



The International Society for Urban Health
New York Academy of Medicine
1216 Fifth Avenue
New York, NY 10029
T: 212.822.7387 ♦ www.isuh.org ♦ F: 212.876.6220

Urban Health Literature Review

March-April 2007

Topic A: Built Environment

Topic B: Neighborhood and Social Environment Effects

Topic C: Adolescents and Children

Topic D: Women's Health

Topic E: Minority Health and Health Disparities

Topic F: HIV Risk and Prevention

Topic G: Other

Topic A: Built Environment

- 1. Rundle A, Roux AV, Free LM, Miller D, Neckerman KM, Weiss CC. The urban built environment and obesity in New York City: a multilevel analysis. *Am J Health Promot.* March 2007;21(4 Suppl):326-34.**

PURPOSE: To examine whether urban form is associated with body size within a densely-settled city. **DESIGN:** Cross-sectional analysis using multilevel modeling to relate body mass index (BMI) to built environment resources. **SETTING:** Census tracts (n = 1989) within the five boroughs of New York City. **SUBJECTS:** Adult volunteers (n = 13,102) from the five boroughs of New York City recruited between January 2000 and December 2002. **MEASURES:** The dependent variable was objectively-measured BMI. Independent variables included land use mix; bus and subway stop density; population density; and intersection density. Covariates included age, gender, race, education, and census tract-level poverty and race/ethnicity. **ANALYSIS:** Cross-sectional multilevel analyses. **RESULTS:** Mixed land use (Beta = -.55, p < .01), density of bus stops (Beta = -.01, p < .01) and subway stops (Beta = -.06, p < .01), and population density (Beta = -.25, p < .001), but not intersection density (Beta = -.002) were significantly inversely associated with BMI after adjustment for individual- and neighborhood-level sociodemographic characteristics. Comparing the 90th to the 10th percentile of each built environment variable, the predicted adjusted difference in BMI with increased mixed land use was -.41 units, with bus stop density was -.33 units, with subway stop density was -.34 units, and with population density was -.86 units. **CONCLUSION:** BMI is associated with built environment characteristics in New York City.

- 2. Diez Roux AV, Evenson KR, McGinn AP et al. Availability of recreational resources and physical activity in adults. *Am J Public Health.* March 2007;97(3):493-9.**

OBJECTIVES: Using data from a large cohort of adults aged 45 to 84 years-old, we investigated whether availability of recreational resources is related to physical activity

levels. **METHODS:** Data from a multiethnic sample of 2723 adult residents of New York City, NY; Baltimore, Md; and Forsyth County, NC, were linked to data on locations of recreational resources. We measured the availability (density) of resources within 0.5 (0.8 km), 1, 2, and 5 miles of each participant's residence and used binomial regression to investigate associations of density with physical activity. **RESULTS:** After adjustment for potential confounders, individuals in the tertile of participants residing in areas with the highest density of resources were more likely to report physical activity during a typical week than were individuals in the lowest tertile. Associations between availability of recreational resources and physical activity levels were not present for the smallest area assessed (0.5 miles) but were present for areas ranging from 1 to 5 miles. These associations were slightly stronger among minority and low-income residents. **CONCLUSIONS:** Availability of resources may be 1 of several environmental factors that influence individuals' physical activity behaviors.

3. Cohen DA, McKenzie TL, Sehgal A, Williamson S, Golinelli D, Lurie N. Contribution of public parks to physical activity. *Am J Public Health*. March 2007;97(3):509-14.

OBJECTIVES: Parks provide places for people to experience nature, engage in physical activity, and relax. We studied how residents in low-income, minority communities use public, urban neighborhood parks and how parks contribute to physical activity.

METHODS: In 8 public parks, we used direct observation to document the number, gender, race/ethnicity, age group, and activity level of park users 4 times per day, 7 days per week. We also interviewed 713 park users and 605 area residents living within 2 miles of each park. **RESULTS:** On average, over 2000 individuals were counted in each park, and about two thirds were sedentary when observed. More males than females used the parks, and males were twice as likely to be vigorously active.

Interviewees identified the park as the most common place they exercised. Both park use and exercise levels of individuals were predicted by proximity of their residence to the park. **CONCLUSIONS:** Public parks are critical resources for physical activity in minority communities. Because residential proximity is strongly associated with physical activity and park use, the number and location of parks are currently insufficient to serve local populations well.

4. Tilt JH, Unfried TM, Roca B. Using objective and subjective measures of neighborhood greenness and accessible destinations for understanding walking trips and BMI in Seattle, Washington. *Am J Health Promot*. March 2007;21(4 Suppl):371-9.

PURPOSE: Examine the influence of destinations within walking distance of a residence and vegetation on walking trips and body mass index (BMI). **DESIGN:** Cross-sectional analysis of data from residences with varying accessibility and greenness. **SETTING:** Seattle, Washington. **SUBJECTS:** Stratified random sample of residents, stratified by accessibility and greenness. **RESPONSE RATE:** 17.5 %, 529 respondents. **MEASURES:** Accessibility and greenness were measured objectively by Geographic Information Systems (GIS) Network Analysis and normalized difference vegetation index (NDVI), respectively. Self-reported destinations, natural features,

walking trips, BMI, and importance of destinations were measured through a postal survey. RESULTS: Objective accessibility were related to walking trips per month ($r(2) = .110$, $p < .0001$), as was subjective greenness ($r(2) = .051$, $p < .0001$), although objective measures of actual greenness were not. In areas with high accessibility, BMI was lower in areas that had high NDVI, or more greenness ($r(2) = .129428$, model $p < .0001$; t-test of interaction $p = .0257$). Low NDVI areas were associated with overestimation of the number of destinations within walking distance ($F(1, 499) = 11.009$, $p = .001$). CONCLUSIONS: Objective and subjective measurements of accessibility and greenness led to an understanding of variation among walking trips and BMI in different neighborhoods.

5. Coogan MA, Karash KH, Adler T, Sallis J. The role of personal values, urban form, and auto availability in the analysis of walking for transportation. *Am J Health Promot.* March 2007;21(4 Suppl):363-70.

PURPOSE: To examine the association of personal values, the built environment, and auto availability with walking for transportation. SETTING: Participants were drawn from 11 U.S. metropolitan areas with good transit services. SUBJECTS: 865 adults who had recently made or were contemplating making a residential move. MEASURES: Respondents reported if walking was their primary mode for nine trip purposes. "Personal values" reflected ratings of 15 variables assessing attitudes about urban and environmental attributes, with high reliability ($\alpha = 0.85$). Neighborhood form was indicated by a three-item scale. Three binary variables were created to reflect (1) personal values, (2) neighborhood form, and (3) auto availability. DESIGN: The association with walking was reported for each of the three variables, each combination of two variables, and the combination of three variables. An analysis of covariance was applied, and a hierarchic linear regression model was developed. RESULTS: All three variables were associated with walking, and all three variables interacted. The standardized coefficients were 0.23 for neighborhood form, 0.21 for autos per person, and 0.18 for personal values. CONCLUSION: Positive attitudes about urban attributes, living in a supportive neighborhood, and low automobile availability significantly predicted more walking for transportation. A framework for further research is proposed in which a factor representing the role of the automobile is examined explicitly in addition to personal values and urban form.

6. Forastiere F, Stafoggia M, Tasco C et al. Socioeconomic status, particulate air pollution, and daily mortality: differential exposure or differential susceptibility. *Am J Ind Med.* March 2007;50(3):208-16.

BACKGROUND: Short-term increases in particulate air pollution are linked with increased daily mortality and morbidity. Socioeconomic status (SES) is a determinant of overall health. We investigated whether social class is an effect modifier of the PM₁₀ (particulate matter with diameter <10 micron)-daily mortality association, and possible mechanisms for this effect modification. METHODS: Area-based traffic emissions, income, and SES were available for each resident in Rome. All natural deaths (83,253 subjects) occurring in Rome among city residents (aged 35+ years) during the period 1998-2001 were identified. For each deceased individual, all the previous

hospitalizations within 2 years before death were available via a record linkage procedure. PM(10) daily data were available from two urban monitoring sites. A case-crossover analysis was utilized in which control days were selected according to the time stratified approach (same day of the week during the same month). Conditional logistic regression was used. RESULTS: Due to the social class distribution in the city, exposure to traffic emissions was higher among those with higher area-based income and SES. Meanwhile, people of lower social class had suffered to a larger extent from chronic diseases before death than more affluent residents, especially diabetes mellitus, hypertension, heart failure, and chronic obstructive pulmonary diseases. Overall, PM(10) (lag 0-1) was strongly associated with mortality (1.1% increase, 95% CI = 0.7-1.6%, per 10 microg/m³). The effect was more pronounced among persons with lower income and SES (1.9% and 1.4% per 10 microg/m³, respectively) compared to those in the upper income and SES levels (0.0% and 0.1%, respectively). CONCLUSIONS: The results confirm previous suggestions of a stronger effect of particulate air pollution among people in low social class. Given the uneven geographical distributions of social deprivation and traffic emissions in Rome, the most likely explanation is a differential burden of chronic health conditions conferring a greater susceptibility to less advantaged people.

Topic B: Neighborhood and Social Environment Effects

7. Cagney KA, Browning CR, Wallace DM. The Latino paradox in neighborhood context: the case of asthma and other respiratory conditions. *Am J Public Health.* May 2007;97(5):919-25.

OBJECTIVES: Evidence indicates that foreign-born Latinos have a health advantage compared with US-born persons of the same socioeconomic status. An explanation for this paradox has remained elusive. We examined the extent to which this paradox exists for the prevalence of asthma and other respiratory conditions. We then explored the role of neighborhood social context in understanding any observed advantage. We invoked theories of social organization, collective efficacy, and the urban ethnic enclave. METHODS: We combined data from the Project on Human Development in Chicago Neighborhoods Community Survey with 2 other data sources and used hierarchical generalized linear modeling techniques. RESULTS: We found a distinctly graded effect for asthma and other breathing problems among foreign-born Latinos, depending on community composition. Foreign-born Latinos embedded in a neighborhood that had a high percentage of foreign-born residents experienced a significantly lower prevalence of asthma and other breathing problems; those in communities that had a low percentage of foreign-born residents had the highest prevalence overall (even when compared with African Americans). CONCLUSIONS: Foreign-born Latinos have a respiratory health advantage only in enclave-like settings. Contexts such as these may provide the cohesiveness critical for effective prevention.

8. Rodriguez RA, Sen S, Mehta K, Moody-Ayers S, Bacchetti P, O'Hare AM. Geography matters: relationships among urban residential segregation, dialysis facilities, and patient outcomes. *Ann Intern Med.* April 2007 3;146(7):493-501.

BACKGROUND: End-stage renal disease disproportionately affects black Americans. However, the impact of residential segregation by race—a prominent feature of many U.S. cities—on outcomes of patients receiving dialysis and on facility performance has not been evaluated. **OBJECTIVE:** To examine the relationship among racial composition of ZIP codes in metropolitan areas, outcomes of patients receiving dialysis, and characteristics of dialysis facilities. **DESIGN:** Retrospective cohort study of patients receiving dialysis and cross-sectional study of dialysis facilities. **SETTING:** U.S. metropolitan ZIP codes with differing percentages of black residents. **PATIENTS:** Black and non-Hispanic white patients who initiated long-term dialysis between 1 January 1995 and 31 December 2002 (n = 399,424) and dialysis facilities in operation in December 2004 (n = 3244). **MEASUREMENTS:** Mortality and time to transplantation among patients receiving dialysis, and performance of dialysis facilities on the basis of quality indicators (anemia management, dialysis adequacy, and facility-level mortality rates). **RESULTS:** Most black patients (50.3%) but few white patients (5%) lived in the 3% (n = 769) of ZIP codes in which most residents were black. In analyses adjusted for patient and ZIP code characteristics, mortality rates were higher among white patients but not among black patients living in areas with a higher percentage of black residents (adjusted hazard ratio for ZIP codes with > or =75% black residents vs. <10% black residents, 1.14 [95% CI, 1.07 to 1.21] for white patients and 1.02 [CI, 0.99 to 1.06] for black patients). Time to transplantation was longer among both black and white patients (adjusted hazard ratio for ZIP codes with > or =75% black residents vs. <10% black residents, 0.84 [CI, 0.78 to 0.92] and 0.63 [CI, 0.57 to 0.71] for black patients and white patients, respectively). Dialysis facilities located in areas with a higher percentage of black residents were more likely to have higher-than-expected mortality rates and were less likely to meet performance targets. **LIMITATIONS:** Patient-level analyses were restricted to black and non-Hispanic white patients. Patient-level and facility-level analyses focused only on the percentage of black residents in each ZIP code. **CONCLUSIONS:** The racial composition of urban residential areas is associated with time to transplantation and dialysis facility performance on standard quality measures. Closer scrutiny of care provided to patients receiving dialysis who live in predominantly black residential areas and to dialysis facilities operating in these areas may be warranted.

9. Bell JF, Zimmerman FJ, Mayer JD, Almgren GR, Huebner CE. Associations between residential segregation and smoking during pregnancy among urban african-american women. *J Urban Health*. May 2007;84(3):372-88.

Approximately 10% of African-American women smoke during pregnancy compared to 16% of White women. While relatively low, the prevalence of smoking during pregnancy among African-American women exceeds the Healthy People 2010 goal of 1%. In the current study, we address gaps in extant research by focusing on associations between racial/ethnic residential segregation and smoking during pregnancy among urban African-American women. We linked measures of segregation to birth certificates and data from the 2000 census in a sample of US-born African-American women (n = 403,842) living in 216 large US Metropolitan Statistical Areas (MSAs). Logistic regression models with standard errors adjusted for multiple individual observations within MSAs were used to examine associations between segregation and

smoking during pregnancy and to control for important socio-demographic confounders. In all models, a u-shaped relationship was observed. Both low segregation and high segregation were associated with higher odds of smoking during pregnancy when compared to moderate segregation. We speculate that low segregation reflects a contagion process, whereby salutary minority group norms are weakened by exposure to the more harmful behavioral norms of the majority population. High segregation may reflect structural attributes associated with smoking such as less stringent tobacco control policies, exposure to urban stressors, targeted marketing of tobacco products, or limited access to treatment for tobacco dependence. A better understanding of both deleterious and protective contextual influences on smoking during pregnancy could help to inform interventions designed to meet Healthy People 2010 target goals.

10. Brown AF, Ang A, Pebley AR. The relationship between neighborhood characteristics and self-rated health for adults with chronic conditions. *Am J Public Health.* May 2007;97(5):926-32.

OBJECTIVES: We sought to determine whether the association between neighborhood characteristics and health differs for people with and without a chronic condition.

METHODS: We analyzed data from 2536 adults from the Los Angeles Family and Neighborhood Survey and evaluated the relationship between the presence of a chronic condition at the individual level, neighborhood socioeconomic status (SES), and self-rated health. We constructed multilevel models to evaluate the relationship between the neighborhood SES index and self-rated health for people with and without chronic conditions, after adjustment for other individual characteristics. **RESULTS:** Having a chronic condition was associated with substantially poorer self-rated health among participants in a deprived area than among those in a more advantaged area.

CONCLUSIONS: Residence in a disadvantaged neighborhood may be associated with barriers to the management of a chronic condition. Further work is needed to identify the specific characteristics of disadvantaged areas associated with poorer self-rated health for adults with chronic conditions.

11. Mari-Dell'Olmo M, Rodriguez-Sanz M, Garcia-Olalla P et al. Individual and community-level effects in the socioeconomic inequalities of AIDS-related mortality in an urban area of southern Europe. *J Epidemiol Community Health.* March 2007;61(3):232-40.

OBJECTIVE: To study socioeconomic inequalities in AIDS mortality in Barcelona, Spain, during the periods 1991-6 (before highly active antiretroviral therapy (HAART)) and 1997-2001 (post-HAART) taking into account individual as well as community effects of socioeconomic level. **DESIGN:** Cross-sectional design. **SETTING:** Barcelona, Spain. **PARTICIPANTS:** All residents aged > or =20 years. All AIDS-related deaths occurring between 1991 and 2001 were studied. The individual variables analysed were age, sex, educational level, neighbourhood of residence and HIV transmission group. Male unemployment was used as the community-level indicator of neighbourhood deprivation. Multilevel Poisson regression models were fitted to estimate the relationship between AIDS mortality and the individual- and community-level variables. **RESULTS:** At the individual level, AIDS mortality relative risks (RR)

were higher among intravenous drug users (IDUs) with lower educational level in both periods. For the younger population, the RR of AIDS-related mortality associated with having little education compared with having a primary education or more was 4.7 (95% CI 3.6 to 6.1) in men and 5.2 (95% CI 3.6 to 7.7) in women in the pre-HAART period, and 4.7 (95% CI 2.7 to 8.1) in men and 4.5 (95% CI 1.4 to 14.1) in women in the post-HAART period. At the community level, an area effect in AIDS mortality was found, which was more important in neighbourhoods having high deprivation in both periods, although the effect was most important in the post-HAART period.

CONCLUSIONS: This study has shown inequalities in AIDS mortality in terms of both individual variables and a community-level variable in the pre-HAART as well as in the post-HAART period. These socioeconomic inequalities of AIDS mortality must be considered when prevention and treatment strategies are implemented.

12. Smith KC, Stillman F, Bone L et al. Buying and Selling "Loosies" in Baltimore: The Informal Exchange of Cigarettes in the Community Context. *J Urban Health*. April 2007 13; [Epub ahead of print].

Since the release of the first Surgeon General's report, the proportion of adult smokers in the U.S. has been reduced by half (U.S. Department of Health and Human Services, 2004). This success has not, however, been equally felt across all social strata. Recent survey data from Baltimore show considerably elevated smoking rates within urban, African-American communities. Of particular concern was that in some communities, over half of the young adults (18-24 years old) smoke cigarettes. As yet, there has been little focus on understanding or preventing cigarette smoking among young adults, particularly for those seeking entry into the workforce rather than being engaged in higher education. In this paper, we explore community factors contributing to high young adult smoking prevalence. Our analysis is based on data from four focus groups conducted in 2004 as part of a community-based participatory research project with two urban education and job training organizations. The focus group data reflect the experiences and opinions of 28 young adult program participants (23 smokers and 5 nonsmokers). The data highlight a normalized practice of buying and selling single cigarettes ("loosies") within the community, with participants describing buying loose cigarettes as a preferred acquisition practice. We apply theories of informal economy and suggest that this alternative purchasing option may influence the smoking behavior of these young adults. We argue that public health efforts need to more closely consider the impact of community structures on program implementation. Overlooking key community characteristics such as the availability of single cigarettes may serve to intensify health disparities.

13. Galea S, Ahern J, Nandi A, Tracy M, Beard J, Vlahov D. Urban neighborhood poverty and the incidence of depression in a population-based cohort study. *Ann Epidemiol*. March 2007;17(3):171-9.

PURPOSE: It has long been suggested that certain characteristics of the urban environment may influence population mental health. However, evidence from multilevel research addressing the relation between intraurban environments and depression has been conflicting, and prospective evidence in this regard has been

limited. We assessed the relation between urban neighborhood poverty and incident depression in a population-based prospective cohort study. **METHODS:** Using random-digit-dial telephone surveys, we recruited 1570 adult residents of New York City (NYC) in 2002. All persons interviewed at baseline were contacted again for follow-up 6 and 18 months after the initial interview. Eighty-one percent of the sample completed at least one follow-up visit. Analysis was restricted to 1120 persons who could be geocoded to NYC neighborhoods, which were represented by NYC community districts (N=59). **RESULTS:** Among persons with no history of major depression at baseline (N=820) there were 113 incident cases of major depression during the 18 months of follow-up; cumulative incidence of depression during the study period was 14.6 per hundred persons (95% confidence interval, 10.9-18.3). In low-socioeconomic status (SES) neighborhoods, the cumulative incidence of depression was 19.4 per hundred persons (95% confidence interval, 13.5-25.3), which was greater than that in high-SES neighborhoods (10.5; 95% confidence interval, 5.9-15.2). In multivariable models adjusting for individual covariates (sociodemographics, individual SES, social support, stressors, traumas, and history of post-traumatic stress disorder), the relative odds of incident depression was 2.19 (95% confidence interval, 1.04-4.59) for participants living in low-SES compared with high-SES neighborhoods. **CONCLUSIONS:** SES of neighborhood of residence is associated with incidence of depression independent of individual SES and other individual covariates. Additional work needs to characterize the pathways that may explain the observed association between living in low-SES neighborhoods and risk for depression.

14. Caughy MO, Hayslett-McCall KL, O'Campo PJ. No neighborhood is an island: Incorporating distal neighborhood effects into multilevel studies of child developmental competence. *Health Place*. March 2007 26; [Epub ahead of print].

The purpose of this study was to examine whether incorporating information regarding neighborhoods which were more distal to the child's neighborhood added any explanatory power to models of child cognitive competence. Participants included a sample of young African-American children living in an urban setting in the northeast United States. Spatial geographic methods were used to estimate the concentration of economic disadvantage, population instability, and crime in the neighborhoods surrounding the child's residence, and multilevel modeling methods were used to estimate the contribution of these factors to between-neighborhood variance in child cognitive scores. Results indicated that the conditions of distal neighborhoods were related to cognitive scores among the preschooler-age children in this sample.

15. Winslow EB, Shaw DS. Impact of neighborhood disadvantage on overt behavior problems during early childhood. *Aggress Behav*. May 2007;33(3):207-19.

Researchers have yet to examine the impact of neighborhood disadvantage on early child behavior problems (BPs) longitudinally. We examined the impact of neighborhood disadvantage on overt BPs in a low-income, urban sample of 281 African American and European American boys followed longitudinally from toddlerhood to

school entry. Measures included census data and maternal report of BPs, sociocultural factors, parental criminality, and maternal depressive symptomatology. After controlling for age 2 overt BPs, family selection variables, and residential instability, neighborhood effects on boys' behavior emerged, but only at age 6 and only at the extreme of neighborhood disadvantage (i.e., underclass). Findings suggest boys in underclass neighborhoods are at risk for overt BPs as they make the transition to elementary school.

Topic C: Adolescents and Children

16. White HR, Jarrett N, Valencia EY, Loeber R, Wei E. Stages and sequences of initiation and regular substance use in a longitudinal cohort of black and white male adolescents. *J Stud Alcohol Drugs*. March 2007;68(2):173-81.

OBJECTIVE: This study examined whether developmental sequences and stages of substance-use initiation and regular use differed and, if so, whether they varied for black and white adolescent males. **METHOD:** The analyses were based on a cohort of inner-city boys in the Pittsburgh public schools, who had been followed prospectively from ages 7 to 19 across 18 data waves (N = 412). **RESULTS:** Blacks were most likely to end initiation of any use and regular use with marijuana, whereas alcohol and tobacco were the most common end stage drugs for whites. Whites were also more likely than blacks to initiate and to become regular users of hard drugs. For both races, the typical developmental sequence for substance-use initiation and regular use was alcohol and/or tobacco, then marijuana, and then hard drugs. However, blacks were more likely to deviate from this sequence than were whites. Participants who initiated any substance use faced a high probability of becoming a regular user of at least one substance. **CONCLUSIONS:** There were differences in the sequences and stages of substance-use initiation and regular use by race. Further research is needed to identify the antecedents of escalation to regular use and progression of regular use across substances and to delineate the cultural and environmental factors that affect substance-use progression.

17. Schilling EA, Aseltine RH, Jr., Gore S. Adverse childhood experiences and mental health in young adults: a longitudinal survey. *BMC Public Health*. March 2007 7; [Epub ahead of print].

BACKGROUND: Adverse childhood experiences (ACEs) have been consistently linked to psychiatric difficulties in children and adults. However, the long-term effects of ACEs on mental health during the early adult years have been understudied. In addition, many studies are methodologically limited by use of non-representative samples, and few studies have investigated gender and racial differences. The current study relates self-reported lifetime exposure to a range of ACEs in a community sample of high school seniors to three mental health outcomes—depressive symptoms, drug abuse, and antisocial behavior—two years later during the transition to adulthood. **METHODS:** The study has a two-wave, prospective design. A systematic probability sample of high school seniors (N = 1093) was taken from communities of diverse socioeconomic status. They were interviewed in person in 1998 and over the telephone two years later. Gender and racial differences in ACE prevalence were tested with chi-

square tests. Each mental health outcome was regressed on one ACE, controlling for gender, race/ethnicity, and SES to obtain partially standardized regression coefficients. RESULTS: Most ACEs were strongly associated with all three outcomes. The cumulative effect of ACEs was significant and of similar magnitude for all three outcomes. Except for sex abuse/assault, significant gender differences in the effects of single ACEs on depression and drug use were not observed. However, boys who experienced ACEs were more likely to engage in antisocial behavior early in young adulthood than girls who experienced similar ACEs. Where racial/ethnic differences existed, the adverse mental health impact of ACEs on Whites was consistently greater than on Blacks and Hispanics. CONCLUSION: Our sample of young adults from urban, socio-economically disadvantaged communities reported high rates of adverse childhood experiences. The public health impact of childhood adversity is evident in the very strong association between childhood adversity and depressive symptoms, antisocial behavior, and drug use during the early transition to adulthood. These findings, coupled with evidence that the impact of major childhood adversities persists well into adulthood, indicate the critical need for prevention and intervention strategies targeting early adverse experiences and their mental health consequences.

18. Paula CS, Duarte CS, Bordin IA. Prevalence of mental health problems in children and adolescents from the outskirts of Sao Paulo City: treatment needs and service capacity evaluation. *Rev Bras Psiquiatr.* March 2007;29(1):11-7.

OBJECTIVE: To estimate the prevalence of mental health problems in children and adolescents, with or without considering global impairment, within a low-income urban community; to estimate the public service delivery capacity in terms of mental healthcare; and to determine the relationship between delivery capacity and treatment demand. METHOD: Cross-sectional study. Probabilistic sample of clusters including all eligible households (low-income community - Embu, Southeastern Brazil). Participants: 479 children and adolescents (aged 6-17 years; attrition rate: 18.8%). Measurement: 1) Clinical mental health problems in children and adolescents using the Child Behavior Checklist and/or Youth Self-Report total problem scales; 2) Global impairment: positive score in the Brief Impairment Scale (total score > 15.5); 3) Care service capacity: total number of cases annually seen by psychologists/psychiatrists in the health, education, juvenile justice, and child welfare sectors. RESULTS: Prevalence of mental health problems in children and adolescents: 24.6% (20.7-28.5) without considering global impairment; 7.3% (5.0-9.6) with global impairment (cases in need of treatment). Current annual service capacity can only provide care for 14.0% of impaired cases; approximately seven years would be necessary for all to be treated. CONCLUSIONS: Mental health problems in children and adolescents are frequent in the studied community, and the current structure of the community's public service system is not prepared to treat impaired cases in an adequate timeframe.

19. Raffaelli M, Koller SH, Cerqueira-Santos E, DE Moraes NA. Developmental risks and psychosocial adjustment among low-income Brazilian youth. *Dev Psychopathol.* 2007;19(2):565-84.

Exposure to developmental risks in three domains (community, economic, and family), and relations between risks and psychosocial well-being, were examined among 918 impoverished Brazilian youth aged 14-19 (M = 15.8 years, 51.9% female) recruited in low-income neighborhoods in one city in Southern Brazil. High levels of developmental risks were reported, with levels and types of risks varying by gender, age, and (to a lesser extent) race. Associations between levels of risks in the various domains and indicators of psychological (e.g., self-esteem, negative emotionality) and behavioral (e.g., substance use) adjustment differed for male and female respondents. Findings build on prior research investigating the development of young people in conditions of pervasive urban poverty and reinforce the value of international research in this endeavor. This study was funded by grants from the World Bank and CNPq to Silvia H. Koller. Manuscript preparation was partially supported by a Faculty Development Fellowship to Marcela Raffaelli from the College of Arts and Sciences, University of Nebraska-Lincoln, and by a Visiting Fellowship at the Key Centre for Women's Health in Society, School of Population Health at the University of Melbourne. The authors acknowledge the assistance of J'aims Ribeiro in developing the questionnaire.

20. Dosreis S, Mychailyszyn MP, Myers M, Riley AW. Coming to Terms With ADHD: How Urban African-American Families Come to Seek Care for Their Children. *Psychiatr Serv.* May 2007;58(5):636-41.

OBJECTIVE: This study investigated how parents' interpretations of their child's disruptive or inattentive behaviors led them to seek medical care that resulted in a diagnosis of attention-deficit hyperactivity disorder (ADHD). **METHODS:** Qualitative, semistructured telephone interviews were conducted with parents of children who had been newly diagnosed as having ADHD (96% of the children were African American). The 26 participants were recruited from primary care, developmental and behavioral, and specialty mental health pediatric clinics affiliated with a large, urban teaching hospital. The analysis followed a grounded theory approach. **RESULTS:** By the time that parents sought treatment for their child's ADHD, they had been through an extensive process to pinpoint their child's problems. Parents' conceptualizations emerged as they described their child's behavior, explained the situation, described how ADHD affected their children, and explained how they sought answers. Their reactions to the behavior and visions they had for their child's future reflected their motivation to manage the situation. Parents' conceptualization and management of the behaviors described the process of coming to terms with their child's ADHD and the need for care. Four distinct patterns describing this process emerged from the analysis: immediate resolution, pragmatic management, attributional ambivalence, and coerced conformance. **CONCLUSIONS:** It is likely that clinicians' awareness of the different approaches by which families come to the decision to seek care for their child's ADHD will allow clinicians to provide more responsive care and better tailor interventions to improve therapeutic outcomes for children receiving mental health treatments.

21. Grant R, Bowen S, McLean DE, Berman D, Redlener K, Redlener I. Asthma among homeless children in New York City: an update. *Am J Public Health.* March 2007;97(3):448-50.

Homeless children in New York City had an extremely high asthma prevalence-40%-in a cross-sectional study at 3 shelters (n=740) during 1998 to 1999. We used the same protocol to summarize subsequent data through December 2002. Asthma prevalence was 33% (n=1636); only 15% of the children previously diagnosed were taking an asthma controller medication. Emergency department use was 59%. These data were used to support a class action lawsuit that was resolved in favor of homeless children with asthma in New York City.

- 22. Schmier JK, Manjunath R, Halpern MT, Jones ML, Thompson K, Diette GB. The impact of inadequately controlled asthma in urban children on quality of life and productivity. *Ann Allergy Asthma Immunol.* March 2007;98(3):245-51.**

BACKGROUND: The burden of inadequately controlled pediatric asthma on education and other daily activities is not well described. **OBJECTIVE:** To evaluate asthma-related activity limitations and productivity losses among children and caregivers. **METHODS:** Surveys were mailed to caregivers of children with asthma. Caregivers provided demographics, health-related quality of life (HRQL), workplace productivity, and asthma-related costs. Adolescents (aged 12-18 years) provided HRQL, asthma control, and school-based productivity, and young children (aged 4-11 years) completed an asthma control questionnaire with help from a caregiver. **RESULTS:** Among the 239 respondents, the mean age was 10.1 years; 49% were girls. More than half were inadequately controlled as measured using the Asthma Control Test. Both HRQL and productivity were significantly lower in patients with inadequately controlled asthma compared with those with controlled asthma. In the previous year, caregivers reported missing 1.4 days of work due to their child's asthma, with the child missing an average of 4.1 school days. Fewer adolescents with controlled asthma reported missing 1 or more school days in the previous week compared with adolescents with inadequately controlled asthma (3.5% vs 34.0%; $P < .001$). There were similar differences in caregiver workdays missed and health care resource use: both were significantly higher in children with inadequately controlled asthma. **CONCLUSIONS:** Inadequately controlled asthma has a significant impact on asthma-specific HRQL, school productivity and attendance, and work productivity of children and their caregivers.

- 23. Martin MA, Shalowitz MU, Mijanovich T, Clark-Kauffman B, Perez E, Berry CA. The Effects of Acculturation on Asthma Burden in a Community Sample of Mexican American Schoolchildren. *Am J Public Health.* May 2007 30; [Epub ahead of print].**

Objectives. We sought to determine whether low acculturation among Mexican American caregivers protects their children against asthma. **Methods.** Data were obtained from an observational study of urban pediatric asthma. Dependent variables were children's diagnosed asthma and total (diagnosed plus possible) asthma. Regression models were controlled for caregivers' level of acculturation, education, marital status, depression, life stress, and social support and children's insurance. **Results.** Caregivers' level of acculturation was associated with children's diagnosed asthma ($P=.025$) and total asthma ($P=.078$) in bivariate analyses. In multivariate

models, protective effects of caregivers' level of acculturation were mediated by the other covariates. Independent predictors of increased diagnosed asthma included caregivers' life stress (odds ratio [OR]=1.12, P=.005) and children's insurance, both public (OR=4.71, P=.009) and private (OR=2.87, P=.071). Only caregiver's life stress predicted increased total asthma (OR=1.21, P=.001). Conclusions. The protective effect of caregivers' level of acculturation on diagnosed and total asthma for Mexican American children was mediated by social factors, especially caregivers' life stress. Among acculturation measures, foreign birth was more predictive of disease status than was language use or years in country. Increased acculturation among immigrant groups does not appear to lead to greater asthma risk.

24. Khawaja M, Barazi R, Linos N. Maternal cultural participation and child health status in a Middle Eastern context: evidence from an urban health study. *Child Care Health Dev.* March 2007;33(2):117-25.

BACKGROUND: The negative effect of poverty on child health has been well established. However, rapid urbanization in developing countries prompts new research questions relating to socio-cultural practices and other related variables in these settings. **OBJECTIVE:** To examine the association between maternal cultural participation and child health status in impoverished neighbourhoods of Beirut, Lebanon. **METHODS:** A cross-sectional survey of 1241 mothers with children aged less than 5 years was conducted from randomly selected households in three impoverished neighbourhoods of diverse ethnic and religious make-up. The outcome variable was child health status (good/bad) as assessed by the mother. Maternal variables, including cultural participation, education, demographic and environmental/structural factors, were studied. 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:** Two indicators of maternal cultural participation, namely watching entertaining television and attending movies/art exhibitions, were found to be significantly associated with child health status after controlling for other risk factors. The quality of water, the quality of local health services and maternal education were also significantly associated with child health status. Household income, child gender and household dampness had no significant association with child health status in this context. **CONCLUSION:** Maternal cultural participation was a significant predictor of child health status in impoverished urban communities. Improving child health through culturally focused interventions for mothers, especially in deprived areas, may be greatly important.

25. Thompson R. Mothers' violence victimization and child behavior problems: Examining the link. *Am J Orthopsychiatry.* April 2007;77(2):306-15.

The current study examined the link between parents' experience of violence victimization and child outcomes, in 197 mother-child dyads recruited from low-income urban neighborhoods. At recruitment (when children were between 6 and 18 months old), demographic factors, child behavioral outcomes, mother-child interactions, mothers' psychosocial functioning, and mothers' history of violence victimization were

assessed. Child behavioral outcomes, mother-child interactions, and mothers' psychosocial functioning were assessed again at age 4. Mothers' history of victimization as children (but not as adults) uniquely predicted child behavior problems at age 4. Three classes of possible mediators were examined: demographics, maternal psychosocial functioning, and mother-child interactions. Of these, only mother psychological aggression toward child met preliminary criteria for mediation; it partially mediated the link between mother childhood victimization and child behavioral outcomes. Maternal depressive symptoms and young age at child's birth independently predicted child behavior problems, but did not act as mediators. Mothers' early experiences with violence victimization appear to exert an important influence on child behavioral outcomes; this influence appears to be mediated, in part, by mothers' psychological aggression toward their children. ((c) 2007 APA, all rights reserved)

Topic D: Women's Health

26. Dornelas EA, Stepnowski RR, Fischer EH, Thompson PD. Urban ethnic minority women's attendance at health clinic vs. church based exercise programs. *J Cross Cult Gerontol.* March 2007;22(1):129-36.

Older, sedentary, urban-living, ethnic minority women are at high risk for preventable disease, but it is difficult to engage this population in health promotion efforts. This study tested two methods of engaging Hispanic and African American women, who were at high risk for cardiovascular disease, in a 10-week aerobic fitness program. The program was offered to 76 participants, in either a women's health clinic or a church. Attendance was the primary dependent variable and was recorded at each exercise session. Other variables, including the Baecke Questionnaire of Habitual Physical Activity, Fat Frequency Questionnaire, Self-Efficacy for Exercise Behaviors Scale, Social Support and Exercise Survey, and Psychological General Well-Being Schedule, were measured prior to the intervention, at the end of the 10-week program, and at 3-month follow-up. Age predicted attendance, independently of site. Women in the highest age quartile (50 - 70 years) attended more than twice as many exercise sessions compared to women in the lowest age quartile (17 - 27 years). The relationship between older age and attendance was particularly strong for Hispanic women. Church parishioners were primarily women over the age of 40, making it impossible to disentangle the relative effect of locale. These findings are relevant for clinicians who design exercise programs targeting older, ethnic, minority women. Administrators who design exercise programs for urban-living women should consider age of the target population when selecting the most conducive setting.

27. Merchant RC, Gee EM, Bock BC, Becker BM, Clark MA. Correlates of women's cancer screening and contraceptive knowledge among female emergency department patients. *BMC Womens Health.* May 2007 22;7(1):7.

BACKGROUND: Lack of knowledge regarding preventive health services for women might impede campaigns to expand these services in the emergency department setting. For 18-55-year-old English-speaking women visiting an urban emergency department,

we aimed to: (1) Ascertain their knowledge regarding the applicability, purpose, and recommended intervals of three women's cancer screening and three contraceptive methods; and (2) Determine if patient age, race/ethnicity, medical insurance status, and current or recent usage of these methods are associated with greater or lesser knowledge about them. **METHODS:** Emergency department-based survey on recent or current usage and knowledge about Pap smears, breast self-examinations, mammograms, condoms, birth control, and emergency contraception. Analyses included calculation of summary statistics and creation of multivariable logistic regression models. **RESULTS:** Of 1,100 patients eligible for the study, 69.9% agreed to participate. Most of the participants were < age 35, white, single (never married and no partner), Catholic, and had private medical insurance. Participant's recent or current usage of a particular cancer screening or contraceptive method varied by type of method: Pap smear within the past year (69.1%), breast self-exam within the past month (45.5%), mammogram within the past year (65.7% for women age 45-55), condom usage during every episode of sexual intercourse (15.4%), current usage of birth control pills (17.8%), and ever use of emergency contraception (9.3%). The participants correctly answered 87.9% of all survey questions about condoms, 82.5% about birth control pills, 78.5% about breast self-exams, 52.9% about Pap smears, 35.4% about mammograms, and 25.0% about emergency contraception. In multivariable logistic regression models, survey participants who had private medical insurance and those who recently or currently used a given screening or contraceptive method had a greater odds of correctly answering all questions about each cancer screening or contraceptive method. **CONCLUSIONS:** Although these female ED patients demonstrated strong knowledge on some women's cancer screening and contraceptive methods, there were several areas of knowledge deficit. Women without private medical insurance and those who have not used a particular cancer screening or contraceptive method demonstrated less knowledge. Reduced knowledge about women's cancer screening and contraceptive methods should be considered during clinical encounters and when instituting or evaluating emergency department-based initiatives that assess the need for these methods.

28. Lofters A, Glazier RH, Agha MM, Creatore MI, Moineddin R. Inadequacy of cervical cancer screening among urban recent immigrants: A population-based study of physician and laboratory claims in Toronto, Canada. *Prev Med.* March 2007 21; [Epub ahead of print].

OBJECTIVE.: In Canada, Pap smears are recommended from 18 to 69. Self-reported socioeconomic gradients in screening have been documented in North America but there have been few direct measures of Pap smear use among immigrants or socially disadvantaged groups. Our purpose was to investigate whether socio-demographic factors are related to cervical cancer screening in Toronto, Canada. **METHOD.:** Pap smears were identified using fee and laboratory codes in Ontario physician service claims for 3 years (2000-2002 inclusive) for women aged 18-66. Area-level socioeconomic factors were derived from the 2001 census. At the individual level, recent registrants for health coverage, over 80% of whom are expected to be recent immigrants, were identified as women first registering after January 1, 1993. **RESULTS.:** Among 724,584 women, 55.4% had Pap smears within 3 years. Recent immigration, visible minority, foreign language, low income and low education were all

associated with significantly lower area rates. Recent registrants had much lower rates than non-recent registrants (36.9% versus 60.9%). **CONCLUSION.:** Pap smear rates in Toronto fall below those dictated by evidence-based practice. Recent registrants, a largely immigrant group, have particularly low rates. Efforts to improve coverage need to emphasize women who recently immigrated and those with socioeconomic disadvantage.

29. Whitman S, Shah AM, Silva A, Ansell D. Mammography screening in six diverse communities in Chicago-A population study. *Cancer Detect Prev.* 2007;31(2):166-72.

Background: Despite the fact that recent studies suggest a narrowing in access to mammography, Black women are much more likely to die from breast cancer than White women. Data at the community level regarding mammography screening can help explain health disparities and inform plans for improved screening efforts. Methods: In 2002-2003, a comprehensive household health survey in English or Spanish was conducted in six community areas with 1700 households. The module on mammography was based on a state-based nationwide health survey and included questions on frequency of mammography, repeat screenings, and several demographic variables. Results: The proportion of women ≥ 40 years (n=482) who received a mammogram in the past 2 years ranged from 74% to 90% across the six communities. The community with the highest screening proportion was predominantly Mexican and included recent immigrants. The screening proportion in the poorest community area, which was all Black, was 77%. Women with health insurance, higher income, and more education were more likely to receive a mammogram. Proportions for women ≥ 50 years (n=286) were slightly higher but similar. Repeat screening, which is recommended, occurred at lower levels. Conclusions: Access to and utilization of mammography have grown in recent years so that even these vulnerable communities had screening proportions at or even higher than the national average and the Healthy People Year 2010 objective. Nonetheless, repeat screening sequences were lower and may require attention if mammography screening efforts are to have a greater impact on female breast cancer mortality.

30. Fontana V, Castro T, Polynice A. Preferences of healthy inner city women and the surgical treatment of early stage breast cancer. *Am Surg.* March 2007;73(3):215-21.

Numerous studies have shown that women of a lower education level and socioeconomic status use less breast-conserving surgery than women of a higher education level and socioeconomic status. Surveys of healthy women and the surgical treatment of early stage breast cancer have been performed. However, no survey has focused exclusively on inner city women. The objective of this study was to determine the awareness, preferences, and concerns of inner-city, multiethnic women and the surgical treatment of stage I and II breast cancer, and to identify if a distinct treatment preference for mastectomy or lumpectomy exists in such a population. The study consisted of a prospective survey of volunteers, age 18 years and older, in the nononcologic clinics of St. Barnabas Hospital in the Bronx, New York. We

consecutively surveyed 200 women between the ages of 18 and 75 using a 12-item form from January 2004 to May 2004. Of 200 surveys, 21 were excluded as incomplete and two women surveyed who gave a prior history of breast cancer were excluded from study, leaving 177 total surveys for analysis. Women were presented with a hypothetical diagnosis of early stage breast cancer curable by mastectomy or lumpectomy and radiation therapy. Women were asked about their surgery preferences, who they would seek advice from, if they would let their physician decide treatment, and their concerns if faced with a diagnosis of breast cancer. One hundred seventy-seven completed surveys were obtained; 124 (70%) women chose lumpectomy and radiation, 48 (27%) chose mastectomy, and 5 (3%) chose no treatment. Women who were educated below the collegiate level were more likely to prefer breast conservation therapy compared with those with a college education and above (adjusted OR 1.8, 95% CI 1.0, 3.6). Overall, most women surveyed (62%) were concerned with cancer recurrence followed by the side effects of radiation therapy (19%). Most women surveyed (63%) would make their physician principal advisor, whereas some (23%) would make their significant other the principal advisor. More women who chose mastectomy would make their physician their principal advisor (80%) versus those who chose lumpectomy (65%). More than 80 per cent of the women surveyed would have their physician decide their treatment. The women in the present study exhibited a distinct preference for breast conservation therapy over mastectomy.

31. Ekberg-Aronsson M, Nilsson PM, Nilsson JA, Lofdahl CG, Lofdahl K. Mortality risks among heavy-smokers with special reference to women: a long-term follow-up of an urban population. *Eur J Epidemiol.* May 2007 30; [Epub ahead of print].

Increased mortality risks associated with smoking are well established among men. There are very few population-based studies comprising a sufficient number of heavily smoking women, measuring the direct effect of smoking on mortality risks. Between 1974 and 1992, 8,499 women and 13,888 men attended a health screening programme including reporting of smoking habits. Individuals were followed for total mortality until 2005. All-cause, cancer, cardiovascular, lung cancer and respiratory mortality were calculated in smoking categories <10 g per day, 10-19 g per day, and \geq 20 g per day with never-smokers as a reference group and with adjustments for co-morbidities, socio-economic and marital status. For respiratory mortality and lung cancer adjustments for FEV(1), socio-economic and marital status were performed. Smoking was associated with a two to almost threefold increased mortality risk among women and men. The relative risk (RR) with 95% confidence interval, (CI) for women who smoked 10-19 g per day was 2.44 (2.07-2.87), and for those who smoked 20 g per day or more the RR (95% CI) was 2.42 (2.00-2.92). Smoking was a strong risk factor for cardiovascular mortality among women, the RR (95% CI) for women who smoked 10-19 g per day was 4.52 (3.07-6.64). Ex-smoking women showed increased risks of all-cause mortality; RR (95% CI) 1.26 (1.04-1.52) cancer (excluding lung cancer); RR (95% CI) 1.42 (1.07-1.88) and lung cancer RR (95% CI) 2.71 (1.02-7.23) mortality. However, the cardiovascular; RR (95% CI) 1.18 (0.69-2.00) and respiratory; RR (95% CI) 0.79 (0.16-3.84) mortality risks were not statistically significant. This study confirms that as for men, middle-aged heavily smoking women have a two to threefold

increased mortality risk. Adjustments for co-morbidity, socio-economic and marital status did not change these results.

32. Amaro H, Dai J, Arevalo S et al. Effects of Integrated Trauma Treatment on Outcomes in a Racially/Ethnically Diverse Sample of Women in Urban Community-based Substance Abuse Treatment. *J Urban Health*. March 2007 14; [Epub ahead of print].

This study presents findings from a quasiexperimental, nonequivalent, group-design study with repeated measures that explored the effects of integrated trauma-informed services on the severity of substance abuse, mental health, posttraumatic stress disorder (PTSD) symptomatology among women with histories of trauma in urban, community-based substance abuse treatment. The study also explored if the model of integrated services was equally beneficial for women of various racial/ethnic groups. Participants in the study were 342 women receiving substance abuse treatment in intervention and comparison sites. Results indicated that at 6 and 12 month follow-ups, those in the trauma-informed intervention group, in contrast to the comparison group, had significantly better outcomes in drug abstinence rates in the past 30 days as well as in mental health and PTSD symptomatology. Results also showed that, overall, integrated services were beneficial for women across the different racial/ethnic groups in substance abuse treatment, although some differences appear to exist across racial/ethnic groups in improving addiction severity and mental health and PTSD symptomatology.

33. Hill TD, Mossakowski KN, Angel RJ. Relationship Violence and Psychological Distress Among Low-income Urban Women. *J Urban Health*. April 2007 25; [Epub ahead of print].

In this paper, we examined the association between relationship violence and psychological distress among low-income urban women. Extending prior research, we considered the effects of relationship violence within the context of other chronic stressors that are common in the lives of these women. Using data from the Welfare, Children, and Families project (1999), a probability sample of 2,402 low-income women with children living in low-income neighborhoods in Boston, Chicago, and San Antonio, we predicted psychological distress with multiple measures of relationship violence, a wide range of sociodemographic variables, and several chronic stressors. Our results show that relationship violence is associated with higher levels of economic hardship, neighborhood disorder, and household disrepair. We also find that relationship violence is associated with higher levels of psychological distress, net of these other chronic stressors. Finally, we observe that the effects of relationship violence do not vary according to the chronic stressors under study. Because the adverse effects of relationship violence are similar for women despite other adverse circumstances, interventions and treatment efforts focused exclusively on relationship violence may make a unique contribution to the psychological well-being of low-income urban women.

- 34. Gaz-Olavarrieta C, Paz F, Abuabara K, Martinez Ayala HB, Kolstad K, Palermo T. Abuse during pregnancy in Mexico City. *Int J Gynaecol Obstet.* April 2007;97(1):57-64.**

OBJECTIVE: Measure the prevalence of physical and sexual abuse during pregnancy, determine the nature and severity of abuse, and assess correlates with abuse. **METHOD:** A total of 1314 women seeking prenatal care between July 2000 and January 2003 were approached at three public hospitals in Mexico City. An original composite case record form was created to measure physical and sexual abuse before and during pregnancy. **RESULT:** Forty-one percent of respondents had a history of physical or sexual abuse, with current abuse reported by 11.1%, and abuse during pregnancy by 7.6%. Among abused women, 71% reported an increase in the severity of abuse since becoming pregnant. Logistic regression revealed physically fighting with a partner and a history of abuse best predict violence during pregnancy. **CONCLUSION:** The severity of abuse among abused women appears to increase during pregnancy. Prenatal care visits in Mexico are an important opportunity for violence screening and intervention.

Topic E: Minority Health and Health Disparities

- 35. Kanna B, Schori M, Azeez S, Kumar S, Soni A. Colorectal tumors within an urban minority population in New York City. *J Gen Intern Med.* June 2007;22(6):835-40.**

BACKGROUND: Data on gender- and age-specific predisposition to colorectal tumors and colorectal tumor location and stage among the urban minority population in Northeastern United States is limited. **OBJECTIVE:** To study the age and gender distribution of colorectal tumor type, location, and stage of colorectal tumors among urban minorities. **DESIGN:** Retrospective analysis of a database of 4,043 consecutive colonoscopies performed over a 2-year period. **PARTICIPANTS/MEASUREMENTS:** Of study participants, 99% were Hispanic or African American and two-thirds were women. Age, gender, colonoscopy findings, and biopsy results were analyzed in all study subjects. Outcome measures are expressed as odds ratios (OR) with 95% confidence intervals (CI). **RESULTS:** Colonoscopies, 2,394 (63.4%), were performed for cancer screening. Women had higher visit volume adjusted odds to undergo colonoscopy (OR 1.35; CI 1.26-1.44, $P < .001$). Individuals, 960 (23.7%), had adenomas, and 82 (2.0%) had colorectal cancer. Although cancers were outnumbered by adenomas in the colon proximal to splenic flexure (OR 0.48; CI 0.29-0.80 $P = .002$), 51% of all abnormalities and 35.4% of cancers were found in this region. Of cancers, 75% belonged to AJCC stage 0 to 2. Men had higher odds for both adenomas and cancers (OR 2.38, CI 2.0-2.82, $P < .001$). More polyps occurred at a younger age. Of the cancers, 38% were noted among the 50- to 59-year-old subjects. However, the odds of colorectal cancers were higher at age greater than 70 years (OR 1.91; CI 1.09-3.27, $P < .05$), specifically among men (OR 2.27, 95% CI 1.07-4.65, $P < .05$). **CONCLUSION:** Our study of colonoscopies demonstrates lower odds of colonoscopy after adjusting for visit volume and greater predilection for colorectal cancer among urban minority men. Although older individuals were more likely to have colorectal cancer, a high

percentage of colorectal tumors were noted at a younger age. These findings emphasize the vital need for preventive health education and improving early access to colorectal screening among urban minority men. A large proportion of colorectal tumors were found proximal to splenic flexure, which supports colonoscopy as the preferred method for colorectal cancer screening in the urban minority population in New York City.

36. Hellerstein DJ, Almeida G, Devlin MJ et al. Assessing Obesity and Other Related Health Problems of Mentally Ill Hispanic Patients in an Urban Outpatient Setting. *Psychiatr Q.* April 2007 7; [Epub ahead of print].

OBJECTIVE: This paper describes the role of an agency Clinical Director in developing a project to assess and begin to address obesity-related health problems of patients treated in a community-based mental health clinic in New York City. After a five year review of outpatient deaths revealed a high rate of deaths from cardiovascular and diabetes-related issues, the Clinical Director assembled a group of clinicians, researchers, and administrative staff to design a pilot project to assess health and nutrition status of primarily Hispanic day treatment patients with severe and persistent mental illness. **METHOD:** About 69 of the 105 patients at the clinic were assessed by chart review, interview about nutritional habits and medical care, and somatic measurements for blood pressure, weight, girth, body mass index (BMI), glucose and lipid levels. **RESULTS:** Patients were predominantly between the ages of 25 and 64 years, 51% were female, and 78% were Hispanic. Around 57% were diagnosed with schizophrenia-spectrum disorders, 86% were receiving antipsychotic medications, and 25% were on two or more antipsychotics. Only 11% of the women and 41% of the men had normal weight. A total of 29% of the women and 18% of the men were overweight (BMI = 25-29.9); and an additional 60% of the women and 41% of the men were obese (BMI \geq 30). Atypical antipsychotic treatment was significantly associated with obesity (BMI \geq 30) (chi sq = 5.5, df = 1, P < 0.025). Using American Heart Association criteria, waist measurements showed significant abdominal obesity among female patients. Blood pressure was elevated in 77% of the patients: 45% were pre-hypertensive with BP 120-139/80-89 and 32% were hypertensive with BP \geq 140/90. About 53% had elevated random blood glucoses (>110 mg/dl). On the positive side, patients generally had had recent medical follow-up, and most had adequate cooking facilities. **CONCLUSIONS:** This project revealed that these predominantly Hispanic, severely mentally ill individuals were at high risk for cardiac illness, highlighting the need for developing culturally-sensitive interventions in urban outpatient psychiatric settings. Findings were disseminated in educational presentations and clinical discussions, and have mobilized an institutional effort to significantly improve medical monitoring for these patients.

37. Lee AC, Brugge D, Phan L, Woodin M. A Comparison of Knowledge about Asthma Between Asians and Non-Asians at Two Pediatric Clinics. *J Immigr Minor Health.* March 2007 27; [Epub ahead of print].

Little is known about the relative knowledge of asthma in recent immigrant Asian populations in the United States (US). To comparatively assess asthma knowledge for Asian and non-Asian populations, 333 parents and children were surveyed at two

geographically close urban clinics that had a large percentage of Asian patients, most of whom were Chinese. The Asian respondents scored lower compared to the non-Asian respondents on 4 of the 6 knowledge questions ($p < 0.001$). Subcategories of non-Asians (white, African-American, Hispanic) were more similar to each other than they were to Asians. In multivariate analysis we found that SES (measured as parental occupation) and being Asian were independent predictors of less asthma knowledge. Having family members with asthma did not improve knowledge scores. A single focus group of Cantonese-speaking parents of asthmatic children suggested that a combination of cultural factors and lack of knowledge contribute to lower knowledge scores in this Asian population. Asthma education programs need to be developed, tailored to recent Asian immigrants and tested for efficacy.

38. Sims M, Sims TL, Bruce MA. Urban poverty and infant mortality rate disparities. *J Natl Med Assoc.* April 2007;99(4):349-56.

This study examined whether the relationship between high poverty and infant mortality rates (IMRs) varied across race- and ethnic-specific populations in large urban areas. Data were drawn from 1990 Census and 1992-1994 Vital Statistics for selected U.S. metropolitan areas. High-poverty areas were defined as neighborhoods in which $>$ or $=$ 40% of the families had incomes below the federal poverty threshold. Bivariate models showed that high poverty was a significant predictor of IMR for each group; however, multivariate analyses demonstrate that maternal health and regional factors explained most of the variance in the group-specific models of IMR. Additional analysis revealed that high poverty was significantly associated with minority-white IMR disparities, and country of origin is an important consideration for ethnic birth outcomes. Findings from this study provide a glimpse into the complexity associated with infant mortality in metropolitan areas because they suggest that the factors associated with infant mortality in urban areas vary by race and ethnicity.

39. Smith KL, Matheson FI, Moineddin R, Glazier RH. Gender, income and immigration differences in depression in Canadian urban centres. *Can J Public Health.* March 2007;98(2):149-53.

BACKGROUND: Immigrants tend to initially settle in urban centres. It is known that immigrants have lower rates of depression than the Canadian-born population, with the lowest rates among those who have arrived recently in Canada. It is established that women and low-income individuals are more likely to have depression. Given that recent immigration is a protective factor and female gender and low income are risk factors, the aim of this study was to explore a recent immigration-low income interaction by gender. **METHODS:** The study used 2000-01 Canadian Community Health Survey data. The sample consisted of 41,147 adults living in census metropolitan areas. Logistic regression was used to examine the effect of the interaction on depression. **RESULTS:** The prevalence of depression in urban centres was 9.17% overall, 6.82% for men and 11.44% for women. The depression rate for recent immigrants was 5.24%, 3.87% for men and 6.64% for women. The depression rate among low-income individuals was 14.52%, 10.79% for men and 17.07% for women. The lowest-rate of depression was among low-income recent immigrant males (2.21%),

whereas the highest rate was among low-income non-recent immigrant females (11.05%). **CONCLUSIONS:** This study supports previous findings about the effects of income, immigration and gender on depression. The findings are novel in that they suggest a differential income effect for male and female recent immigrants. These findings have implications for public health planning, immigration and settlement services and policy development.

Topic F: HIV Risk and Prevention

40. **Schwarcz S, Scheer S, McFarland W et al. Prevalence of HIV infection and predictors of high-transmission sexual risk behaviors among men who have sex with men. *Am J Public Health.* June 2007;97(6):1067-75.**

OBJECTIVES: We sought to determine the prevalence of HIV and novel cofactors of high-transmission-risk behavior in a probability sample of men who have sex with men (MSM). **METHODS:** We performed a cross-sectional telephone survey of 1976 adult MSM in San Francisco. **RESULTS:** We found an HIV prevalence of 25.2%. Predictors of unprotected insertive anal intercourse with a serodiscordant (not having the same HIV/AIDS serostatus) partner among HIV-infected men included use of Viagra and a greater number of partners in the past 12 months. Unprotected receptive anal intercourse with a serodiscordant partner among men not known to be HIV infected was independently associated with having lived in San Francisco for less than 1 year, use of crystal methamphetamine and amyl nitrites, a greater number of partners, and agreement with the statement, "You are less careful about being safe with sex or drugs than you were several years ago because there are better treatments for HIV now." **CONCLUSIONS:** Strategies to prevent HIV for urban MSM should focus on new predictors of HIV transmission.

41. **Salazar LF, Crosby RA, Holtgrave DR et al. Homelessness and HIV-Associated Risk Behavior Among African American Men Who Inject Drugs and Reside in the Urban South of the United States. *AIDS Behav.* May 2007 9; [Epub ahead of print].**

This study determined whether homeless injection drug users (IDUs) were more likely than stably housed IDUs to engage in HIV-associated risk behaviors. Respondent driven sampling was used to recruit 343 African American male IDUs. About 69% of men had been homeless in the past year and 13% were HIV positive. Controlling for age and income, homeless men as compared to stably housed men were 2.6 times more likely to report sharing needles, 2.4 times more likely to have 4 or more sex partners and 2.4 times more likely to have had sex with other men. Homeless men were also twice as likely to report having unprotected sex with a casual partner and about two-thirds less likely to report never using sterile needles. Self-reported HIV status was an effect modifier of these associations such that the observed relationships applied mostly only to men who were not knowingly HIV positive.

42. El-Bassel N, Gilbert L, Wu E et al. Intimate partner violence prevalence and HIV risks among women receiving care in emergency departments: implications for IPV and HIV screening. *Emerg Med J.* April 2007;24(4):255-9.

OBJECTIVE: To examine (1) the prevalence of experiencing physical, injurious and sexual intimate partner violence (IPV) and (2) the associations between HIV risks and different types of IPV among women receiving care in an inner city emergency department (ED). **METHODS:** A cross-sectional survey that elicited self-reported HIV risks and IPV among a random sample of 799 women receiving ED care. Multiple logistic regression was used to examine the associations between HIV risk and IPV, with covariance adjustment for potentially confounding sociodemographics. **RESULTS:** 49.6% of the women reported a history of any form (ie, minor and severe type) of physical, injurious and/or sexual IPV, 15% severe sexual coercion (rape) over life time and 11.8% IPV in the past 6 months. Women who reported engaging in sex with a HIV-infected partner or an injecting drug user (IDU), having multiple partners in the past 12 months and injecting drugs were significantly more likely to have experienced any form of physical/injurious IPV, severe physical/injurious IPV and any form of sexual IPV in the past 6 months. In addition, women with multiple partners in the past 12 months and women who reported injecting drugs were significantly more likely to indicate having experienced a severe form of sexual IPV in the past 6 months. **CONCLUSION:** For many women receiving care in EDs, IPV and several HIV risk behaviours are frequent, co-occurring health problems. HIV testing and routine IPV inquiry in ED settings offer an important opportunity to identify women who are affected by these overlapping epidemics and refer them to appropriate treatment services.

43. Rietmeijer CA, Lloyd LV, McLean C. Discussing HIV serostatus with prospective sex partners: a potential HIV prevention strategy among high-risk men who have sex with men. *Sex Transm Dis.* April 2007;34(4):215-9.

OBJECTIVE: To study factors associated with HIV serostatus discussions among men who have sex with men (MSM). **DESIGN:** The authors conducted a cross-sectional survey among MSM visiting an urban sexually transmitted infection (STI) clinic. **METHODS:** MSM were asked about sex partner recruitment, serostatus of partners, condom use, drugs use, and HIV serostatus discussions with sex partners. **RESULTS:** Among 1,400 MSM reporting occasional sex partners, serostatus discussion with 100% of partners was reported by 509 (36.3%), with 50% to 99% of partners by 263 (18.8%), and with <50% of partners by 628 (44.9%). Factors associated with serostatus discussion included lower number of sex partners, anal sex with an occasional partner, and sex partner recruitment through the Internet. Partner recruitment in bathhouses and having sex with both men and women were negatively associated. **CONCLUSIONS:** Discussion of HIV serostatus was common among MSM studied. Although this strategy has limitations, interventions should address HIV status discussions. Because the Internet may facilitate these discussions, web-based interventions should be evaluated.

44. Sivaram S, Johnson S, Bentley ME et al. Exploring "Wine Shops" as a Venue for HIV Prevention Interventions in Urban India. *J Urban Health.* May 2007 8; [Epub ahead of print].

Addressing male heterosexual risk is a high priority for HIV prevention efforts in India. Particularly in urban India, which draws men for employment opportunities, these efforts are gaining momentum with a focus on understanding possible risk facilitators such as alcohol use. However, little is known about venues where such efforts might be targeted. In this paper, we explore community-based alcohol outlets or "wine shops" in Chennai, India, as potential venues. We conducted ethnographic research with wine shop staff and clients to understand alcohol use and sexual behaviors. We then surveyed 118 wine shop patrons to quantify these risk behaviors and plan an appropriate intervention. Our results show that wine shops are a venue where social and sexual networks converge. Reports and observations of regular and heavy drinking were frequent. Over 50% of patrons surveyed reported three or more sexual partners in the past 3 months, and 71% of all patrons reported a history of exchanging sex for money. Condom use history was low overall but, in the adjusted analyses, was significantly higher (OR = 20.1) among those who reported that their most recent partner was a sex worker and lower (OR = 0.28) among those who reported they drank to feel disinhibited. The data suggest that wine shops may be an appropriate location to target men for HIV prevention interventions. We discuss how these findings helped design such an intervention in Chennai.

Topic G: Other

45. Saitz R, Gaeta J, Cheng DM, Richardson JM, Larson MJ, Samet JH. Risk of Mortality during Four Years after Substance Detoxification in Urban Adults. *J Urban Health*. March 2007;84(2):272-82.

The objective of this analysis was to assess the mortality rate and risk factors in adults, with substance dependence, who are not receiving primary medical care (PC). Date and cause of death were identified using the National Death Index data and death certificates for 470 adults without PC over a period of almost 4 years after detailed clinical assessment after detoxification. Factors associated with risk of mortality were determined using stepwise Cox proportional hazards models. Subjects were 76% male, 47% homeless, and 47% with chronic medical illness; 40% reported alcohol, 27% heroin, and 33% cocaine as substance of choice. Median age was 35. During a period of up to 4 years, 27 (6%) subjects died. Median age at death was 39. Causes included: poisoning by any substance (40.9% of deaths), trauma (13%), cardiovascular disease (13.6%), and exposure to cold (9.1%). The age adjusted mortality rate was 4.4 times that of the general population in the same city. Among these individuals without PC in a detoxification unit, risk factors associated with death were the following: drug of choice [heroin: hazard ratio (HR) 6.9 (95% confidence interval (CI) 1.6-31.1]; alcohol: HR 3.7 (95% CI 0.79-16.9) compared to cocaine); past suicide attempt (HR 2.1, 95% CI 0.96-4.5); persistent homelessness (HR 2.4, 95% CI 1.1-5.3); and history of any chronic medical illness (HR 2.1, 95% CI 0.93-4.7). Receipt of primary care was not significantly associated with death (HR 0.85, 95% CI 0.34-2.1). Risk of mortality is high in patients with addictions and risk factors identifiable when these patients seek help from the health care system (i.e., for detoxification) may help identify those at highest risk for whom interventions could be targeted.

46. Schanzer B, Dominguez B, Shrout PE, Caton CL. Homelessness, health status, and health care use. *Am J Public Health*. March 2007;97(3):464-9.

OBJECTIVES: Little is known about the health status of those who are newly homeless. We sought to describe the health status and health care use of new clients of homeless shelters and observe changes in these health indicators over the study period. **METHODS:** We conducted a longitudinal study of 445 individuals from their entry into the homeless shelter system through the subsequent 18 months. **RESULTS:** Disease was prevalent in the newly homeless. This population accessed health care services at high rates in the year before becoming homeless. Significant improvements in health status were seen over the study period as well as a significant increase in the number who were insured. **CONCLUSION:** Newly homeless persons struggle under the combined burdens of residential instability and significant levels of physical disease and mental illness, but many experience some improvements in their health status and access to care during their time in the homeless shelter system.

47. Platt L, Rhodes T, Judd A et al. Effects of sex work on the prevalence of syphilis among injection drug users in 3 Russian cities. *Am J Public Health*. March 2007;97(3):478-85.

OBJECTIVES: We examined risk factors for syphilis infection among injection drug users in 3 Russian Federation cities, focusing particular attention on the potential roles of gender and sex work. **METHODS:** We conducted a cross-sectional survey of injection drug users in Moscow, Volgograd, and Barnaul, collecting behavioral data and testing for antibodies to *Treponema pallidum*. Associations between presence of antibodies to *T pallidum* and covariates were explored. **RESULTS:** Overall, the prevalence of antibodies to *T pallidum* was 11% (95% confidence interval=9.7%, 13.1%). Syphilis was associated with involvement in sex work and with gender in Moscow and Barnaul but not in Volgograd. Female injection drug users not involved in sex work were more likely than men to be younger and to have recently begun to inject; female injection drug users involved in sex work were more likely than those not involved in sex work to inject daily. **CONCLUSIONS:** Syphilis transmission dynamics varied by region. Sex work can increase syphilis risk among injection drug users, potentially feeding the momentum of sexually transmitted HIV and syphilis among noninjectors. Targeted interventions are needed to reduce both sexual and injection risk behaviors among injection drug users.