi-level intervention. Expanding the efforts of community programs to include vaccination could be an effective strategy for vaccinating hard-to-reach populations. Further, this project has the potential to be utilized in annual mass vaccination campaigns or in the event of an influenza pandemic.

P-108 INVOLVING PRIVATE HEALTH SECTORS IN HIV/AID PREVENTION AND MANAGEMENT IN OGUN AND LAGOS STATES

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Background: In 2005, Hospital assist Nigeria in partnership with 100 private health facilities implemented a project titled, 'involving private health sector in facilities in HIV/AIDS prevention in Lagos and Ogunstate the goal the projects for Private health facilities to contribute `to HIV/AIDS reduction through integration of HIV information, management, care and support. The objectives were to improve provision of care and support services, build human and institutional capacities to deliver quality and affordable HIV prevention and management services.

Methodologies: The project employed 5 major methodologies viz capacity Building trainings, Advocacy and community mobilization, HIV prevention Mainstreaming, care and support through clinical service deliveries Establishment of VCT centre and Community Education and BCC.

Results: Project demonstrated the feasibility of Private Health facilities contribution to the reduction of speed of HIV/AIDS'{There was an increase by 60% in the number of facilities mainstreaming HIV prevention and VCT,during the course of the project implementation. There was an increase by 37% in the number of private health practitioner promotion and distribution of condoms with 43% increase facilities in individual and community education on HIV/AIDS prevention in culturally sensitive communities like Lagos sex (use of condom)practices improvement by 14% and 11% respectively in Ogun and Lagos with partners' casual partners.

Conclusion: Project demonstrated sustained capacity of health providers to mainscreem and delivers quality and affordable HIV management and prevention services. Project enhanced a paradigm change in private health sector services as it improved public education through conduct of outreach activities by private health facilities. Project revealed the untapped potential of private health sector in HIV/AIDS.

P-109 THE PROCESS OF IMPLEMENTING AN HIV/AIDS SEROLOGICAL STUDY IN URBAN SLUM SETTINGS

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Introduction: There is a dearth of available data on HIV prevalence rates in urban poor settings. The limited data that does exist on the same has noted HIV prevalence rates in the urban areas of sub-Saharan Africa as being relatively high. The informal settlements are under-represented in national HIV surveys yet they constitute a sizeable population and going by the other health indicators, it can be hypothesized that the HIV prevalence in these settlements is much higher than the non-slum parts of Nairobi. This paper will explore the processes of conducting an HIV testing pilot study within two informal settlements in Nairobi and it will make recommendations based on the lessons learnt.

Objectives: The study aims to determine the feasibility of conducting an HIV serological study in urban slums through documentation of lessons learnt, challenges encountered, and overall client participation.

Methods: The research is being conducted under the longitudinal framework of the NUHDSS. This database contains information for about 60,000 residents in Korogocho and Viwandani, dating back to 2003, when the surveillance started. A key advantage of the longitudinal framework over cross-sectional data is the ability to explore and tease out sequencing when studying the relationships between variables. APHRC partnered with Kenya Medical Research Institute (KEMRI) on this project to tap on their expertise in HIV serological testing.

The sample size for the pilot phase is about 1000 participants. We aim to use anonymous testing that can be linked with individual behavioral data from the NUHDSS. The HIV status of the subjects will not be disclosed while in the field, but those who wish to know their sero-status will be encouraged to go to our

collaborating VCT centers within the two slum areas for free HIV testing and proper counseling. During the community mobilization stage, a directory of VCT service providers who agree to be referral centers was compiled for the benefit of study participants.
Anticipated Results: Community mobilization for participation in the study is underway. A top-down approach has been used and is proving to be very effective. The importance of involving all key stakeholders has been noted and valuable information. Preliminary results indicate that an elaborate community mobilization process is likely to positively inform community participation.
Conclusion: Preliminary data suggest that implementing sensitive studies (such as this) using a multi-faceted community mobilization strategy can achieve positively response and good acceptance rates in urban poor communities.

P-110 SCREENING HIDDEN AND MULTI-FACETED URBAN RISK GROUPS FOR INFECTIOUS DISEASES: DEVELOPMENT OF AN ANONYMOUS HEPATITIS C SCREENING PROCEDURE THROUGH THE INTERNET

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For the Hepatitis C Internet Project
Introduction: Hepatitis C virus (HCV) infection, first identified in 1989 as a blood-borne infection, can lead to liver cirrhosis and hepatocellular carcinoma. In the general Dutch population the prevalence is estimated to be 0.1-0.4%. Recent advances in the treatment of HCV make it important to inform the population. However, since there are various risk factors for HCV, the population to be informed is multi-faceted, sometimes difficult to reach and likely to live in urban areas. Furthermore, HCV awareness is low as there has not been a national information campaign yet. This pilot project aims to trace and test risk groups in the general population for HCV through an internet screening.
Aim: The project aims (a) to evaluate the effectiveness of the open media campaign and online anonymous screening procedure in tracing HCV infected individuals and (b) to retrieve knowledge concerning HCV risk factors, and outcomes in the Netherlands.
Screening method: An open media campaign will start February 2007 to attract and refer individuals at risk for HCV (e.g. blood transfusion recipients before 1992, former injection drug users and migrants from high prevalence countries) to the online screening website. At the website, the visitor will be motivated to fill out a short interactive questionnaire which assesses the person's risk for HCV. If the participant is at risk for HCV, anonymous HCV serological testing in a laboratory will be arranged online. The results of the blood test will be available online after one week. Subsequently, HCV positive participants will be invited for a confirmation blood test. Chronically infected participants will be referred to a hepatologist for further diagnostics and treatment if indicated. The online procedure will be offered for 12 months. We aim to test 6000 individuals for HCV.
Evaluation: We will evaluate the reach of the open media campaign, the extent in which individuals who completed the online screening questionnaire are at risk for HCV, and whether those at risk for HCV use the project's website to get tested. In relation to this, the usability and acceptability of the online screening procedure as perceived by the participants will be measured. Finally, cost-effectiveness analysis will be performed on the clinical outcome of the screening procedure. If the online screening procedure proves to be successful in tracing infected individuals, this strategy might be implemented nationwide, and might be used for tracing risk groups for new emerging diseases in the future.

P-110a HEALTH PROMOTION THROUGH COMMUNITY COLLECTIVES IN AGRA: COMPLEMENTING GOVERNMENTS EFFORTS TO REACH URBAN POOR THROUGH TRAINED COMMUNITY LINK VOLUNTEERS AND GROUPS

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Learning Objectives: Participants will understand how trained community link volunteers and community based groups promote healthy practices among underserved slum communities.
Introduction: Agra is a rapidly urbanizing city with approximately 800,000 urban poor population across

393 slums. UHRC in partnership with NGOs and Government is encouraging slum communities to promote health through adoption of appropriate practices and enhanced utilization of services.
Methods: Needs assessment and situation analysis followed by stakeholder consultations with government officials, non-government organizations, community and UHRC to gauge partnership potential helped determine context-appropriate program strategies. Capacity building of community for progressive improvement in their health practices and care seeking behaviour is an integral aspect of the approach. Women link volunteers from slums are trained to mobilize community for availing services hence helping service providers to reach the underserved. Mahila Arogya Samiti (MAS) locally known as women's health groups are nurtured and trained for tracking of timely antenatal care, immunization services and promoting healthy practices. Link Volunteers and MAS identify special attention households where owing to issues such as alcoholism or lack of family support, the mother is unable to take care of her own and her child's health. Women of such families receive support from MAS and link volunteer and the much needed social confidence to take desired care of her and her child's health.
Results: Three capable and experienced civil society organizations (NGOs) collaborate with government to strengthen primary health services. A tripartite agreement involving the district government, NGOs and UHRC has been developed. The partnership is steadily expanding Reproductive and Child Health (RCH) services to about 1,40,000 urban poor population across 71 slums. 80 community link volunteers and 32 MAS are promoting healthy household behaviours- tracking timely immunization, antenatal service and enhancing demand for and utilization of health services. MAS also facilitate increased uptake of services at regular monthly outreach sessions.
Initial trends suggest positive outcomes; monitoring data indicates TT immunization by 6 months increased from 7% to 78%, three ANC from 43% to 73%, DPT 1 by 2 months from 3.8% to 63%, measles by 9 months from 7.3% to 85% between June 2005 and March 2006.
Conclusion: Motivated and capable communities (trained volunteers, women's health groups) contribute towards better health outcomes through modeling appropriate health behaviours, supporting special attention households and also enhance utilization of health services by ensuring improved attendance at regular monthly outreach MCH sessions in slums.

P-110b PUBLIC-PRIVATE-PEOPLE PARTNERSHIP IN AGRA, UTTAR PRADESH: AN EFFECTIVE WAY TO REACH UNDERSERVED URBAN POOR POPULATION

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Learning objective: Participants will understand how PPP partnership evolves and rapidly increases reach of maternal and child health services to underserved urban poor.
Introduction: Noting inadequacy of existing urban health infrastructure and burgeoning underserved urban population, Government of India is encouraging partnerships with private players for quickly and effectively reaching the urban poor. In Agra, Urban Health Resource Centre (UHRC) facilitates operationalisation and coordination. NGOs run Urban Health Centres (UHC) in areas having no such centres. They also strengthen capacity of slum communities to avail services.
Method: Public-Private-People partnership aims at harnessing the combined potential of Government, NGO and slum communities in a coordinated manner to optimize available resources and expeditiously expand health services for the urban underserved.
A situation responsive approach was developed involving all stakeholders- government officials, non-government organizations (NGOs), community and UHRC. Program planning involved (a) understanding local context through needs assessment and situation analysis (b) stakeholder consultations to gauge complementary skills, willingness for partnership, building mutual trust (c) involvement of government officials in decision making, encouraging champions within public sector (c) determining context-appropriate strategies by bringing evidence into planning and remaining open to ideas/feedback (d) establishing formal documentation within government system for sustaining the process.
A selection committee comprising government officials and UHRC representatives assessed capacities of potential partners. A tripartite agreement involving district government, NGOs and UHRC was developed.

Results: Services are reaching to 1, 41,000 hitherto underserved slum population (71 slums). Two new UHCs are providing OPD and outreach services. The network of community link volunteers, women's health groups, community organizers enhance demand for services. Beneficiaries visiting UHC pay nominal service charges, which is a step towards creating self sustaining health care system. Initial trends have shown progressive utilization of MCH services; monitoring data indicates TT immunization by 6 months increased from 7% to 78%, three ANC from 43% to 73%, DPT 1 by 2 months from 3.8% to 63%, between June 2005 and March 2006. A District Urban Health Task Force chaired by District Magistrate with Chief Medical Officer as convener, reviews and supports program implementation.
Conclusion: The potential of private NGOs can effectively be utilized for reaching to underserved urban poor in similar urbanizing city. Such a partnership approach can significantly add to government health system and has the potential to become as a viable approach for replication/adaptation in other cities and states.

P-111 DEVELOPING AN URBAN NEIGHBORHOOD OBESITY MODEL

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Introduction: Obesity rates in North America have continued to rise since the 1980's, contributing to increased morbidity and mortality from diabetes, heart disease and some cancers. Data from national surveys suggest that over 30% of Americans now exceed the World Health Organization's criteria for obesity based on the body mass index. To date, research on the determinants of obesity has focused mainly on the role of individual-level risk factors. However, in addition to individual-level factors such as genetic predisposition, socio-economic status and ethnicity, evidence suggests that neighborhood characteristics including the built environment and access to fast food restaurants are significant determinants of urban obesity. There is currently no single conceptual model that comprehensively describes the relationships between individual and neighborhood-level obesity risk factors, and no validated tool exists to assess the 'obesogenic' character of a neighborhood.
Methods: PubMed and PsychInfo were systematically searched using the keywords: neighborhood, obesity, multilevel, built environment, food availability and fast food. Seventy studies were identified, coded and abstracted. The results of this review were used to inform the development of a Neighborhood Obesity Model that describes the relationships between individual risk factors and the contextual variables that shape population-level obesity.
Results: Obesity is associated with neighborhood SES, racial composition and fast food availability and inversely associated with neighborhood walkability. Ambiguous relationships were reported for access to supermarkets, neighborhood crime, access to public transportation, farmers' markets, community supported agriculture, supplemental feeding programs and food prices. A small number of studies have assessed the associations between single neighborhood variables and obesity risk, though seldom have protective variables been assessed simultaneously with neighborhood factors that promote obesity. Consequently, the overall neighborhood effect on obesity rates may have been over- or under-estimated.
Conclusion: Neighborhood context influences dietary patterns, physical activity habits and neighborhood obesity rates. Little work to date has clarified the pathways through which individual and contextual variables interact to influence obesity outcomes. We have proposed the Neighborhood Obesity Model (NOM) to illustrate these relationships. Next steps include testing the model using data from New York City.

P-112 HOUSING FIRST INITIATIVE FOR ROUGH SLEEPERS IN BOSTON

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Purpose: Housing first models have been utilized by several cities across the county, primarily to serve persons with chronic mental illness. No attempts have been made to house chronically homeless individuals living on the streets who suffer from the tri-morbidity of medical, psychiatric, and substance abuse.
Methods: The multidisciplinary Street Team of the Boston Health Care for the Homeless Program (BHCHP) includes 2 internists, a physician assistant, 2 nurses, a psychiatrist and therapist. The team combs the streets of Boston day and night to offer direct medical and mental health care to these 'rough sleepers.'

A new housing first program has been implemented with a goal of housing 24 long-term 'rough sleepers' directly from the streets. The BHCHP Street Team has worked with a housing partner to provide continuity of care through frequent home visits. An evaluation of the program will involve collecting demographics, documenting morbidity and mortality, and assessing health outcomes as well as utilization of emergency departments and hospitals. A survey will be administered at baseline, 3 months, and six months to assess the effects of housing on health and well-being.
Results: 8 persons have been housed sine October 2005, and 16 others will be housed by July 2006. We will report on the housing stability and health outcomes.
Conclusions: This small pilot program will add to the growing body of literature that has attempted to assess the effects of housing on health. Our hypothesis is that safe housing will reduce morbidity and mortality, improve health outcomes, change health care utilization patterns, and result in personal well-being.

P-113 PRIVATE PUBLIC PARTNERSHIP IN INDIA:THE NAGPUR EXPERIENCE

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Health is one of the most precious possessions of a human being. And nowadays, more and more people get aware of this. People are more concerning about their health and want to improve their live quality. That is one of the reasons for the growing interest in Waste Management.
With a proper and solid waste management, the public health and the quality of live of the citizens can noticeable improve.
CDC is taking care of the door-to-door collection in 9 out of 10 zones in Nagpur and lifting and transportation of the complete city. Presently, there is 100% coverage with door-to-door collection of garbage in Nagpur city. They provide a daily and regular service to the households. And if people have a complaint about the service, CDC tries to solve the problem within 24 hours. A customer care service number is available for complains from 6am to 8pm every day. According to the citizens of Nagpur, before outsourcing there was only lifting of garbage on a daily basis in the influential areas. NMC workers covered around 30% of the city with door-to-door collection. To register a complaint about waste citizens had to go through the hierarchal structure of NMC's management. Only after a lot of complaints NMC used to lift the garbage from their area. This is a big improvement in comparison of the working style of NMC before outsourcing the Waste Management project and a cleaner city is the result.
The citizens recognize the improvements. 87% says that the cleanliness of their area is better or much better than before. Besides, 75% is satisfied with CDC's garbage collection service.
Shopkeepers are also satisfied with CDC's garbage collecting and road sweeping services. For them, clean surroundings are important to attract customers.

P-114 KYOTO PROTOCOL AND PAKISTAN

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Introduction: Global warming is a greater threat than terrorists.
The Kyoto protocol officially known as United Nations Framework Convention on Climate Change is aimed at reducing the world's greenhouse gas emissions.
Objectives: The Kyoto protocol named after the city of Japan where it was signed in 1997, is a legally binding treaty that aims at reducing the amount of carbon dioxide emitted by developed nations from 1990's levels by an average 5.2 percentage between 2008 and 2012.
Methodology: Interviews with officials in Govt, civil society organizations and field studies in Pakistan.
Findings/ Pakistan Situation: All Pakistan's major cities including Karachi, Lahore and Rawalpindi suffer from pollution. Degrading air quality has adversely affected the health of some 16 million people. The country is spending an additional about $500 million in health care cost every year. As a result in 1999-2000 the health of 40 per cent of the urban population was affected by air pollution. Vehicles and industries have already been identified as major sources of air pollution in Pakistan. However many environmentalists say the fuel quality is to blame as there are high levels of lead and sulphur in fuel. Some 550 tons of lead are emitted by vehicle every year. Oil fired thermal power plants add another 190 tons of lead, according to

IUCN report. The Pakistan Medical Research Council (PMRC) in a survey found dangerously high lead level in the blood of the children of between 41 and 50 microgram/deciliter where the safe limit is 15.
Recently Govt of Pakistan agreed to launch a clean fuel initiative, which later on promoted to the use of CNG in the vehicles, forethought a major cut down in the country's import bill of petroleum products.
Recommendations: To fulfill the Kyoto protocol essentially the reduction of green house gases we suggest that the Govt should freeze the prices of CNG otherwise its promotion campaign regarding the use of CNG would be futile.
Moreover Industrial units have to set the emissions intensity targets (tons of emission per unit produced). A very strict check on vehicles running without their engines tuned up would also help in mitigating the problem.

P-115 SPATIAL DISTRIBUTION OF FOOD IN BLACK AND WHITE: NEW INSIGHTS ABOUT FOOD AVAILABILITY IN A SEGREGATED CITY

J.A. Kelley-Moore (University of Maryland Baltimore County, Baltimore, United States of America), J. Lloyd, J. R. Short

Introduction. The availability of grocery stores in neighborhoods is associated with better nutrient intake for residents and overall neighborhood stability. However, much of the literature does not distinguish between types of grocery stores beyond classifying them as 'chain' versus 'non-chain'. The purpose of this paper is to accurately assess actual food availability in Baltimore, Maryland, a residentially segregated city by race and social class.
Methods. We developed a heuristic to classify levels of food stores in neighborhoods based on criteria such as size of store, hours of operation, and variety of products. Using ArcGIS mapping software, we defined the boundaries of the Baltimore neighborhoods, and geocoded the food stores by level. We then added the GIS layers of socioeconomic and racial composition of the neighborhoods.
Results. The results of the spatial regression analysis indicate that poorer neighborhoods are likely to have small, poorly-stocked food stores with limited hours. More affluent neighborhoods tended to have more total food stores and a greater variety of types of store. Fresh meat, whole-grain breads, and fresh produce were available in a greater number of stores in White neighborhoods than in Black neighborhoods. There was an interaction between racial and socioeconomic composition of a neighborhood. Middle-class Black neighborhoods were more likely to have better grocery stores than poor Black neighborhoods, but were less likely to have the level of store found in economically equivalent White neighborhoods. Indeed, the largest grocery stores (some open 24 hours) were only located in predominantly White neighborhoods.
Conclusion. Classifying food stores by level helps elucidate the mechanisms of urban health inequality by indicating not just whether food is available, but what kind of food is available in neighborhoods. This element of spatial inequality reflects the social construction of space, differential economic and political investment, and stereotypes regarding food preference by race and class.

P-117 THE FULL SERVICE SCHOOL: SERVING THE MIND, BODY AND SOUL

M. Gregory (UMDNJ, Newark, United States of America)

Introduction: Full-Service Schools have emerged from the desperate need among many urban areas. These education systems have experienced obstacles in achieving their educational goals due to a complicated set of variables. These variables often lay outside the physical school doors. The full-service school addresses the needs of the whole child. Services provided by this type of school include health care, social service, mental health service, family resource centers, guidance, community workshops and self esteem building groups. The most important service provided is a place to seek help at any time. The ultimate goal is to achieve a harmonious blend of education and health.
Methods: Literature review of existing full service schools/clinics and policy implications regarding funding, staffing, management and government intervention.
Results: Thorough investigation revealed that most school based clinics are staffed by social workers, health educators, clinic aids, nutritionists, psychologists and part time physicians. Pregnancy prevention and

psychological counseling are services that are provided in addition to medical attention. Social skills and competency training workshops are offered to provide students with the life skills needed to survive in real world situations, such as avoiding drugs and conflict. Similarly, group counseling sessions are offered to address specific needs such as suicide prevention and gay/lesbian support.
Conclusion: What is known about the effectiveness of full service schools is that they find a way to appear in the most depressed communities. The higher the risk the student population is, the more determined the full service program should function. The positive ramifications of school based health clinics have led to decreased Emergency Department (ED) visits, higher rate of attendance in school (due to in house medical treatment), and higher contraceptive use among secondary school students.

P-118 URBAN SOLD WASTE PROBLEM: A COMMUNITY BASED APPROACH

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The problem of waste is primarily an urban phenomenon. Rapid urbanization and indiscriminate setting up of industries within cities, as is the case in Bangladesh, worsens the problem. About a fourth of Bangladesh's population of over 120 million currently live in urban areas, which is expected to increase to 46 million in the year 2006 and to 68 million in 2015.(The Independent, January 19, 1998) Of the current urban population of 30 million, nearly a fourth live in the Dhaka city which has an area of 344 square kilometer. Such high concentration of population makes solid waste management a serious problem for the municipal authorities of Dhaka city. The problem will get much more serious when Dhaka becomes a mega city early next century. The paper begins by bringing into focus the seriousness of the issue of solid waste management in Dhaka city. It then describes the prevailing system, as employed by the Dhaka City Corporation (DCC), to deal with this growing problem. Next, it presents the workings of a community-based experiment to manage solid waste in Dhaka city and examines the effectiveness of the experiment. The paper concludes by drawing some implications from the study.
Estimates for solid waste generated in Dhaka city vary from 3,000 to 3,500 tons per day. (Shukur and Paul, 1993; Sinha and Enayetullah, 1997) They come from households, commercial and industrial establishments and street sweepings. Households generate most of the solid waste, accounting for nearly 45% of the total.

P-119 REVITALIZING URBAN RECREATIONAL FACILITIES: THE BOSTON SCHOOLYARD INITIATIVE

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The provision of quality recreational opportunities must be a central component of strategies to increase physical activity and address the global epidemic of obesity. There is a critical need in many urban communities to improve active living spaces in schools and neighborhoods. This is particularly the case in U.S. inner cities where affordable recreation opportunities are scarce. Schools have outdoor recreation facilities that can play an important role in this effort. Unfortunately, too many older urban centers' schoolyards have decayed to the point that they pose hazards to children and are a negative influence on their surrounding communities. Similar to other cities, Boston schoolyards were poorly maintained spaces that lacked safe play equipment that were more likely to be used for parking than recreation.
In 1996 the Boston Schoolyard Initiative (BSI)) was introduced as a public-private partnership to rebuild deteriorated playspaces. Funded by city/school funds and private foundations, each project cost up to $200,000 and was individually designed through a multi-year effort. Half of Boston's public schools have been renovated to date and the projects have reached every neighborhood and demographic group in this increasingly diverse city. Post renovation schoolyards range from passive greenspaces to active outdoor classrooms.
A case study of the BSI, funded by the Robert Wood Johnson Foundation's Active Living Research program, examined the development, evolution, and impact of this initiative. Through a review of BSI files and interviews with key individuals, several lessons have emerged that are applicable to other communities interested in similar types of strategies.
Successful coalition building takes time and must be founded on the development of a shared vision by all

stakeholders. BSI projects depended on the long-term involvement of multiple institutions and people. Coalitions should include people and organizations both inside and outside the schools. Including non-school personnel increases the amount of fiscal and other resources available to the school. It also can stimulate the development of school 'neighborhood connections, help create better projects and assist in the long-term viability of improvements.
Revitalized schoolyards can make teachers, students and parents feel better about their school environments, stimulate learning and attract additional investment to the school.
Care must be taken to not burden already stressed school budgets. Long-term maintenance must be addressed.
This case study is organized and presented in a way that facilitates local government and civic leaders' understanding of how renovated schoolyard spaces can serve as pedagogical and community-building tools.

P-120 POTENTIAL ENVIRONMENTAL DETERMINANTS OF PHYSICAL ACTIVITY IN ADULTS: A SYSTEMATIC REVIEW

G.C.W. Wendel-Vos (National Institute for Public health and the Environment, Bilthoven, the Netherlands), M. Droomers, S. Kremers, J. Brug, F. Van Lenthe

Introduction: In promoting physical activity on a national and a local scale, the key issue is to know how to create an environment that incorporates a maximum of facilitating and a minimum of obstructing attributes. The purpose of the present systematic review was to gain insight into which environmental factors have been identified in the scientific literature as potential determinants of various types and intensity of physical activity among adult men and women.
Methods: A systematic review of observational studies retrieved from Medline, PsycInfo, Embase and Social scisearch. The ANGELO framework was used to classify environmental factors. Data extraction was done separately for men and women as well as for both genders combined.
Results: 47 publications were identified. No evidence for differences between men and women was found. Social support and having a companion for physical activity were found to be convincingly associated with different types of physical activity. Availability of physical activity equipment was convincingly associated with vigorous physical activity / sports and connectivity of trails with active commuting. Other possible, but less consistent correlates of various types of physical activity were availability, accessibility and convenience of recreational facilities.
Conclusion: Supportive evidence was found for only very few presumed environmental determinants. However, most studies used cross sectional research designs and non-validated measures of environments and/or behaviour. Therefore, no strong conclusions can be drawn and more research of better quality is clearly needed.

P-121 YOUTHS HEALTH AND LIFESTYLE IN THE LIGHT OF THEIR RESIDENCE

N. Keresztes (University of Szeged, Szeged, Hungary), B. dr Pik

Introduction: Number of studies have pointed out that residence have strong influence on youth' health status, health behaviors and leisure-time activities. The main goal of our present study was to detect youth's health behaviors, psychosocial health and leisure-time activities according to residence and the type of flat in the Southern Plain Region of Hungary.
Method: Our data were collected in 2004 among 14-21-year-old students at the Southern Plain Region of Hungary (n=548) using self-administered questionnaire. Items measured youth's health behaviors, psychosocial health and leisure-time activities.
Results: We have found that peers - and consumption oriented leisure factor is significantly more common among youth from city and county town whether intellectual ' artistic leisure factor is characterize youth from provincial town and village. It is also pointed out that health risk behaviors, psychosomatic and depressive symptoms are more frequent among those who lives in block of flats or housing estate.
Conclusion: Our findings suggest that residence and residental environment can influence many aspects of youth's lifestyle which could be an important factor of health promotion.

P-122 CONTEXTUAL ASPECTS OF URBAN HEALTH AND MENTAL HEALTH

G. Caracci (Urban Mental Health Section World Psychiatric Association, Newark, United States of America)

Introduction. Over tha past few years there has been a growing interest on the impact of contextual factors on urban health and mental health. Methodology. A critical review of the scientific literature on the effects of environmental, socioeconomic and psychosocial factors on urban health and mental health. Results. A number of researchers have begun to focus on the effects of environmental factors on health issues. Examples include the influence of neighborhoods characteristics on medical illnesses as well as depression. A growing number of studies highlight the effects of socioeconomic changes such as globalization and migrations on health. A smaller number of studies focus on the impact of psychosocial issues such as social support and participation/exclusion on health.

The results of an international survey on the subject by the Urban Mental Health Section of the World Psychiatric Association will also be presented. Conclusion. The important role played by contextual factors in urban health and mental health may have significant implications for urban planner and policy makers.

P-123 DEFINING NEIGHBOURHOODS FOR POPULATION HEALTH RESEARCH IN A WORLD OF MOBILITY: ANALYSING ACTIVITY SPACES AND TRIP PATTERNS

Y. Kestens (Université de Montréal, Montréal, Canada), C. Morency, M. Daniel

Introduction: Recent trends in public health research show a growing interest in place effects on health. Generally, the physical and social characteristics of places are measured around the place of residence at the 'neighbourhood' level. With increasing urbanisation, the neighbourhood has become a reference in urban planning, in the objective of re-creating a place favouring activities at a local scale like shopping, leisure, and social interaction, thereby reinforcing the sense of community and civic participation. Although the consideration of such bounded neighbourhoods seem appealing for measuring place effects on health, the evolution of polynuclear cities resulted in increasingly complex activity spaces and trip patterns. Consequently, today's neighbourhoods are very different from the relatively self-contained neighbourhoods of 100 years ago. Therefore, in order to increase our understanding of neighbourhood effects, accounting for people's actual activity spaces and mobility patterns may provide the means to help to spatially define where 'neighbourhood effects' take place.

Methods: This report presents an analysis of data from the 1998 Montreal Origin-Destination survey. For each of the 162,594 individuals surveyed, the following measures were calculated within a GIS and then modelled: total size of activity space (area of the convex hull of destinations), as well as more specific measures concerning the activity space around the place of residence, including the overlap between the total activity space and a buffer of 500 meters around residence, and time spent in activity, the distance travelled, and the probability of using an active mode of transportation within that same buffer. Explanatory variables include socio-demographic characteristics of individuals and households, and a number of variables describing the social and physical characteristics of the neighbourhood of residence.

Results: Individual variables (sex, age, having a driver's license, car access, and occupation), household variables and neighbourhood variables (SES, density of destinations) are significantly associated with each of the outcomes.

Conclusion: These findings have key implications for better integrating 'neighbourhood' effects in population health studies. They suggest that activity spaces around the place of residence are not homogeneous, and that accounting for these differences may contribute to detect place effects that would otherwise be attributed simply to individual-level factors or considered as residuals.

P-124 PEDESTRIANS' SAFETY AND DESIGN STANDARDS: NEW CHALLENGES ARE ON THE ROAD

R. Barbisan (Florida State University, Tallahassee, United States of America)

Introduction: Transportation planners and engineers have long embraced a design paradigm according to which roads built to standards are safe. This paradigm states that roads built with high design standards will decrease the frequency of collisions among motor-vehicles by compensating for driver errors during vehicle operation. Within this paradigm, professionals focus on motorists as the primary, and privileged,

class of road users. By contrast, pedestrians and their needs are largely ignored, with the result that walking has become one of the least safe modes of transportation in the United States.
Recently, more attention is being paid to issues of pedestrian safety. Research has resulted in the development of new pedestrian safety guidelines that seek to improve the safety and mobility of pedestrians through the adoption of pedestrian-focused design standards. These standards are quite different from those promulgated by organizations such as the American Association of State Highway and Transportation Officials (AASHTO), the Institute of Transportation Engineers (ITE), and state Departments of Transportation (DOT) whose primary focus on motorist safety reflects the notion that streets are primarily traffic conduits.
Pedestrian-focused designs assume that people would walk wherever they wish, if attractive and safe facilities and environments are provided.
Methods: This paper uses insights from the pedestrian safety literature to critically evaluate the design guidelines and manuals that most directly affect street construction in the United States. The literature review will provide an up to date account and discussion of the most crucial research findings, theories and approaches to roadway safety. The review will result in the creation of an evaluation framework within which I will determine the extent to which pedestrian safety research is being incorporated into AASHTO, ITE, and state DOT design guidelines and standards. I will examine manuals produced over the past two decades in order to determine the degree to which design standards have changed in the light of recent pedestrian safety research.
Results: The results of the research will be a better understanding of the degree to which pedestrian safety research is being incorporated into manuals that guide transportation planning and engineering practice and specific recommendations for improvement, as appropriate.
Conclusion: As long as we continue to rely on the manuals to guide street construction, we must be sure the design standards they contain focus on the needs of all road users. This research will provide guidance that ensures they do so.

P-125 HEALTH EFFECTS IN PEOPLE EXPOSED TO LEAD AND CADMIUM

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The pollution with heavy metals made by metallurgical plants represents a major health problem. Lead and cadmium are the main pollutants with toxic effects on humans. Monitoring the environment and biotoxicological parameters are efficient means of identifying problems and seeking prevention.
We investigated a group of 71 persons from a city living in the neighborhood of the plant, who were exposed to lead and cadmium and compared them to an unexposed group. The level of the lead in the air exceeded the maximum accepted values (0.10 mg/m3).
Exposure tests of lead and cadmium were made: blood lead, blood cadmium, and blood iron using atomic absorption spectrophotometrye. In the same investigation program, we also made clinical examinations and filled in standard questionnaires on specific symptoms, which appear after long, high-level exposures to lead and cadmium.
We found low exposure to lead in 10% of the exposed group and 18.1% of the unexposed group; moderate exposure in 76.6% of the exposed group and 72.7% of the unexposed group; excessive exposure in 13.3% of the exposed group and 9% of the unexposed group.
High levels of blood cadmium were found in 15% of the exposed group and 9% of the unexposed group. For blood iron, high levels were found in 53.6% of the exposed group and 70% of the unexposed group.
There were significant differences between the exposed and unexposed regarding the three levels of exposure to lead ($p<0.001$) and also in the blood cadmium levels between the two groups ($p<0.001$). The differences regarding the high iron levels were also significant ($p<0.01$).

P-126 TRAFFIC, AIR POLLUTION AND ATTRIBUTABLE MORBIDITY IN THE AMSTERDAM AGGLOMERATION, A STUDY DESIGN

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In different international studies, exposure to air pollution has been associated with increases in mortality and hospital admissions due to respiratory and cardiovascular diseases. These effects have been found in short-term as well as long-term studies. The pollutants of interest are mainly nitrogen dioxide and particulate matter. An important anthropogenic source of these pollutants is combustion of fossil fuels by motor vehicles. Specific components related to traffic exhaust, especially diesel combustion products, are expected to be important in the association with health effects. Within urban areas, earlier studies indicate that living near busy roads is associated with increased mortality. The influence of chronic traffic related air pollution on morbidity has not been studied very thoroughly. In this project we propose to use traffic counts and associated air pollution modeling to estimate attributable risk of hospital admissions. Data on traffic density and related air pollution in Amsterdam, Haarlem and surrounding municipalities will be collected from local authorities. Using GIS (geographic information systems) we will build exposure categories. All people living in the agglomeration will be allocated to certain exposure categories according to traffic density or modeled air pollution concentrations. Using traffic count data and GIS for exposure estimation is a complicated but innovative subject. Combining exposure categories with hospital admissions, will allow us to calculate the attributable health risk of living near busy roads. This way, local authorities could base policies around 'air pollution hotspots' on health arguments instead of solely on exceedance of air quality standards.

P-127 HOW LAND-USE CHANGES PROMOTE SMOKE-HAZE DISASTERS IN INDONESIAN CITIES AND COUNTRYSIDE

V.C. Hammen (Centre for Environmental Research (UFZ), Halle (Saale), Germany)

Introduction: Smoke-haze episodes caused by forest and peat fires affect parts of Indonesia every year with significant impacts on human health and air quality. Particularly fires in degenerated peat areas release huge amounts of trace gases, e.g. CO2, CO and CH4, and particles into the atmosphere, exceeding by far the emissions per unit area from fires in surface vegetation. The 1997 Indonesia forest fires were an environmental disaster of exceptional proportions. Such a disaster caused massive transboundary air pollution and indiscriminate destruction of biodiversity in Southeast Asia. The immediate consequence of the forest fires was the production of large amounts of haze in the region, causing visibility and health problems within Southeast Asia. More than 500 cases of haze related mortality were reported.

In the 1997 haze disaster an estimated 9 million ha forests burned, of which were 0.9-1.2 million ha peat lands. Peat is an organic soil which is smouldering for months when set on fire, emitting large amounts of smoke. Indonesia has one of the largest areas of tropical peatlands worldwide, estimated at 25 million ha in Borneo and Sumatra. But it is Indonesian policy to converse most of these areas for agricultural purpose, meaning that the water prone peat soil will be drained and susceptible to fire. Conversation is proceeding at a rate of 700 000 ha per year, which means that in 30 years most of the now difficult to set on fire peatlands will be conversed dry peat areas, highly susceptible for fire.

The high risk of future haze disasters for Indonesian cities will be evaluated in this presentation.

Methods: Evaluation of the interaction of land-use change, forest conversation, peatland degradation, El-Nino droughts, and forest fires and peatland fires will be shown.

Results: In 30 years the area of burning dry peatlands can be 10-20 times larger than at the 1997 haze disaster. Health effects of humans living in the nearby countryside will be disastrous, but effects will be significant also in cities as distant as Singapore.

Conclusion: There will be no other possibilities to prevent such a disaster except a change in land-use practises, avoiding fire as a tool.

P-128 NO DECREASE IN AIR POLLUTION IN AMSTERDAM IN THE PERIOD 1999-2005

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Traffic related air pollution is associated with increased morbidity and mortality. In Amsterdam, a relatively large part of the population (11%) is living close to main roads and is therefore exposed to higher levels of traffic related air pollution.

In 2001, new stricter European health limit values were implemented in Dutch legislation, with target values of 40 µg/m3 as annual mean concentration for particulate matter (PM10) and nitrogen dioxide (NO2), to be reached in 2005 and 2010 respectively.The assumption was that in the years before 2005/2010, NO2 concentrations would decrease with 2 and and PM10 concentrations with1 µg/m3 per year, due to general emission reduction measures.

In Amsterdam, PM10 and NO2 concentrations are routinely measured by the local Air Pollution Monitoring Network. We analyzed the trend in annual mean PM10 and NO2 concentration in the period 1999-2005 at 3 measurement sites. Two sites are so called traffic sites that are heavily affected by traffic. One site is located along the motorway A10 (123000 vehicles/24h), the other site is located along an inner city main road (Stadhouderskade, 24000 vehicles/24h). The third site is an urban background site, that is located at some distance of local sources of air pollution.

Analysis of the annual mean PM10 concentrations in the period 1999-2005 showed no change in annual mean concentration. The annual mean concentrations varied around 27,5 µg/m3 at the background site and around 37 and 31 µg/m3 at the motorway site and street site, respectively. This was confirmed by the results of linear regression analysis with annual mean concentration as the dependent variable and number of years since the start (in 1999) of the analysis as the explanatory variable.

There was a tendency of decreasing NO2 concentrations at the background site and increasing NO2 concentrations at the traffic sites, but the resulting regression coefficients did not reach statistically significance. NO2 concentrations varied around 35 at the background site and around 53 and 46 µg/m3 at the motorway site and street site, respectively.

Apparently, general emission control measures do not result in decreasing levels of PM10 and NO2. Tailpipe emissions per car have decreased in the period 1999-2005, and traffic intensity in Amsterdam remained at a constant level. To date, we have no clear explanation for the lack of decrease in air pollution levels.

P-129 ENVIRONMENTAL HEALTH AND EXPOSURES IN THE SANDTOWN-WINCHESTER NEIGHBORHOOD OF BALTIMORE, MARYLAND

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Community Building in Partnership (CBP) (a non-profit community-based organization), in the Sandtown-Winchester neighborhood in Baltimore, MD, have been concerned about environmental justice issues in their predominantly African-American, economically disadvantaged, neighborhood for years. In order to finally address these issues they enlisted a researcher at Johns Hopkins University to investigate resident's exposures to environmental hazards. The goals of this project were to 1) build community capacity to address environmental health issues as they arise, 2) gather information regarding residents attitudes, perceptions and beliefs about environmental health issues in their community, and 3) develop outreach and educational material based on the data collected. To achieve these goals and reduce exposures it is necessary to have a well-established, well-trained, community-based group of people who know and understand environmental monitoring and community assessment. In order to make this project successful the researcher followed the principles of community-based participatory research (CBPR), which is a collaborative process that includes equal participation in research by the community partner and researchers with the understanding that each brings a unique set of knowledge and skills. Therefore, the researcher activity included the young adults (18-24 years old) from CBP's Urban Youth Corps (UYC) program in the research. The researcher trained the young adults in a variety of research methods and then they conducted an environmental health survey in 150 homes by going door-to-door. The survey was developed by

several of the young adults and was aimed at capturing attitudes, beliefs and knowledge about salient environmental health issues in the Sandtown-Winchester neighborhood. The young adults also collected indoor particulates measuring less than 2.5 micrometers in aerodynamic diameter (PM2.5) data from 20 homes in the Sandtown-Winchester community and simultaneously collected PM2.5 samples from 5 outdoor neighborhood locations. The young adults in collaboration with the researcher are currently entering the data from the surveys, and using the data to develop outreach and educational materials. The goal is to have the educational material complete and back into the community by fall 2006.

P-130 LOCATING NOXIOUS FACILITIES IN URBAN AREAS: MAJOR SOURCES OF WORRIES AND CONCERNS ABOUT LANDFILLS IN LAGOS METROPOLIS, NIGERIA

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Public consensus has long held that landfills are not a favourable usage of land. This is because landfills pose unacceptable risks to human health and the environment. In Nigeria, these risks are further accentuated by the fact that landfills are operated in essentially residential neighbourhoods. There is a dearth of empirical research that ascertains the individual and community level impacts around the existing landfills in Nigerian urban areas. Using the model of environmental stress and coping, the study, therefore, examines the major sources of worries and concern about the two functional landfills in Lagos metropolis. It utilizes primary data collected by means of structured questionnaires administered to 930 heads of households around the landfills. It focused on the nature of geographical variations and intensities of impacts with distance from the landfills. Lagos metropolitan area offers an interesting research laboratory to study the impact of landfills because, apart from the fact that solid waste is currently one of the biggest environmental problems commonly experienced in the metropolis, Lagos is a socially heterogeneous city with large variations in environmental quality. The outcome of the study shows that landfills within Lagos are uncontrolled and do not conform to international standards of landfill operations. The results reveal that respondents consistently placed high premium on negative externalities of landfills. Specifically, odour, smoke, noise, flies and rodents, aesthetics and water pollution were the most frequently mentioned environmental problems, while psychological disturbance, nausea and diarrhoea were frequently mentioned health problems. There is palpable fear among respondents that the environmental problems could snowball into major health problems. The major contributions are with particular reference to the negative gradient of major impact trajectories especially environmental and health. Given the fact that Nigerian cities have the fastest growth rate in Africa, the outcome of the study would be useful in informing the decision to site this much needed facility in Nigerian cities in the future.

P-131 NOISE LEVELS IN THE NYC SUBWAY SYSTEM

R.R.M. Gershon (Columbia University, New York, United States of America), R. Neitzel, M. Barrera, M. Akram

Introduction: Noise-induced hearing loss (NIHL) is a widespread global urban health problem. One important source of urban noise is mass transit, including subways, buses, commuter rail and other transportation systems. In particular, subway noise is a concern; the ridership is vast, and noise data are extremely limited. To address this gap, a pilot noise survey of the New York City transit system was conducted.

Methods: Sound pressure levels (SPLs) were measured on subway platforms, inside subway cars, and at bus stops (for comparison purposes), using a sound level meter.

Results: Fifty-seven average SPL measurements, encompassing 377 5-second intervals, were made on subway platforms in 17 different subway stations. All 57 measurements were over 75 dBA, the threshold level above which there is a duration-dependent risk of NIHL.

The mean level across all measurements was 85.7 dBA, and the maximum 5-second interval SPL was 106 dBA. Over 50% of all measurements were over 85 dBA, and more than 10% were over 90 dBA. Major transfer point stations had significantly higher ($p=0.002$) SPLs, and conditions associated with higher platform noise levels included track curvature, two trains at a platform simultaneously and excessive brake squealing.

Additionally, twenty-five maximum SPL measurements were collected on subway cars from five different

train lines, as well as 10 different outdoor bus stops. Inside the subway cars, the mean maximum noise level was 94.9 +/- 7.1 dBA, with a range of 84 to 112 dBA. All maximum SPLs exceeded 85 dBA, 68% exceeded 90 dBA, and 20% exceeded 100 dBA. The mean maximum bus stop SPL was 84.1 +/- 4.5 dBA, with a range of 76 to 89 dBA. Maximum SPLs in subway cars were significantly greater ($p<0.0001$) than those from the bus stops.
Conclusion: NIHL generally results from chronic exposure to noise levels in excess of 85 dBA. EPA and WHO recommend lower daily exposures (75 dBA for 8 hours, or 70 dBA for 24 hours) to prevent any hearing loss among exposed individuals. The levels measured in this study indicate that subway riders as well as subway operators have the potential to exceed recommended levels. Additional studies of this public health problem are warranted to fully characterize the risk and guide the development of effective risk management strategies.

P-131a HEALTH STATUS OF WASTE WORKERS; CASE STUDY OF NAGPUR, INDIA

V. Agrawal (Centre for Development Communication, Jaipur, India), J. Turnbull

Over the next two decades, growing urbanisation in India will result in a massive increase of waste. By the year 2021, as workers continue to migrate to urban areas, the urban population is expected to represent 40% of the overall population (around 400 million people). Generally it is the urban poor that bear the brunt of the developing waste problem, as it is almost always their living areas that are selected as waste dumping sites. The urban poor are also the main source of labour for collecting the build up of waste A Study was conducted in city of Nagpur having 2.3 million population to compare health status of people engaed in waste management. There are 2000 workers engaged by an NGO and 2800 workers by Municipal Body. This study moves away from the 'bigger picture' stance of previous studies and attempts to gain some insight into the health and social conditions of sanitation workers. While issues of productivity and efficiency are addressed, the focus is upon gaining a general idea of the wellbeing of the sanitation workers.
Based on a survey and medical tests conducted on NGO workers, to view a broad spectrum of influencing factors on the health conditions of door-to-door rubbish collectors in the city of Nagpur, India, it was found that despite several below standard work practices, the health conditions of the sampled solid waste collectors were satisfactory. The relatively short time frame of employment of the sample means that further time series analysis is required at a future date in order to determine the health effects of length of exposure to the employment. Analysis of the factors associated with the health conditions of the solid waste collectors does however help to identify key elements for policies that can improve their working conditions.

P-132 GENDER INEQUALITIES AND RIGHTS OF VULNERABLE POPULATION

R. Husnain (AMAL NGO, Islamabad, Pakistan)

Introduction: Basic human rights are often denied to high-risk populations and people living with HIV/AIDS. Their rights to work and social security, health, privacy, non discrimination, liberty and freedom of movement, marriage and having a family have been compromised due to their sero-positive status and risk of being positive. The spread of HIV/AIDS has been accelerating due to the lack of general human rights among vulnerable groups. To formulate and implement effective responses needs dialogue and to prevent the epidemic to go underground barriers like stigma need to be overcome.
Objective: How to reduce the situation of stigma, discrimination and human rights violations experienced by people living with HIV/AIDS and those who are vulnerable to HIV/AIDS Methodology & Findings: Consultation meetings were structured around presentations, field visits, community meetings and group work to formulate recommendations on how Govt and NGOs/CBOs should move forward based on objective.
Pakistan being a low prevalence country, the whole sense of complacency that individuals are not subject to situations of vulnerable to HIV is the major threat to an explosion in the epidemic, therefore urgent measures are needed to integrate human rights issues from the very start of the response. The protection and promotion of human rights in an integral component of all responses to the HIV/AIDS epidemic. It has been recognized that the response to HIV/AIDS must be multi sectoral and multi faceted, with each

group contributing its particular expertise. For this to occur along with other knowledge more information is required in human rights abuses related to HIV/AIDS in a particular scenario. The consultation meetings on HIV/AIDS and human rights were an exemplary effort to achieve the same objective.
Recommendations: The need for a comprehensive, integrated and a multi-sectoral approach in addressing the issue of HIV/AIDS was highlighted. The need social, cultural and religious aspects to be prominently addressed were identified. It was thought imperative measures even in low prevalence countries. Education has a key role to play, there is a need for a code of ethics for media people and health care providers and violations should be closely monitored and follow up action taken.

P-133 FACTORS AFFECTING URBAN HEALTH IN NEPAL

J. Bhandari (Mahidol University, Bangkok, Thailand)

Objective: The objective of this study is to analyse the factors associated with urban health in Nepal.
Methodology: It was a qualitative research which included in-depth interviews and Focus Group Discussions (FGDs) among older people and family members. The interview was conducted to 100 urban people residing in Kathamndu city, and 10 FGDs with family members.
Results: In Nepal, urban health is increasingly facing many health problems for several reasons. Increasing migration from rural to urban areas, urban poverty, lack of safe water supply provision and poor solid waste management system. Similarly, the road accidents and injuries in the urban centres are reportedly high in the recent years. Increasing number of vehicles, industries and factories in the urban areas have caused adequate environmental pollution in the city areas. Though there are urban community health clinics in different urban areas, the utilization of the services is low due to lack of comprehensive care and services.
Again, the internally displaced persons (IDPs) in the urban areas are facing many health problems. These are mainly due to poor housing, lack of food and water and other basic socio-economic services. The youth and adolescents of IDPs are working in restaurants, bars and massage parlors where commercial sex work is a hidden yet flourishing business for economic reasons. This has contributed to prostitution and, many sexual and reproductive health problems among youth and adolescents.
Conclusion: Urban health is increasingly facing new problems and challenges due to migration, urbanization and lack of basic health, social and infrastructure services. Expansion of community-based health care services and health promotion are key strategies for urban health.

P-134 THE URBAN SOCIAL ENVIRONMENT AND HEALTH IN NIGERIA

I. Nwaka (Abia State University, Uturu, Nigeria)

Health is a major urban policy issue in Nigeria because poverty and slum conditions pose a serious public health threat to the country's rapidly expanding urban population. The assumption that city dwellers are better off than their rural counterparts often obscures the wide and growing gap in health status between the wealthy few and the urban poor majority whose presumed 'illegal status' in the city precludes from due recognition and unimpeded access to health, educational and other social services. To achieve the Millennium Development Goals the WHO has emphasized that it is the home, not the clinic that holds the key to an effective health delivery system. Unfortunately, in the poor areas of most Nigerian and other African cities, inadequate sanitation and waste management, and the poor state of public health infrastructure have led to the spread of a wide variety of water-borne and other communicable disease. The paper considers ways to forestall the growth and spread of slums in the future, and ensure that the existing ones are upgraded and progressively integrated into the urban mainstream; how poverty which leads to slum conditions can be alleviated in order to reduce the worsening disparities in access to health care. The central argument is that human development ought to be at the centre of the concern for sustainable urbanization in Africa. To achieve this, the paper considers how best to promote the growth of more inclusive and humane cities by reviewing discriminatory laws and codes which tend to inhibit the access of the poor to affordable land and housing security.
The concluding section cautions that the mere presence of health facilities in the cities should not be

confused with these facilities being accessible to and affordable by the poor. It stresses the need for appropriate and well targeted urban health and other related interventions by state and local authorities, the international development community, private and civil society organizations, and the urban poor themselves in a collaborative effort to build safer, healthier and more equitable cities. In this regard the paper draws insights from the Habitat Agenda, WHO's Healthy Cities Programme, and other recent global initiatives which provide guidance on ways to improve health and environmental conditions in the cities of the developing world.

P-135 AN ANALYSIS OF THE RESIDENTIAL MOBILITY OF INDIVIDUALS RECEIVING EMPLOYMENT-INSURANCE BENEFITS

E. Robitaille (Université de Montréal, Montréal, Canada), M.F. Raynault, R. Choinire

Introduction: Over the last few years, several studies conducted in the United States and even in Canada have shown that social inequalities have grown in urban centres. Social inequalities in health and the fight against poverty are of prime concern to the Montréal Public Health Department, whether in relation to knowledge/monitoring and prevention strategies with the population. However, the relationships between these inequalities and health are sometimes difficult to define due mainly to the residential mobility of the population. Moreover, we have only a little idea of the mobility patterns of the deprived population. From this perspective, this research projects aims to describe and explain the migratory processes of recipients of employment-insurance benefits.

Method: To meet this objective, we used a database created from the files of employment-insurance beneficiaries. Each recipient is followed for a period of five years and is included in the database if he or she has lived in one of four neighbourhoods under study (n = 83 864). The database enabled us to follow the residential, family and educational paths of each beneficiary. Descriptive and logistic regression analyses were then performed.

Results: We counted 1319 moves into and 27 412 moves out of the neighbourhoods under study over a period of 5 years. Some neighbourhoods are more 'mobile' than others (min: 22.5% - max: 42%). Most beneficiaries moved to neighbourhoods that are just as disadvantaged as the ones where they lived initially. Results of a logistic regression analysis indicated that a change in the level of a beneficiary's education increases the chances of moving (OR = 1.66; 95% CI 1.59-1.75), as does a change in family status (OR = 1.64; 95% CI 1.58-1.70). Finally, being over age 45 has a negative effect on the probability of moving (OR = .61; 95% .59-.64).

Conclusion: Based on the results obtained, it appears that the neighbourhoods under study are not attractive for recipients of employment insurance benefits. In other words, people in need do not perceive them as host neighbourhoods. The fact of moving can be explained for the most part by events such as changes in education levels and family status. As for public health, the implications of implementing support programmes for these beneficiaries can be considerable. Thus, short- and long-term programmes should be established, and long-term programmes should take into account the high mobility rate of employment insurance recipients.

P-136 GETTING TO KNOW THE COMMUNITY: WHO ARE THE BLACK MEN WHO HAVE SEX WITH MEN IN TORONTO?

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Introduction: Canadian studies of the determinants of HIV infection among gay and bisexual men and other homosexually active men have included Black men, but the results and service implications are often indeterminate for three main reasons: (a) researchers have found it difficult to recruit large enough numbers of Black men for studies that are designed for mainstream populations, (b) recruitment is normally done from mainstream gay environments that may not be frequented by diverse communities of Black men, and (c) research studies of gay or bisexual men generally do not focus on the issues or circumstances of Black men who, like Canadian Black communities in general, experience various forms of marginalization in Canada. This leaves us with an incomplete understanding of relationships, behaviours

and vulnerability to HIV among Canadian Black gay and bisexual men and other Black men who have sex with men (BMSM). The study seeks to: describe the risk behaviour of BMSM and variables associated with these behaviours; understand how lived experiences and everyday decision-making are associated with (un)protected sex; understand how BMSM interpret and assess the role of AIDS Service Organisations (ASO) in their networks or communities.
Methods: The study will use both survey and in-depth interviews. Surveys are especially appropriate to describe risk behaviours while in-depth interviews are appropriate to understand behaviours. African or Caribbean identifying BMSM aged 18 years and older and living in or spending a significant part of their time in Toronto will be eligible to complete a survey on sexual behaviour and some individuals will be interviewed. Key informants from the ASOs who are knowledgeable of the BMSM networks will also be interviewed.
Discussion: The study will present a clearer picture of BMSM thereby allowing health promotion agencies to design targeted prevention activities. These activities will contribute to HIV prevention among BMSM, promote knowledge of service providers/stakeholders and ensure value for limited resources. The research will enhance prevention and support services for BMSM through improved understanding of the communities of BMSM and their risk behaviours.

P-137 CLOSING THE GAP BETWEEN SCIENCE AND POLICY LESSONS LEARNED FROM A HEALTH POLICY TO REDUCE INEQUALITIES IN HEALTH IN THE CITY OF THE HAGUE, THE NETHERLANDS

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Introduction: Many believe that closer linkages between research and policy are warranted to produce relevant knowledge that is directly used in public health practice, and ultimately results in more effective health policies. This abstract draws on our experiences with such a partnership. The partnership was set up to scientifically support the development of a local policy that aimed at reducing inequalities in health through a community-based intervention in The Hague, The Netherlands. The research aims were to unravel the 'black-box' of developing the intervention as well as to assist local policy makers and public health officers in their efforts to make it successful for the city of The Hague. To meet these aims, a development evaluation study was conducted.
Methods: Drawing methodological lessons and insights from our experiences with the aforementioned study in The Hague.
Results:
- The challenge was to get and maintain a mutual goal orientation throughout the study period. By means of a continuous dialogue, we co-constructed a broad, open and flexible conceptual model 'including research questions, objectives and methods' to find a common starting point and to nurture mutual understanding. Throughout the study, this conceptual model helped to interpret and understand the developmental process of the intervention. However, it was also noticeable that having such a conceptual model does not mean that researchers and policymakers think and act in similar ways.
- The interface between research and policy blurred over time. Being a partner in a developmental project implied that we as researchers took part in and even influenced the health policy making processes. For example, during the study we gave the policy makers feedback by writing meantime reports or requested memos on specific topics. Consequently, the researchers were interventionists and evaluators at the same time.
- Local policy makers and politicians used the evaluation study in at least two ways: 1) as a political tool to rationalise their policies; 2) as an instrument for organisational learning and developing community-based interventions.
- The knowledge produced is contextual bound. Essentially, the evaluation cannot separated from the intervention and vice versa.

Conclusion: The lessons learned in this project underscore the potential of partnering with policymakers to close the gap between science and policy. However, researchers should carefully monitor and consider the nature and scientific quality of the knowledge produced in order to make it valuable for other scientists and policymakers.

P-138 COLLECTIVE COMMUNITY ACTION FOR URBAN HEALTH PROGRAMMING: GARNERING LOCAL STRENGTH, WISDOM AND NEGOTIATION CAPACITY FOR ENHANCED SERVICE UTILIZATION BY SLUM DWELLERS IN INDORE, MADHYA PRADESH, INDIA

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Introduction: Functional since April 2003 the program aims at demand generation by building social infrastructure and linking slum communities with maternal and child health services. 5 Non Government Organization ' Community Based Organization (CBO) consortia, State Department of Health, Municipal Corporation and private providers are reaching 140000 people in 75 slums.

Participants will understand how potential of slum communities can be utilized for effective implementation of health programs: by engaging them in planning process, forming linkage with service providers and building capacity of community groups for improving health service utilization.

Methods: This multistakeholder program approach evolved through evidence based consultative planning (situation analysis, stakeholder consultation and slum vulnerability assessment).Slum based networks and CBOs helped in identifying unaccounted slum pockets and understanding health seeking behaviour. The hidden strength of community, often untapped was nurtured by encouraging community based groups to spearhead awareness and sensitization work in the slums. The organized civil society organization (NGOs) having experience in health were involved in facilitating service provision and community mobilization. This Demand-Supply-Linkage approach consists of public health department and some private providers as suppliers, NGOs and CBOs as community mobilizers and link between providers and community.

Results: 83 CBOs with 567 members have been promoted and strengthened in 75 slums. (a) CBO members have developed credibility as role models thereby empowering slum families to adopt healthy behaviors and avail health services; monitoring data indicates increase in TT immunization from 22.6% to 88.9%; timely initiation of breast feeding from 10% to 79%; between November 2003 to June 2005; (b) CBOs negotiate with government officials and elected representatives to access health services and basic services like water; (c) continued nurturing and mentoring has helped CBOs generate and utilise community health funds to meet unforeseen health expenditure; and (d) adequate representation of slum communities in CBOs has encouraged efforts for welfare of the entire slum.

Conclusions: The program is focusing on strengthening social infrastructure in slums by stabilizing community level institutions and linking them with city level RCH program. The program serves as a learning university through (a) dissemination of lessons and evidence based best practices to inform District, State and National Urban Health Program strategies and b) through study tours for program implementers.

P-139 TOBACCO USE CESSATION AND THE URBAN ENVIRONMENT: EXPERIENCES AMONG YOUNG PEOPLE OF NEW YORK CITY

C.S.F. Fryer (University of Pittsburgh, Pittsburgh, United States of America)

Introduction: Tobacco control research has demonstrated that attempts to quit smoking are common among young people. The majority of that research, however, has focused on cigarette acquisition and smoking initiation, with relatively less consideration paid to smoking cessation among this group. Additionally, studies have shown that contextual factors affect the health and well-being of its residents, especially young people. Yet, there is a paucity of research examining the unique cigarette use cessation experiences of young people residing in urban communities. This study explores the function that language serves among current and former 16-18 year old smokers in New York City to better understand their self-initiated quitting experiences. Specifically, the study investigates: (1) how young people discursively construct the cessation process and (2) the meaning and utility of quitting smoking in their lives. Moreover, the study is framed within the context of community disintegration which acknowledges the dynamic relationship among one's physical environment, social functioning, and health.

Methods: Data were obtained from focus groups and analyzed utilizing discourse analysis. Focus groups were employed because of their ability to capture the beliefs, perspectives, and sentiment of a group through conversation. Discourse analysis was selected as the investigative tool because of its ability to

examine the variability of language including function, context, and production. The group discussions allowed for the exploration of the discourse young people draw upon to describe their experiences, further highlighting the context in which they try to quit smoking.
Results: Through an analysis of the language used and shared among this cohort, social, contextual and structural factors including stress, addiction, stigma and tobacco advertising emerged as significant barriers in the cessation process. The discourse of the peers challenged the notion that quitting smoking was a process. Equally important, it also revealed how young people felt smoking cessation required support from the physical environments of urban communities.
Conclusion: The young participants contextualized their experiences (1) utilizing dominant discourses found in conservative, anti-drug media campaigns and (2) with meanings that were locally embedded within their physical environment. These findings will inform public health practitioners of the most salient issues of the cessation process from the perspective of poor, urban youth further clarifying how quitting may be particularly arduous among certain subgroups of young people.

P-140 DISPLACEMENT AND HEALTH STATUS IN LOW INCOME WOMEN: FINDINGS FROM A POPULATION BASED SURVEY IN GREATER BEIRUT

N. Choueiry (American University of Beirut, Beirut, Lebanon), M. Khawaja

Introduction: The number of internally displaced persons has exploded during the past few years. Despite the increasing number of such groups worldwide, its health effects, especially on women has not been adequately investigated. In this paper we examine the relationship between internal displacement, social support and self reported health status of ever married women in three disadvantaged urban neighborhoods in Lebanon. Methods: This study was based on data from a cross sectional survey conducted in 2003 on 1869 ever married women residing in three urban disadvantaged communities in the outskirts of Beirut, Lebanon. The outcome variable was self rated health (good/bad) as assessed by the women. The independent variables included ever displaced status, social support, demographic, socioeconomic and health behavior variables. Descriptive statistics and bivariate associations were provided using Pearson's chi-square tests. Unadjusted and adjusted odds ratios were then obtained from binary logistic regression models. Results: Displacement was a significant risk factor for poor self reported health (OR=1.67; 95% CI= 1.35-2.07). Adjusting for demographic and socioeconomic factors decreased the association between displacement and self reported health but the relationship remained statistically significant. Women with poor support from the family, friends and neighbors were more likely to have poor health status. However, not exchanging support with the family members (OR= 1.87; 95% CI = 1.13 ' 3.12) was significantly associated with poor self reported health only among displaced women but not among those who were not displaced. Conclusion: Displacement and social support were negatively associated with women's health status but family support may play an important role in improving the health status of displaced women and not non displaced women.

P-141 A STUDY OF FAMILY SUPPORT AND EMPLOYMENT OUTCOMES IN A PRISONER RE-ENTRY PROGRAM IN NYC

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Introduction: We evaluated a year-long program for recently released prisoners that seeks to strengthen family relationships and improve employment outcomes. Services include group and individual counseling and concrete assistance with job placement.
Methods:
1) a retrospective survey of 135 program records, client characteristics, criminal justice histories, and program outcomes;
2) a prospective assessment (quantitative and qualitative) of 40 new admissions, including a baseline interview and 3 month and 6 month follow up interviews and program review.

Results: the retrospective survey found that (n) 30% left the program within 3 months, (n) 10% before

12 months, and (n) 11% were either re-incarcerated, arrested, or absconded from parole. For the N (49%) that completed 12 months of the program, (N) 73% showed positive outcomes: (N) 12% had sustained employment; (N) 14.6% better family outcomes; another N (46%) had some positive family and employment outcomes. While 27% of completers did poorly on family and employment, there was no recidivism.
Conclusions: The retrospective survey suggests that yearlong program participation improves employment and family outcomes and reduces recidivism. Preliminary findings from the prospective study will be presented, including 3 and 6 month follow up data on a sample of 40 clients.

P-142 NEIGHBORHOOD-LEVEL FACTORS AND DIFFERENTIAL RISK OF GUNSHOT INJURY FOR BLACKS AND WHITES

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Background: Firearm violence is a significant problem in urban environments across the United States. Further, firearm violence disproportionately impacts inner-city blacks. Epidemiologic evidence has shown that individual behavior and sociodemographic variables alone do not account for observed racial differences in risk for gun violence. This study examines the contribution of neighborhood-level explanations for racial differences in interpersonal gun victimization in Philadelphia.
Methods: We use 2003-2004 data from the Philadelphia Gun & Alcohol Study, a population-based case-control study designed to assess the effects of alcohol outlets and other contextual factors on drinking behavior and firearm violence. In addition to sociodemographic data, data on alcohol consumption at the time of shooting, gun possession, and the location of the shooting were collected for each control and case. Shooting locations were geocoded using ArcGIS 8 and tract-level census data were linked to each subject. Conditional logistic regression analysis, accounting for clustering, was performed to test whether neighborhood-level factors affected gunshot injury risk differentially by race (white/African-American).
Results: African-Americans represented 81% of interpersonal shooting victims during the study period. Majority of shooting victims were male. Number of alcohol beverages consumed did not explain racial differences. Geographic analysis of shootings indicated that both African-American and white shootings occurred in areas with high levels of illicit drug arrests and poverty; however, the effect of neighborhood poverty was statistically significant for whites only. Gun possession was significantly associated with black, but not white, victimization; but this association did not persist when neighborhood characteristics were accounted for.
Conclusion: Understanding the causes of racial differences in shooting victimizations represents an important area of research for urban health disparities. For whites, living in poverty may contribute to shooting victimization. For blacks, neighborhood characteristics may play a part in the decision to carry a gun, which in turn increases the likelihood of a shooting incident. Results from this study suggest that the context in which shootings occur can offer valuable insight over and above individual explanations.

P-143 YOUTHS EXPERIENCES WITH SEXUALLY TRANSMITTED INFECTIONS DURING AN ECONOMIC BOOM: SOCIO-CULTURAL AND STRUCTURAL FORCES IN AN OIL, GAS, AND MINING COMMUNITY

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Introduction: Sexually transmitted infection (STI) prevalence is high and rising among youth living in oil, gas, and mining communities in British Columbia, Canada. These places are undergoing rapid socio-cultural and structural changes associated with the in-migration of young people attracted by the current economic 'boom' in these resource extraction sectors. While emerging evidence indicates that socio-cultural and structural explanations are integral to understanding and addressing sexual health disparities, the health and social impacts of boom and bust economic cycles in the developed world remain under-explored, particularly in relation to STIs.
Methods: A modified ethnographic approach of participant observation (8 weeks) and in-depth interviews (with 40 young men and women ages 15-24, and 10 health, education, and social service providers) is used to document perspectives on young people's experiences with STIs and STI testing and treatment in

an oil, gas, and mining community.
Results: Migration to booming resource extraction communities has important implications for the spread of STIs, since among its many consequences are seasonal population fluctuations, a disproportionately large young male demographic, high levels of disposable income, drug and alcohol addictions, and housing shortages. This presentation explores how structural and socio-cultural forces at play during a 'boom' in the oil, gas, and mining industries (e.g., gender, social standing, public health service delivery, physical characteristics of 'place') intersect to shape the milieu within which the health and social problems associated with STIs are expressed. The effects of these forces on youth's access to and experiences with STI services are discussed.
Conclusions: These detailed portraits of the structural and socio-cultural influences affecting youth's experiences with STIs and STI services in a 'boom' town confirm the need to tailor and target youth- and place- sensitive STI testing and treatment services for young people living in booming resource-extraction communities.

P-144 MIGRATION BETWEEN CITIES AND SUBURBS IN THE UNITED STATES: IMPLICATIONS FOR PUBLIC HEALTH PLANNING

D.S. Silver (New York University, New York, United States of America), B.W. Weitzman

Introduction: Epidemiologists, recognizing that individuals serve as vectors of infection, have analyzed patterns of migration, including day-to-day migration for work and other activities, in order to understand the spread of disease. Investigations of migration have also been employed with non-infectious diseases; patterns of behavior may also be 'transported' with implications for the spread of chronic diseases, most especially, conditions associated with risky sexual and substance abuse behaviors. Understanding patterns of day-to-day migration can thus be useful in targeting public health interventions focused on a wide-range of health compromising behaviors.
Methods: This study investigates the characteristics of those who do, and do not, regularly travel across city and suburban boundaries of the 100 most populous cities in the United States. It examines travel patterns of parents with a minor child. Since the morbidity and mortality of parents places a particularly severe burden on society, this study provides an opportunity to investigate a population of special salience for health planning. Using data from a 2001-2 telephone household survey, the 2000 Census, and the 2000 FBI crime reports, we calculate odds ratios for work and non-work travel (e.g., shopping, entertainment) of city and suburban parents. We examine individual, household and metropolitan area characteristics associated with increased 'border crossing.'
Results: Working in another jurisdiction is the largest predictor of non-work travel to that jurisdiction. While men and women are equally likely to travel to the city from the suburbs for work, men more likely to travel to the city for non-work reasons, as are those who are younger (under 35 years), Latino or Asian, and single. In contrast, male city residents are more likely to travel to the suburbs for work than are women, but there are no differences by gender when crossing for non-work reasons. Suburban and city parents are less likely to cross borders when cities are in decline. Suburbanites are more likely to cross borders to the city in less affluent areas of the country, in the South and the West, and in areas with larger non-white, non-black populations.
Conclusion: Public health officials concerned about reducing the spread of disease over urban areas due to health compromising behaviors should focus interventions aimed at younger, Latino suburban men working in the city, particularly in less affluent areas in the West and the South.

P-145 THE LAUNCH OF AN URBAN HEALTH OBSERVATORY: A SOCIAL-SANITARY DIAGNOSIS OF FIRMAT POPULATION, BASED ON THE SURVEY OF URBAN LIFE QUALITY, SOCIAL VULNERABILITY AND HEALTH RISKS LEVELS OF EVERY NEIGHBORHOOD

R.C. Huber (Urban Health´s Observatory, Firmat, Argentina), M. Puebla

Firmat is a city situated in the middle of the Argentine central region known as the Provincia de Santa Fe with a population of more than 20,000 inhabitants. The city underwent noticeable demographic and

economic changes during the 1960s due to rapid agricultural and industrial development in the area. In February 2006 the Department of Scientific Research at the University Center in Firmat (CUF) created an Urban Health Observatory. The Observatory is a public health and wellness research project that monitors and evaluates the effectiveness of public policies and health promotion activities aimed at improving health and reducing health inequalities. The primary objective of the Observatory is to produce health profiles that provide relevant and timely information on the health conditions and quality of life of the city's inhabitants and the health services that are available. The profiles are useful for advocating for government resources to improve the health of individuals living in urban areas. The secondary objective is to stimulate collaboration among researchers, city leaders, practitioners, health policymakers and the community to develop innovative strategies to address environmental health issues at the local level. The Observatory aims to accomplish this by (1) collaborating with local health organizations and government authorities to gather, manage and analyze local health information and design public health policies; (2) conducting survey questionnaires at the community level to create health and illness profiles; (3) conducting survey questionnaires at the institutional level to identify management structure and complexity level and make recommendations; and (4) working with schools to conduct research and develop educational activities to stimulate students involved in the medical and social sciences to become involved with the Observatory. Observatory staff are currently analyzing survey data on the quality of life, social vulnerability and health risks of Firmat neighborhoods, as well as information from secondary sources such as government publications. This analysis will help to identify social and environmental inequalities in health and encourage the development and application of policies to improve the living conditions of those in marginal urban areas.

P-146 AN ETHNOGRAPHY OF A COMMUNITY NETWORK FOR PROMOTING HEALTH THROUGH URBAN GARDENS

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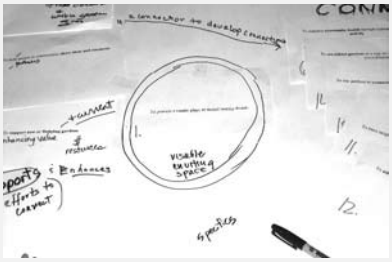
Background: 'Gardens for Growing Health Communities' is a three-year study examining how physical and social changes in the community can lead to improved health and well being of residents. This paper discusses an ethnography of the Healthy Neighborhood Network (HNN), a working group of residents, researchers, and community organizations convened to design and implement a community intervention through Denver's urban gardens.

Methods: Ethnographic field notes focused on two areas: (1) developmental process of the HNN (e.g., development of relationships, commitment, and diversity; meaning of the network for its members; change in how members see their role in the community), and (2) community engagement and social networks (e.g., pathways supporting broader community engagement, whether the HNN catalyzes new social ties).

Results: We describe key ethnographic findings relative to the project's overall goal of developing a community-research collaboration aimed at investigating the role of urban gardens in promoting social engagement, collective efficacy, and healthy living. We also summarize the process used to develop participation and ownership in visioning, planning, and evaluation of the HNN.

Conclusions: Multi-stakeholder collaborative teams offer a promising approach to implementing and studying interventions aimed at reducing health disparities. The findings from this project will help inform others in the public health field who seek to build ongoing community capacity for solving environmental health problems.

Caption 1:
Community garden farmers market in north Denver



Caption 2:
Healthy Neighborhood Network vision for health

P-147 URBAN SPACE AND MENTAL HEALTH: INFLUENCE OF DRUG TREATMENT FACILITY LOCATION ON PATIENT BEHAVIOR

E.C. Moreira (CETAD - Federal University of Bahia, Salvador, Brazil)

Introduction:The influence of drug facility location on drug treatment outcomes is largely understudied. Some evidence suggests that neighborhood deprivation is a predict factor for drug use. More recently, we can find in the literature the discussion of the neighborhood level disadvantage of treatment location and its relation to treatment attrition. Our study, in a exploratory manner, tries to unveil the urban dynamics that may justify the specificity of a drug treatment service location in a great urban area of Brazil.
Methods: A qualitative analysis of the treatment outcome of a young drug use patient from a high deprived area of the city was done. During two years, we observed his pattern of social and interpersonal relations and how the weekly exposure to our less disadvantage located facility, changed his perspective on social values and influence his behavior changes. Our drug treatment center is a program from the Federal University of Bahia, Brazil. The author is a psychiatrist specialized in drug addiction treatment and a doctoral student from the Architecture and Urbanism Department of the same University.
Results: Some residing neighborhood elements such as violence, drug traffic, and delinquent peers, had a negative influence on the patient behavior and motivation to change. It was impossible to move to another environment because of his income situation. The weekly visity to our center decreased his sense of confinement to that spatial condition and made him an observer of that reality from a more spatially and socially organized location.
Conclusion: The city design and income inequalities create in modern cities from underdeveloped countries spaces of confinement which amplifies the influence of disadvantage elements in poverty areas. The lack of access to less deprived areas of the city, engenders a fatalistic sense of life. Less disadvantage drug treatment facility location can forces the individual to be exposed to a more organized milieu, which may increase his critical view of reality and his resilient behavior back to his residing location.

P-148 TRENDS IN MORTALITY FROM SUICIDE AMONG LITHUANIAN URBAN POPULATION DURING 1984-2003

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Introduction. Suicides are one of the main public health problems, which requires more extensive and prolonged investigation, especially in Eastern European countries. Incidence of suicide in Lithuania are one of the highest in Europe. The current study examines the suicides and some sociodemographic variables related to mortality from suicides among Lithuanian urban population using quantitative design. Aim. The aim of the study was to analyze the suicide rate in Kaunas population aged 25-64 during 1984-2003 years in relation with age, family status, education and occupation and to assess trends in mortality from suicide in 1984-2003. Material and methods. Information on deaths from suicide during the period of 1984-2003 was obtained from Lithuanian Department of Statistics and Kaunas register of deaths. Death cases of suicide were analyzed by ICD-9:E950-959 and ICD-10:X60-X84. Mortality rates were age-standardized using the European Standard, recommended by the WHO. Trends in suicides and average annual changes were

based on logarithmic regression analysis.
Results. Throughout the period of 1984-2003, 1,172 suicides were registered among men and 265 among women in Kaunas population. In 1994-2003 the average suicide rates in Kaunas population ranged from 41.0/100,000 for men aged of 25-34 to 84.8/100,000 for men aged of 55-64, and from 6.5 to 16.4 for women, respectively. The male to female ratio was 5.8:1. The risk of death from suicide among divorced men was 9-fold that of married men. The risk of suicide among workers was higher that among employees (HR=3.6; 95%CI=1.3-10.1). Mortality from suicide in 1984-2003 among men increased (ß=3.36, p<0.0001), but the incidence among women showed no statistically significance (ß=1.17, p>0.05).
Conclusion. These results may point out to active development of public health measures that are more effective in preventing of suicides.

P-149 IMMIGRATION-ASSOCIATED NEIGHBORHOOD CHARACTERISTICS AND RISK OF INTIMATE PARTNER FEMICIDE IN NEW YORK CITY: RESULTS OF A MULTI-LEVEL ANALYSIS

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Introduction: In New York City (NYC) approximately 30% of homicides of women are perpetrated by intimate partners (current or former spouses or romantic partners). Termed intimate partner femicides, these deaths have come to be seen as largely preventable through domestic violence prevention interventions at both the individual and neighborhood levels. Foreign-born status is an important correlate of intimate partner femicide, as compared with non-intimate partner femicide in NYC. Intimate partner femicide victims are nearly twice as likely to be foreign-born, as compared with women who were killed by non-intimate partners, while controlling for other important individual-level factors. Given the crucial role that neighborhood and community may play in both sanctioning perpetrators and protecting victims, we have begun to analyze the role of neighborhood characteristics in risk of intimate partner femicide. In the present analysis, we examine whether an independent relationship between select immigration-associated neighborhood characteristics and intimate partner femicide exists, while controlling for individual-level foreign-born status.
Methods: Data collected from the NYC Office of the Chief Medical Examiner on femicides occurring between 1990 and 1999 (n=1058) and Census data on NYC residential community districts (n=58) were used in multi-level case-control analyses using GEE methods. Community districts are referred to as neighborhoods hereafter. 'Cases' were intimate partner femicides and 'controls' were non-intimate partner and unknown perpetrator femicides.
Results: When controlling for neighborhood-level population age structure, density and per capita income, and individual-level foreign-born status, neighborhood linguistic isolation was marginally significantly and positively associated with risk of intimate partner femicide (OR=1.02; 95% CI 1.00, 1.03), as compared with non-intimate partner femicide. The proportion of the neighborhood population that is foreign-born was not significantly associated with intimate partner femicide, as compared with non-intimate partner femicide.
Conclusions: Being foreign born has been hypothesized to increase women's intimate partner femicide risk through several mechanisms. Shifting gender roles associated with immigration may increase the frequency and intensity of existing abuse; alternatively, foreign-born women may be less likely to access legal protections. Living in a linguistically-isolated neighborhood may be an added barrier to accessing such protections. In addition to the effect of linguistic isolation, it is possible that several more immediate and unmeasured socio-environmental factors influence intimate partner femicide risk. Further study and analysis is required.

P-150 NEIGHBORHOOD CORRELATES OF DEPRESSION IN AN ECONOMICALLY DISADVANTAGED URBAN AREA

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Objectives: The current study examined the relationship between a wide range of neighborhood charac-

teristics and depressive symptoms among impoverished inner-city residents of Baltimore, Maryland.
Methods: 341 females and 494 males in impoverished urban areas of Baltimore, Maryland, USA were administered an interview containing the Environmental Inventory, Centers for Epidemiological Studies Depression Scale. STI, HIV, and drug testing was also conducted.
Results: In the multivariate analyses, two neighborhood characteristics were found to be associated with depressive symptoms. Perceptions of neighborhood disorder and the perceived probability of confronting problems in the next year were strongly associated with depression. Whereas neither comfort in calling the police about neighborhood issues or comfort in personally addressing neighborhood problems were associated with depression. Moreover, there was an interaction between length of time living in the neighborhood and the association between neighborhood perceptions and level of depressive symptoms.
Conclusions: The results of this study suggest that specific neighborhood characteristics, especially those that are associated with crime and appear immutable may be promote feelings of entrapment and lead to depression.

P-151 SOCIAL EXCLUSION AND ITS IMPACT ON MENTAL ILLNESS OUTCOMES: NEED TO RETHINK MODELS OF CARE IN THE COMMUNITY

W. Fakhoury (Barts' and The London School of Medicine, London, United Kingdom), S. Priebe

Objective: To investigate the relationship between social exclusion factors such as homelessness, violence, living alone, and alcohol and/or drug abuse and outcomes of mentally ill patients receiving care in the community in London, UK.
Method: Analysis was conducted on data on 580 patients from the 'Pan-London Assertive Outreach Study (PLAO)'. Data were collected from patients' records and using clinician-rated scales of alcohol and drug abuse in the last six months before baseline. Outcomes 'voluntary and compulsorily hospitalisation 'were assessed over a 9-month follow-up period.
Results: The analysis identified a group of patients with substance abuse who suffer from social exclusion and forensic problems (n=77, 15.8%), and had poorer outcomes than the rest of the patients in terms of voluntary (52% vs. 36% respectively) and compulsorily (39% vs. 22% respectively) hospitalisation.
Conclusion: There is a distinct group of patients whose treatment requires social inclusion and forensic expertise. There is a need to re-think models of care and types of interventions provided for mentally ill patients receiving care in the community and who are socially excluded.

P-152 NEIGHBORHOOD CONTEXT AND PREGNANCY OUTCOMES AMONG NON-HISPANIC BLACK AND WHITE WOMEN IN MARYLAND: DOES GEOGRAPHIC SETTING MATTER?

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Introduction: The United States exhibits much higher rates of infant mortality compared to all other industrialized nations ranking 27th worldwide in 2000. Contributing to the high infant mortality are high rates of preterm birth and low birth weight. Preterm birth, delivery before 37 weeks of gestation, contributes to infant deaths and subsequent childhood neurological problems. Wide gaps in preterm birth by race and ethnic group have also been demonstrated in the US. The high rates of preterm birth and the intractable gaps by race/ethnicity have been the subject of numerous studies over the last few decades. One recent area of focus has been the role of socioeconomic and social factors including the impact of residential neighborhood environments on racial disparities in pregnancy outcomes. Existing research suggest that differential neighborhood environments may, in part, be responsible for the Black-White racial gaps in health and pregnancy outcomes by contributing to the stressors and risk factors responsible for poor health. The focus of this presentation is on the relationship between neighborhood context and three pregnancy-related outcomes (low birth weight, preterm birth and late entry into prenatal care) among non-Hispanic White and non-Hispanic Black women residing in Maryland. The following research questions will be addressed: 1) What are the relationships between neighborhood context and a) low birth weight, b) preterm birth and c) late entry into prenatal care?; 2) Do the relationship remain after

controlling for the selected individual level maternal?; and 3) Does the relationship between vary by level of urbanicity?
Methods: This presentation will utilize vital records birth certificate and census data from two urban (Baltimore City and Prince Georges County) and two suburban counties (Baltimore County, and Montgomery County) in Maryland to examine the relationship between neighborhood context and three pregnancy-related outcomes (low birth weight, preterm birth and late entry into prenatal care) among non-Hispanic White and non-Hispanic Blacks. Using multilevel modeling techniques, neighborhood and individual level data will be simultaneously analyzed to gain a better understanding of how multiple levels of influence are associated with racial inequalities and pregnancy outcomes.
Results: First the crude analyses using only the neighborhood-level measures will be presented. Then results from the multi-level multivariate models adjusted for select individual-level maternal characteristics will be presented.
Conclusions: Particular attention will be paid to similarities and differences between the urban and suburban geographic settings. Discussion will focus on the research and intervention implications of the study results.

P-153 IMPACT OF INFANT FEEDING ATTITUDES AND SOCIAL NETWORKS ON BREASTFEEDING INITIATION: A STUDY OF SOCIO-ECONOMICALLY DISADVANTAGED ANTEPARTUM WOMEN IN GLASGOW

A.B. Wallis (University of Iowa, Iowa City, United States of America), C. Dungy, R. McInnes, D. Tappin, A. Wallis, F. Oprescu

The objective of this study was to determine the impact of infant feeding attitudes and the influence of social networks among socioeconomically disadvantaged women in an area of Glasgow with historically low rates of breastfeeding. Women (n=49) attending an antenatal clinic serving women in the DEPCAT-7 Easterhouse area of Glasgow and social network members (n=47) listed by 14 women purposively selected from the original sample. Four outcomes were measured: (1) mothers' infant feeding attitudes (Iowa Infant Feeding Attitude Scale, IIFAS), questions about breastfeeding in public selected from the Health Education Board of Scotland Biannual Survey), (2) mothers' feeding intentions (self-report questionnaire), (3) attitudes of social network members (IIFAS), and (4) breast or formula feeding initiation (hospital records). The IIFAS was found to be a valid and reliable measure of infant feeding attitudes among members of women's social network. Positive attitudes towards breastfeeding significantly increased the odds of both intended (OR: 1.123; CI: 1.025,1.230) and actual breastfeeding (OR: 1.082; CI: 1.005,1.164). Having a social network positive towards breastfeeding was significantly associated with both women's positive attitude towards breastfeeding ($p=.005$) and breastfeeding initiation ($p<.05$). This study demonstrates the association between infant feeding attitudes and behaviors among a disadvantaged population with low breastfeeding rates. Moreover, this research suggests a relationship between the attitudes of social network members and mothers' infant feeding attitudes and decisions. The IIFAS offers a cost-effective, valid, and reliable tool to help clinicians and health planners better understand the infant feeding attitudes of women and members of their social network. Understanding their attitudes can lead to the development of cost-effective breastfeeding promotion strategies.

P-154 PSYCHO-SOCIAL FACTORS FOR INCREASING HIV/AIDS RISK AMONG URBAN POPULATION: FINDINGS FROM A QUALITATIVE STUDY ON FEMALE INJECTING DRUG USERS OF DHAKA CITY

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Introduction: Current prevalence of HIV infection among injecting drug users in central Bangladesh is 4.9 percent and it is very close to the mark of concentrated epidemic. A qualitative descriptive study was carried out among the female injecting drug users in Dhaka city, with a view to explore inner psycho-social issues and root causes of HIV/AIDS risk behaviour in this core-vulnerable group, particularly in a densely populated urban setting of a developing country like Bangladesh.
Methods: A total of 12 in-depth interviews were conducted with the female injectors employing a semi-

structured questionnaire designed with open-ended questions. Investigators transcribed, analyzed and compiled all interview data to accumulate the key themes expressed by the study-participants.
Results: Female injectors verbalized a wide range of experiences in urban psycho-social contexts like 'loneliness', 'self-isolation', and 'mental depression' due to refusal by husband/fiancé/friends, lack of affection from parents and/or family members. Some of them started to take drugs to get relief from 'frustration' due to infertility, second marriage or sudden death of husband, incident of rape, while one injector entered into addiction to forget 'pain in life', as her husband compelled her to sell sex. Alarmingly, these women injectors used to share injecting equipments with their partner-injectors due to unawareness about blood-safety and HIV/AIDS, unavailability of new syringe/needle, lack of money to buy it, unwillingness to care for themselves etc. Majority of the interviewed women had multiple sex-partners and none of them used condom in every sex-act because of unavailability of condom right at the time of sex, cultural barrier to buy condom for a women, ignorance about the danger of HIV/AIDS and also for not getting pleasure during sex with condom. Moreover, these women narrated the stigmas, dilemmas, inequity and obstacles they often faced in the urban setting.
Conclusion: Study findings suggest that well-organized programmes, addressing the psycho-social issues, are essential to minimize the high-risk behaviours of the female injectors and to prevent a large number of city dwellers from contracting HIV/AIDS.

P-155 ADDRESSING THE DETERMINANTS OF HEALTH THROUGH SOCIAL INCLUSION IN A MULTICULTURAL PERINATAL PROGRAM

R. Reynolds (St. Stephen's Community House, Toronto, Canada)

Introduction: Downtown west Toronto is home to diverse communities of newcomers, primarily from Mainland China, but also South and South East Asia, Central and South America and Africa. These populations tend to be underemployed, living on very low incomes, inadequately housed and socially isolated due to poverty, language, culture, personal and family issues. During pregnancy and the post partum period, these factors theaten the health and wellbeing of the mother and child. The Hello Baby Circle Perinatal program addresses these factors through training and employing a group of Peer Parents who increase the linguistic and cultural capacity of the program.
Methods: Three multicultural groups of graduates from the Hello Baby Circle and neighbouring perinatal programs were recruited and trained. These participants are fluent in a total of 23 languages as well as English. Their training is extensive, ranging from pre and post natal health and nutrition, accessing community resources, making referrals and providing language interpretation. They are employed in all aspects of the Perinatal program, from program planning, data collection and analysis, food preparation and workshop facilitation, to providing language interpretation during counseling sessions between program participants and health care providers.
Results: A qualitative evaluation has shown that the Peer Parents have benefited from this initiative in the short term from paid, meaningful work with childcare provided and in the long term through increasing skills during the training period, earning an income, gaining Canadian work experience, building social networks and enhanced external employment opportunities.
Program participants benefited through greater accessibility of health and nutrition information in their first language, referrals to appropriate services (such as health care providers and English as a Second Language classes), increased social networks and the opportunity to become Peer Parents themselves.
Conclusion: This social inclusion program has proven to be successful in reaching isolated individuals, providing necessary supports and increasing the accesibility of Perinatal health programming for women in low income multicultural communities.

P-156 CHLORINATION LEVEL OF WATER AND PREVALENCE OF VIRAL HEPATITIS IN FLOOD AFFECTED AREAS OF VADODARA CITY

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Aims and Objectives :

1) To know the chlorination level in Municipal Water Supply System-Administrative ward wise distribution in Vadodara city post flood.
2) To Study pattern of Viral Hepatitis cases post flood.

Methodology:
Sample selection: Purposively selected households from each of the 10 wards of Vadodara city.
Study period: Chlorination of water - july 4th to july 20th 2005 and disease prevalence 'july '05 to Oct '05.
Results: Measuring the chlorine level in each of the 10 administrative wards of Vadodara city showed initial low level of chlorine (<0.5 ppm) in north and south zone followed by east and west zone upto 8th july 2005 which then significantly improved after regular update and followup action daily till 12th july , but east zone (ward no. 1,2,9) continued to a problem of low chlorination level throught study period. Higher prevalence of viral hepatitis cases reported in the month of august-nov. 2005, which is in relation to low chlorination level of water in all zones, significantly higher in east zone throught the study period.
Conclusion: Low level of chlorine in water was associated with higher number of viral hepatitis all the wards of Vadodara city.
Recommendation: Adequate chlorination of water and its regular monitoring upto end user level is desirable to prevent the outbreak of various water borne diseases.

P-157 URBAN DISASTERS IN GUNTUR MUNICIPAL CORPORATION IN INDIA

T. Thiruveedhula (Yanadi Education Society, Guntur, India)

Introduction: 'GUNTUR' City is a Municipal Corporation with Population of about 7 Lakhs is located in the State of Andhra Pradesh in the Southern part of India. There are above 52 Slums covering about 30 Lakhs of the Population of the city. Most of them cannot afford natural food, proper housing, Cloths, education for children etc. Many of them live in thatched sheds built with palm leave straw etc., as roofs. The temperature in the city 45 to 50 centigrade. The fire accidents that after occur during summer season and other such accessions is a serious problem hundreds thousands of families with children and family members are on roads having lost all that they have and earned barely for their livelihood. Most the families not only lost their property but also their children, old people etc. Such a serious problem needs the attention of the community, Governments non-governmental organizations and serious thinkers and philanthropist.
Methods: To tackle such a serious problem an integrated perspective approach is needed. The following are some of the measures that need a serious attention.

i) In come generating opportunities are to be provided to those people in slum areas after a through in survey and providing vocational skills etc so that they can build their own house.
ii) Government should take up construction of Pucca Houses.
iii) To development security groups with local people government and NGOs also should assist.
iv) To take up programmes like Adult Education, providing Elementary Education to children, providing life skills and vocational skills to the youth.

Results: This integrated approach will result in correcting the problem in the following ways.

i) The assistance of the Government, Banks, Non government organizations with quicker the process of build their own pucca houses and enables them to the have immediate relief.
ii) Brings about awareness and readies them with the measures to be adopted in case of fire disasters.
iii) Insurance will be a great relief in case of full accidents.

Conclusion: To do away with they problem of frequent fire accidents in urban slums we need to take up a multidimensional, integrated, perspective approval tentative plans like providing them temporarily relief and rehabilitation may not be of much help to them. The goots both at the national and provincial levels mush work at such integrated plans.

P-158 COMMUNICATING TO MARGINALIZED COMMUNITIES DURING PUBLIC HEALTH CRISES

K. Taylor-Clark (Harvard University, Boston, United States of America)

Concerns about emerging infectious disease, disasters, and bioterror threats have increased in recent

years. In response, public health officials have urged the importance of allying with the public in times of crisis. Indeed, the failure of U.S. government officials to effectively institute evacuation orders during Hurricane Katrina, for example, fuels the need to consider the concerns of politically and economically marginalized communities and the potential communication strategies that will help to increase these publics' compliance with response efforts. Risk communication literature argues that officials must evaluate the impact of a threat, not just by its scientific or epidemiological hazards, but also by public perceptions of the threat. My proposal utilizes risk communication theory and public opinion research to better gauge how marginalized communities may perceive various epidemic, bioterror, or disaster threats. This is important because research shows that the 'gold standards' used by public officials to respond to and communicate such threats may not be as effective in minority and politically marginalized communities. Using survey research collected by various organizations (i.e Kaiser Family Foundation, Robert Wood Johnson Foundation, and the Harvard School of Public Health), I first analyze public attitudes toward these types of threats, and I further stratify these data based on race, gender and ethnicity. This work will provide public health officials, policymakers and communicators with tools to better create, implement and communicate response policies in populations that may be less trusting and who may face considerable obstacles in complying with public officials.

P-159 EPIDEMIOLOGY OF INJURIES IN EVACUEES OF THE WTC ON 9/11/2001 (PRELIMINARY DATA)

K. Qureshi (Universtiy of Hawaii, Honolulu, United States of America), R.M. Gershon, M. Rubin, M. Sherman

Purpose: To identify preexisting health conditions, injuries sustained, and on-going health problems in evacuees participating in the World Trade Center (WTC) Evacuation study.

Methods: A convenience sample of 1444 former WTC (Tower 1 and 2) employees completed a study questionnaire.

Results: The prevalence of preexisting health conditions reported by the 1444 evacuees was 37%. These included respiratory (27%), mental health (16%), cardiac conditions (12%), vision/hearing problems (8%), and other (7%) (e.g., pregnancy, mobility deficit).

There were 531 (37%) evacuees who reported sustaining at least one type of injury on 9/11/01. Of the 1444 evacuees, 24.7% reported sustaining a psychological injury, 11.9% reported surface trauma (including lacerations, abrasions and contusions), 11.4% reported sustaining an inhalation injury (due to smoke, dust and fume inhalation), 7.2% reported sustaining an orthopedic injury, while 2.5% reported sustaining an eye injury. Those individuals with a pre-existing disability or medical condition were more than twice as likely to report sustaining an injury during the evacuation process (OR = 2.16, 95%CI 1.70-2.74). Most individuals received their post-evacuation medical care in the non-hospital setting (the majority at their own personal family physician's office), while only 44 individuals in this sample were hospitalized. Nearly 17% of the evacuees reported ongoing long term health problems two years after the event. The respondents reported that their most common ongoing health problems were related to mental health or respiratory diagnoses.

Conclusions: The most frequently reported injury among those who survived the evacuation was psychological insult/injury. A substantial proportion of evacuees reported long term health problems, most associated with the psychological injury or respiratory insult that they sustained. Persons with pre-existing health problems were at an increased risk for sustaining an injury during the evacuation process. These findings of increased risk of injury for those with pre-existing health conditions, the high risk for sustaining long term psychological harm and the fact that most injured individuals sought care from their community based personal physician should be considered in terms of preparedness planning and post-disaster response and recovery efforts.

P-160 PSYCHOSOCIAL CARE IN THE WAKE OF DISASTERS IN AMSTERDAM

M. de Vries (Academical Medical Centre Amsterdam, Amsterdam, the Netherlands)

In The Netherlands, terrorism and disasters are a political priority. It is not so much the question 'if', but 'when' and 'where' such events will take place. Amsterdam, capital city of The Netherlands, runs a relatively great risk. Encompassed with 750.000 inhabitants and many tourists, great numbers of people may

become affected. This warrants a major disasterplan. A main task of the Amsterdam Municipal Health Services (MHS) is providing help to those affected who develop disaster related (mental) health problems. To fulfil this task properly, it is crucial to identify the people that need help most. The MHS has developed, in collaboration with the Impact Foundation, a procedure to efficiently select people with disaster related mental health symptoms. At 6 weeks and 6 months post-disaster, a population based short screening tool will be spread among those affected. This questionnaire consists of well-known standardized instruments. In the event of elevated scores, the MHS will contact the respective persons. In this outreaching approach, the MHS offers a semi-structured interview in which the impact of the event is assessed. In case of psychopathology, referral and mediation to the Amsterdam mental health care will be given. This presentation outlines the psychosocial part of the Amsterdam disasterplan. What is the MHS going to do in case of a disaster or terrorist attack in the region of Amsterdam? It focuses on the use and validation of the short screening tool, which plays a central role in the disaster plan.

P-160a FACTORS ASSOCIATED WITH HIGH-RISE EVACUATION: RESULTS FROM THE WORLD TRADE CENTER EVACUATION STUDY

R.R.M. Gershon (Columbia University, New York, United States of America), K. Qureshi, V. Raveis, M. Rubin, M. Sherman

Introduction: Because most high-rise structures (i.e., >75 feet or 10 stories) are constructed with extensive and redundant fire safety features, current fire safety procedures typically involve only a limited evacuation during minor to moderate fire emergencies. Full scale evacuation of high-rises is therefore highly unusual and, consequently, very little is known about how readily and rapidly high-rise structures can be fully evacuated. Importantly, factors that serve as facilitators or barriers to this process remain understudied.
Objective: This paper presents results from the qualitative phase of the World Trade Center Evacuation Study, a three-year, five-phase study, designed to improve our understanding of the individual, organizational, and environmental factors that helped or hindered evacuation from the World Trade Center (WTC) Towers 1 and 2, on September 11, 2001.
Methods: Qualitative data from 30 semi-structured in-depth interviews and five focus groups involving WTC evacuees were collected and analyzed.
Results: Individual level factors that affected evacuation included perception of risk, which was shaped by sensory cues, preparedness training, degree of familiarity with the building, physical condition, health status and individual intuition. At the organizational level, evacuation was affected by worksite preparedness planning, including training and education of building occupants, management leadership, group behaviors, and risk communication. Environmental factors that affected evacuation included environmental cues (e.g., smoke, flames, odor of fuel, vibration, noise, etc.), integrity of staircases, degree of crowdedness on staircases, elevator usage, and communication infrastructure systems (e.g., public address and landline, cell, and fire warden's phones, etc.).
Conclusion: A number of factors at the individual, organizational, and environmental levels were identified that affected evacuation. The implementation of interventions that address barriers to evacuation may improve full-scale evacuation from other high-rise buildings under extreme conditions. Further studies should focus on the development and evaluation of targeted interventions, including model emergency preparedness planning for high-rise occupancies.