CHICAGO RESEARCH YEAR IN REVIEW: 2006

POPULATION HEALTH AND HEALTH SERVICES
Chicago Research Year in Review: 2006 Population Health and Health Services
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Suggested Citation
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Methods</td>
<td>2</td>
</tr>
<tr>
<td>Demographics</td>
<td>3</td>
</tr>
<tr>
<td>General Health</td>
<td>4</td>
</tr>
<tr>
<td>Screening</td>
<td>5</td>
</tr>
<tr>
<td>Chronic Disease</td>
<td>7</td>
</tr>
<tr>
<td>Infectious Disease</td>
<td>13</td>
</tr>
<tr>
<td>Mental Health</td>
<td>16</td>
</tr>
<tr>
<td>Substance Use</td>
<td>17</td>
</tr>
<tr>
<td>Nutrition</td>
<td>20</td>
</tr>
<tr>
<td>Weight</td>
<td>21</td>
</tr>
<tr>
<td>Maternal &amp; Child Health</td>
<td>23</td>
</tr>
<tr>
<td>Injury</td>
<td>24</td>
</tr>
<tr>
<td>Environmental Health</td>
<td>27</td>
</tr>
<tr>
<td>Health Services</td>
<td>28</td>
</tr>
</tbody>
</table>
The purpose of this report is to update health professionals about currently published articles regarding the health of Chicago residents and communities. To our knowledge, a report such as this has never been produced. The articles in this report were taken from 2006 peer-reviewed journals. (A peer reviewed journal is a journal that publishes articles after they have been through a review and approval process involving one or more experts.) Articles were retrieved from two search engines and met a set of selection criteria developed for inclusion in the report. The retrieved articles have been grouped under a general topic heading for ease of reference. Each section of the report contains excerpts from the original abstract written by the author. (An abstract is a summary of the main idea and content of a work such as an article, book, or dissertation.) In addition, the citation for each article is included. After reviewing the included excerpts of interest, the user can use the provided citation for further follow up. This report does not contain all articles written in 2006 peer-reviewed journals. Articles pertaining to studies that involved laboratory tests, experiments or clinical trials in Chicago were not included. Articles not related to the health of Chicago communities were excluded.

This report serves as a starting point for community professionals interested in an extended range of information on the health of Chicago communities. We acknowledge that some articles that ought to have been included in this report may have been missed due to the timing of our article search and retrieval. The inclusion of an article in this report does not imply that we agree with the author’s conclusions; such discretion is left solely to the user of this report.
In order to determine the articles to include in the report, a set of selection criteria were developed. Each article must have been:

- About the health of Chicago residents and communities,
- Published in 2006, and
- From a peer-reviewed journal.

Articles with multiple study sites are included in this report, if Chicago-specific data is presented (i.e., table, graph, etc.) or only the Chicago data is discussed.

Two search engines were used to look for articles, Pubmed and Connect Search. Pubmed is a public use search engine; the Connect Search website is available at university libraries and their affiliated bodies only. We used “Chicago” and “2006” as keywords to search for potential articles in combination with one of following terms: health, population, age, gender, race, ethnicity, screening, diseases, STD, HIV, AIDS, drugs, tobacco, smoking, alcohol, weight, height, BMI, obesity, nutrition, injury, accident, epidemiology and health services. Retrieved articles were then reviewed based on our selection criteria. After selection was completed, each article was grouped under one of the following topic headings:

- Demographics,
- General Health,
- Screening,
- Chronic Disease,
- Infectious Disease,
- Mental Health,
- Substance Use,
- Nutrition,
- Weight,
- Maternal and Child Health,
- Injury,
- Environmental Health, and
- Health Services.

To assess health risk factors and outcomes, as well as issues related to access to care, within a Jewish community in Chicago, a group of community agencies and researchers initiated a unique, population-based health survey. Specifically, a three-stage sampling design was used to select a representative sample of 201 adults and 58 children in the most concentrated Jewish neighborhood in the city. Nearly 500 questions were asked, covering a wide variety of demographic, socioeconomic, and health-related topics. The findings revealed that these Jewish individuals were generally as healthy (or healthier) than the average residents of Chicago and the U.S.; however, many serious health concerns still existed. In particular, health problems such as obesity, depression, disability, and domestic violence were common and, in some cases, more prevalent than in the general population.


Four Chicago neighborhoods are summarized to illustrate how age structure varies across small space, suggesting that neighborhood age structure should be considered a key structural covariate in contextual research on health. Considering age structure implies incorporating not only meaningful cut points for important age groups (e.g., proportion 65 years and over) but attention to the shape of the distribution as well.


To maximize active parent consent form return rates for third-grade minority, urban students enrolled in predominantly low-income elementary schools in Chicago, Ill. Return rates did not vary by students’ ethnicity or by the schools’ demographic variables. Incentives and class visits can yield a high return rate of active parent consent forms for third-grade minority, urban, low-income students.


To present a case for disaggregated community-level health data, we conducted a study exploring the relevance of such data to research on health disparities. Statistically significant variations in health measures were found between the 6 communities themselves (108 of 195 pairwise comparisons were significant) and between the communities and Chicago as a whole (35 of 54 comparisons were significant). The local-level variations in health revealed in this study emphasize that geographic and racial/ethnic health disparities are still prominent in Chicago and shed light on the limitations of existing city- and regional-level data.
All abstracts are abridged. For complete abstracts & full articles, refer to citation.
CANCER


For the past six years, the Chicago-area faith-based Reach Out Consortium has mobilized low-income uninsured and underinsured African American women and Latinas to seek screening for breast and cervical cancer. The funding history for this program illustrates how funds for a small community-based program were leveraged into a broader program, and that grew to serve low-income women across the state. Further, as the program reached more and more uninsured women, community activism led to a further state investment in services for the uninsured. Program sustainability and expansion depended on a combination of public and private competitive grants and grassroots advocacy.


Among men with newly diagnosed prostate cancer, prostate-specific antigen (PSA) levels are higher and the cancer stage more advanced for African Americans than for whites. In the current era in which PSA testing is common, low literacy may be an important and potentially overlooked factor associated with higher PSA levels at prostate cancer diagnosis among African-American and white men.


Prevalence of physician recommendation and patient completion of colorectal cancer screening was investigated among Federally Qualified Health Centers (FQHC) serving low-income neighborhoods in Chicago. Older patients were more likely than their younger counterparts to have received a recommendation from their physician and to have been screened. Organizational interventions are needed to support physicians in medically underserved areas and to promote recommended screening practices.


The purpose of this study was to examine whether the spatial distribution of facilities providing low- or no-fee screening mammography in Chicago, Illinois, is equitable on the basis of neighborhood socioeconomic and racial characteristics. ...it appears that the spatial accessibility of low- and no-fee mammography services is inequitable in Chicago. In view of persistent social disparities in health such as breast cancer outcomes, these findings suggest it is important for researchers to examine the spatial distribution of health resources by both the socioeconomic and racial characteristics of urban neighborhoods.

All abstracts are abridged. For complete abstracts & full articles, refer to citation.
OTHER


Using data from a modified Behavioral Risk Factor Surveillance Survey and guided by the Anderson Model, this study examined the effect of nativity on CVD screening practices among 423 Mexican American adults living in Chicago. Compared to those born in Mexico, US-born Mexican Americans had significantly greater odds of obtaining blood pressure, and cholesterol screenings and having a routine checkup in the past 2 years. Health professionals with an agenda to increase screenings for CVD risk factors among Mexican Americans living in northern cities should understand the impact of nativity on screening practices.


To evaluate whether immunization data collected on a child’s entry into kindergarten, i.e., Chicago Public School Immunization Data (PSID), was comparable to coverage levels determined by the National Immunization Survey (NIS) and to use these data to identify community areas with consistently low immunization coverage. PSID closely approximated NIS coverage estimates for measles-containing vaccine (MCV) and 4:3:1 immunization. These methods can be used by state and city health departments to identify and direct resources to communities at greatest need.

All abstracts are abridged. For complete abstracts & full articles, refer to citation.
ALZHEIMER’S DISEASE


The relationship between smoking status and incident Alzheimer’s disease (AD) was investigated in a random stratified sample of a biracial community in Chicago. Analyses are based on 1,064 persons (of 1,134 evaluated) who had data on smoking status, disease incidence, and key covariates such as apolipoprotein allele status. During a mean of about 4 years of follow-up, 170 persons met criteria for incident AD. Current smoking was associated with increased risk of incident AD (OR = 3.4, 95% CI = 1.4-8.0) compared to persons who never smoked. There was no apparent increase in risk of AD for former smokers compared to persons who never smoked (OR = 0.9, 95% CI = 0.5-1.7). Apolipoprotein E allele status modified this association in that former smokers with a upsilon4 allele were less likely to develop AD (p = 0.04) than those who never smoked. Former smokers also appeared to have a reduced risk of developing AD as their pack-years of smoking increased (p = 0.02) such that the odds of developing AD increased by 50% for every 10 years of smoking cessation (OR = 1.3, CI = 0.9-1.7). The results suggest that older people who currently smoke are more likely to develop AD compared to those who never smoked; the relation between those who used to smoke but quit and the risk of AD is complex and requires further research.


It is currently not known whether dietary intakes of folate and vitamins B12 and B6, co-factors in the methylation of homocysteine, protect against Alzheimer’s disease. To examine the association between risk of incident Alzheimer’s disease and dietary intakes of folate, vitamin B-12, and vitamin B-6. Prospective cohort study. Geographically defined biracial Chicago community. 1,041 residents, aged 65 years and older, initially free of Alzheimer’s disease and followed a median 3.9 years for the development of incident disease. Dietary intakes of folate, vitamin B-12, or vitamin B-6 do not appear to be associated with the development of Alzheimer’s disease.


To test the association of rate of cognitive decline, an indicator of the severity of the underlying disease process, with risk of death in Alzheimer’s disease (AD). A total of 472 persons with clinically diagnosed AD were recruited from a memory disorders clinic and day care centers in the Chicago area. They completed a uniform clinical evaluation at baseline and a battery of nine cognitive tests at six-month intervals for a mean of about three years. The results indicate that the rate at which cognition declines in AD is robustly related to survival.

All abstracts are abridged. For complete abstracts & full articles, refer to citation.
ALLERGY & ASTHMA


This study is undertaken to investigate and establish some contributing environmental factors and the time until onset of allergic rhinitis in Korean immigrants to the United States living in Chicago. Information regarding 246 patients of Korean origin who presented to a Chicago allergy/immunology clinic from 1993 to 1998 were analyzed by retrospective chart review. We conclude that the spectrum of responsible allergens in Korean immigrants closely resembles that seen in native citizens of the United States and that environmental factors play an important role in the pathogenesis of allergic rhinitis in this population.


This study assessed the ability of a community health worker asthma intervention to change home asthma triggers. A total of 56 children and 47 adults with asthma were enrolled. This intervention shows promise as a way to reduce asthma triggers in urban low-income Latino communities.

Chronic Disease


We examined racial and ethnic disparities in the total potential burden of asthma in low-income, racially/ethnically heterogeneous Chicago schools. We used the Brief Pediatric Asthma Screen Plus (BPAS+) and the Spanish BPAS+ to identify asthma and possible asthma among students in 14 racially/ethnically diverse public elementary schools. There are significant racial and ethnic disparities in diagnosed asthma among inner-city schoolchildren in Chicago. However, possible undiagnosed asthma appears to have similar prevalences across racial/ethnic groups and contributes to a high total potential asthma burden in each group studied. A better understanding of underdiagnosis is needed to address gaps in asthma care and intervention for low-income communities.


Asthma morbidity is high in inner-city children in the United States, which may be related in part to increased allergens in poorly maintained housing. This study examined asthma morbidity in relation to mold, cockroach, dust mite, and cat allergens in the homes of 61 low-income Chicago children with asthma. Children exposed to higher levels of Penicillium in the bedroom had more frequent asthma symptoms, whereas those exposed to higher levels of cockroach allergen in the bedroom had a higher number of asthma symptoms. Respiratory infections confounded the association of cockroach allergen with number of asthma symptoms.

All abstracts are abridged. For complete abstracts & full articles, refer to citation.
CANCER


We analyzed data from a cohort study to investigate associations of interviewer-measured BMI and PLG with risk of NHL mortality and to explore associations with leukemia and multiple myeloma. Employees of 84 Chicago-area organizations, with an average age of 40 years at baseline, were screened from 1967 to 1973. High BMI and/or abnormal PLG is associated with higher risk of mortality from NHL and possibly leukemia and from myeloma in women. These findings might have public health significance because BMI and glucose levels are amenable to modification.


In this study, we aimed to examine racial/ethnic and gender differences in self-reported family cancer history knowledge in patients at high risk for hereditary colon cancer syndromes. We performed retrospective analysis of all referrals to the University of Chicago High Risk Colon Cancer Clinic between 1995 and 2003. Blacks and men had significantly decreased rates of paternal history cancer knowledge.


The coincidence between meningioma and breast cancer and case reports of tumor growth during pregnancy support a hormonal hypothesis. A case control study was conducted to investigate this. Female subjects treated between 1987 and 1992 were identified from 3 hospitals in the Chicago area. These data add to the evidence that factors known to influence endogenous hormones (pregnancy and indirectly smoking) may have protective effects for meningiomas primarily in premenopausal women.


This study examined how women attending a high risk breast cancer clinic at a public hospital conceptualize their breast cancer risk and think about the prevention options available to them. Despite general awareness of their objective risk status, many women in this study reported they did not feel “high risk” because they lacked signs and symptoms of cancer. Risk was described as an experienced acute problem rather than a statistical possibility. Women also frequently stated that thinking about cancer might cause it to happen and so it is better not to “dwell on it.” While screening was welcomed, women were generally skeptical about primary prevention. In particular, preventive therapies were perceived to cause problems and were only acceptable as treatment options for a disease. The body of ideas about risk and prevention expressed by this population differ from the medical model. These findings have implications for risk perception research as well as for the efficacy of risk communication and prevention counseling in clinical contexts.

All abstracts are abridged. For complete abstracts & full articles, refer to citation.
DIABETES


We examined whether short or poor sleep is associated with glycemic control in African Americans with type 2 diabetes mellitus. We conducted a cross-sectional study of volunteers with type 2 diabetes interviewed at the University of Chicago Hospitals, Chicago, Ill. In our sample, sleep duration and quality were significant predictors of HbA1c, a key marker of glycemic control. Combined with existing evidence linking sleep loss to increased diabetes risk, these data suggest that optimizing sleep duration and quality should be tested as an intervention to improve glucose control in patients with type 2 diabetes.


To evaluate the impact of clinical pharmacist interventions, including drug therapy management, on outcomes relevant to diabetes mellitus. Significant clinical improvement occurred in patients referred to the pharmacist in a diabetes drug therapy management program.


We assessed the impact of diabetes in a large Puerto Rican community of Chicago by measuring the prevalence of diagnosed diabetes and calculating the diabetes mortality rate. The diabetes prevalence located in this community is the highest ever reported for Puerto Ricans and one of the highest ever reported in the United States for a non-Native American population. The prevalence was particularly high among older people, females, those born in the US, and those with a family history of diabetes. Notably, the diabetes mortality rate was more than twice the rate for all of Chicago and the US. Collaboration between researchers, service providers and community members can help address the issues of diabetes education, early screening and diagnosis, and effective treatment needed in this community.

HEART DISEASE


We investigated whether traditional cardiovascular disease (CVD) risk factors were similarly associated with CVD mortality in black and white men and women. Participants included 3741 black and 33,246 white men and women (44%) without a history of myocardial infarction, aged 18 to 64 years at baseline (1967-1973) from the Chicago Heart Association Detection Project in Industry study. In general, the magnitude and direction of associations between traditional risk factors and CVD mortality were similar by race. Most traditional risk factors demonstrated similar associations with mortality in black and white adults of the same sex. Small differences were primarily in the strength, not the direction, of association.

All abstracts are abridged. For complete abstracts & full articles, refer to citation.

Deaf persons experience communication barriers that may impact on their knowledge of cardiovascular disease (CVD); however, data measuring this deficit are limited. A comprehensive health survey of Deaf adults included questions on CVD knowledge. Knowledge of cardiovascular disease among Deaf respondents is low, and considerably lower than that of the general hearing population. The need to develop health education materials and programs for Deaf individuals is evident. Health care providers should be educated on Deaf culture and barriers in communication. Finally, efforts need to be made to assure that 911 is deaf-accessible.


C-reactive protein (CRP) is emerging as an important predictor of cardiovascular disease (CVD), and chronic inflammation may be a mechanism through which stress affects disease risk. We investigated the contribution of behavioral and psychosocial factors to variation in CRP concentrations in a population-based sample of middle-aged and older adults. African American and female participants were found to have higher CRP concentrations, as did individuals with lower levels of education. However, ethnic differences disappeared after the addition of behavioral and psychosocial variables. Waist circumference, latency to sleep, smoking, and perceived stress were independently associated with increased concentrations of CRP. Psychosocial stress, as well as health behaviors, are important predictors of inflammatory activity in a population-based sample and should be considered in future research on inflammation and CVD.


In this article, the author analyzes the stories of older African American women concerning stress and other events related to heart disease, triangulated with individual- and neighborhood-level socioeconomic and environmental data, from the perspective of the weathering conceptual framework. She conducted in-depth qualitative interviews with urban, older Black women with early-stage heart disease. Women described lifelong and recent incidents of stress that they perceived as contributing to their “bad heart.” The episodes described were a mixture of chronic social, environmental, and family-related challenges. Findings reveal substantial evidence supporting the weathering conceptual framework and the Sojourner syndrome in this sample of older, chronically ill Black women.

Other


To assess whether geriatricians documented the bothersome symptoms of patients with advanced dementia, proxy reports of the most-bothersome symptoms affecting those patients (as elicited in research interviews) were compared with what geriatricians who had seen those patients in a proximate clinic visit documented in the medical record. Geriatricians identified and documented the vast majority of bothersome symptoms, as reported by proxies, of patients with moderate to severe dementia.

This was a retrospective video-EEG study of seizures recorded at Children’s Memorial Hospital (CMH), Chicago, IL, in infants diagnosed with epilepsy syndromes undetermined whether focal or generalized. We propose several small modifications to the existing 1989 ILAE epilepsy syndrome classification: epilepsies with both focal and generalized seizures could be re-labeled “pleomorphic epilepsies” for simplicity and should include idiopathic and symptomatic subgroups. We believe these epilepsies are not uncommon in the group of infants with intractable seizures and may have yet to be discovered metabolic and genetic determinants.


To characterize clinical, radiographic and physiological features of sarcoidosis among African Americans residing in inner-city Chicago. This is a retrospective review of medical records of 75 African Americans with biopsy-proven sarcoidosis from internal medicine and pulmonary clinics at three inner-city, acute care hospitals in Chicago. African Americans with sarcoidosis residing in inner-city Chicago express a high rate of chronic progressive disease necessitating corticosteroid therapy. Further studies are warranted to elucidate the reasons underlying this paradigm.

The Mother/Daughter HIV Risk Reduction intervention (MDRR), an innovative community-based intervention, trains mothers to be their daughters’ primary HIV educators. The mediating variables were daughters’ HIV transmission knowledge, self-efficacy and intention to refuse sex. The sample consisted of 262 daughters with a mean age of 12.4 years. The results revealed that mothers were effective in increasing the mediating variables and in reducing their daughters’ level of sexual activity. Active involvement of mothers is cost-effective and should be integrated into HIV intervention programs.


This study explored the association between educational attainment and HIV/AIDS risk among African American active injection drug users (IDUs) in Chicago, US. Using snowball sampling techniques, 813 African American active IDUs were recruited for semi-structured interviewing and HIV counseling, testing and partner notification. The significant associations found between educational attainment and certain HIV risk behaviors and HIV serostatus have implications for tailoring HIV prevention efforts for less educated African American IDUs.


To examine the effect of a needle exchange program (NEP) on incidence of injection cessation and change in injection frequency; to explore predictors for injection cessation and change in injection frequency; and to assess whether injection quitters transitioned to non-injected drug use. Between 1997 and 2002, 901 injection drug users (IDUs) were recruited from an NEP program or an area with no NEP in Chicago, Illinois, interviewed for drug use behaviors, tested for HIV and followed for three annual visits. All participants were exposed to prevention services targeting HIV and drug abuse. NEP use was not associated with injection cessation and change in injection frequency. These results did not support the hypothesis that NEP use influences the frequency of injection over time. One-sixth of IDUs stopped injection for more than 1 year, providing a substantial window for relapse prevention interventions.


The purpose of this study was to examine factors that predict program participation and attrition among Latino women in a community-based, culturally specific HIV risk reduction intervention. This was a cross-sectional comparison of baseline data drawn from a randomized HIV risk reduction trial. The recruitment and retention strategies should be developed by considering those important predictors of intervention participation to prevent Latino women from dropping out of the HIV prevention program.

This study examines 12-step groups for recovery from methamphetamine and cocaine use that are attended by men having sex with men and the impact of attendance on HIV risk behavior. Participants in Crystal Meth Anonymous and other 12-step groups were interviewed up to 3 months since their last substance use. HIV-positive men were more likely than HIV-negative men to report unprotected anal intercourse when using stimulants but less likely in recovery. Qualitative data suggest a transition from cocaine to methamphetamine in Chicago, and that reduction in partners is due to fear of relapsing in sexual situations rather than program teachings. These programs do however facilitate discussions around drug use and sexual issues.


We compare HIV status among a drug-addicted jail population determined through a physical examination and a voluntary HIV testing program, with self-reported status in an interview. Of 360 subjects interviewed and given physical examinations, approximately one third (110) took the voluntary HIV test and all were negative, and only 1 was identified as HIV-positive in the physical. However, 7 (2%) stated in the interview that they were HIV positive, none of whom took the HIV test. Five of the 7 also self-reported injection drug use and having shared needles. We conclude that inmate self-report is an important pathway for HIV case finding in correctional institutions.


With the advent of more advanced treatments and therapies, people with HIV/AIDS are experiencing significant improvements in their health, making many of their ongoing employment and career goals more realistic. However, people with HIV/AIDS continue to have major concerns regarding the impact of working on their benefits and entitlements, including apprehensions about potential economic hardships related to loss of financial supports and health insurance coverage. This article focuses on factors related to employment status, sources of health benefits, and entitlements among people with HIV/AIDS. In addition, results of the study demonstrate differences in employment status, benefit types, and the amount of financial support individuals receive based on gender.


The threat of social stigma may prevent people living with HIV from revealing their status to others and serve as a barrier to HIV treatment adherence. We evaluated the effect of such concerns on self-reported treatment adherence using a short, three-item measure among 204 people living with HIV. People with high HIV stigma concerns were 2.5 times less likely to define and interpret the meaning of CD4 count correctly and 3.3 times more likely to be nonadherent to their medication regimen than those with low concerns. Concern over revealing HIV status was the only statistically significant, independent predictor of adherence in multivariate analysis. Clinical care directed to individuals living with HIV should therefore include considerations for patient sensitivity to social stigma, such as modifications to medication schedules and referrals for counseling prior to enrollment in antiretroviral therapies.

The aims of this study were to compare features of hepatitis C among Hispanics, Whites, and African-Americans and to characterize hepatitis C infection in Hispanics. A retrospective analysis was performed on 1225 consecutive patients with hepatitis C seen at the University of Illinois at Chicago including 227 Hispanics, 508 Whites, and 490 African-Americans. Hispanics with hepatitis C had higher aminotransferase levels, more portal inflammation than Whites and African-Americans, and a higher prevalence of cirrhosis than African-Americans.

This study investigated the role of an early educational intervention and child-, family-, peer-, and school-level predictors on court-reported juvenile delinquency. Data was provided from the Chicago Longitudinal Study. Findings demonstrate the importance of early intervention and schooling factors in reducing delinquency and highlight the benefits of early intervention as one mechanism for delinquency prevention.


To examine the association between rates of cognitive change and dietary consumption of fruits and vegetables among older persons. The authors conducted a prospective cohort study of 3,718 participants, aged 65 years and older of the Chicago Health and Aging Project. Participants completed a food frequency questionnaire and were administered at least two of three cognitive assessments at baseline, 3-year, and 6-year follow-ups. High vegetable but not fruit consumption may be associated with slower rate of cognitive decline with older age.


This study examines whether lower cognitive function in one spouse is associated with depressive symptoms in the other spouse. The results show a cross-sectional association of wives’ lower cognitive function at baseline with depressive symptoms in husbands; however, husbands’ cognitive function was not associated with wives’ depressive symptoms. There was no longitudinal association of cognitive function at baseline with increased depressive symptoms over time. Furthermore, change in cognitive function over time had no effect on depressive symptoms in either spouse. The relationship between cognitive function and depressive symptoms in spouse pairs is complex. Our findings suggest that husbands may be particularly psychologically vulnerable to the negative effects of their wives’ cognitive impairment. This vulnerability may have a range of long-term health and caregiving implications.

All abstracts are abridged. For complete abstracts & full articles, refer to citation.

Using prospectively gathered data across a 35-year follow-up interval, we assessed the association of educational achievement and school behaviors with risk for the development of an alcohol-use disorder in adulthood. The baseline population consisted of 1242 first-grade students in 1966-1967 residing in the Woodlawn community of Chicago, Illinois. Follow-up interviews were completed for adolescents and their mothers (1975-1976), during young adulthood (1992-1993), and midlife (2002-2003). Relatively few of the hypothesized educational predictors were associated with risk for alcohol-use disorders in adulthood. The measures found to be predictive of a subsequent alcohol-use disorder included the following: (1) math achievement among first-grade boys, (2) mothers’ report of skipping school among adolescent males, (3) self-report of skipping school among adolescent girls, and (4) school dropout. Early shyness among first-grade boys was protective for later alcohol-use disorders. The current report supplies data on the association of educational characteristics and school behaviors with the development of an alcohol-use disorder in a population-based sample with an extended interval of follow-up. Gender-specific differences are discussed.


Using data from the Chicago Health and Life Experiences of Women Study (CHLEW), we examined drinking patterns and problems in a large and diverse sample of lesbians. Structured interviews were conducted with 447 community-residing adult women (ages 18-83) who self-identified as lesbians (48% non-Hispanic white, 28% non-Hispanic black, and 20% Hispanic/Latina; the remainder were in the “other” category). Unlike findings from general population surveys, in which women’s rates of drinking tend to decrease with age, we found relatively few differences across the four age groups of CHLEW respondents. We also found no significant differences between Hispanic and white lesbians on any of the lifetime or 12-month problem-drinking indicators and only a few significant differences between white and black lesbians. As with heterosexual women, patterns of drinking and drinking-related problems among lesbians vary by age and race/ethnicity. However, given our findings of substantially smaller variations among lesbians than among women in the general population, research is needed that examines in greater depth the intersections between age, race/ethnicity, sexual orientation, and drinking.

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Men who have sex with men (MSM) may be more likely to smoke than general population men. Such population comparisons typically do not control for demographic differences and have not tested reasons for MSMs’ greater tobacco use. We compared MSM with general population men in data that allowed us to control demographic differences, and hypothesized that MSM would report more tobacco use, due to elevated levels of three psychosocial variables that generally predict tobacco use: depression symptoms, alcohol use, and limited health access. Data were from a 2001 survey of MSM in Chicago (n = 817) and from the 2001 National Health Interview Study (n = 7,783). Significantly more MSM used tobacco, particularly younger MSM. Depression symptoms, alcohol use, and limited health access were more common among MSM and partially accounted for their elevated smoking risk. The lower health access and greater vulnerability of MSM to depression and alcohol use contributed to their higher smoking rate and must be considered in further smoking research and prevention. Younger MSM show very high rates of smoking and are a particular intervention target. Limitations of this cross-sectional study are noted.

We describe here a program to educate opiate users in the prevention of opiate overdose and its reversal with intramuscular naloxone. Participant education and naloxone prescription are accomplished within a large comprehensive harm reduction program network. The Medical Examiner of Cook County reported a steady increase in heroin overdose deaths since 1991, with a four-fold increase between 1996 and 2000. This trend reversed in 2001, with a 20% decrease in 2001 and 10% decreases in 2002 and 2003.

The purpose of the present study was to characterise the food landscape of an inner city African American neighbourhood and its mixed-race suburban neighbour. Detailed analysis focuses on the relationship between community store mix and price, availability and produce quality. A market basket study was completed by members of the Chicago Food Systems Collaborative. The US Department of Agriculture’s standard market basket survey and methodology were used. Austin is a lower-middle-class African American community of 117,500 on the western edge of Chicago. Oak Park, which borders Austin, is an upper-middle-income suburb of 52,500 with a mixed racial profile. Subjects: A market basket survey of every retail food store in Austin and Oak Park was completed. A total of 134 were included. Many Austin groceries carry produce that is usually competitively priced, but often of unacceptable quality. Food access is related more to store type than number. In this study, item availability and produce quality varied greatly between store types. Price differences were complicated and varied by store type and food category. This has consequences in terms of food purchasing decisions and dietary quality that public health professionals should acknowledge.


To assess consumer understanding and use of messages from the original Food Guide Pyramid and potential concepts for a revised Food Guidance System. Focus groups conducted in two phases, in 2002 and 2004. Market research facilities in Baltimore, Chicago, and Houston. Key concepts of the original Pyramid were widely understood, but specific knowledge was limited and misunderstandings common, especially related to servings and food group placement. Detailed information about whole grains, types of fats, vegetable subgroups, and physical activity was lacking. While consumers are aware of general concepts about healthy eating, they lack specific knowledge to help them implement recommendations. Educators can help by providing consumers with concrete examples and specific information.


To assess consumer response to potential graphics, slogans, and messages for the consumer interface of the MyPyramid Food Guidance System. Qualitative research conducted in two phases, composed of focus groups and Web-TV testing. Professional market research facilities in Baltimore, MD, and Chicago, IL, and Web-TV. A content analysis was used to summarize comments from focus groups and Web-TV tests into meaningful themes. Respondents preferred the familiarity of the pyramid shape and found graphics and slogans that were personal, active, and positive to be appealing. The consumer interface for the MyPyramid Food Guidance System was shaped by consumer feedback that identified appealing and useful elements and avoided elements that were potentially confusing or less meaningful.

All abstracts are abridged. For complete abstracts & full articles, refer to citation.

This article reports the first estimates of overweight prevalence in Chicago children entering school (aged 3-5 years). Chicago data are compared with those from the National Health and Nutrition Examination Survey (NHANES) and the Early Childhood Longitudinal Study (ECLS). Data were from 2 separate convenience samples of children aged 3-5 years attending either 18 Chicago Public Schools or 10 Chicago Catholic School pre-K programs (n = 1517). Data were taken from students’ Certificate of Child Health Examination (CCHE), completed by a health professional. The data reported here document that nearly one quarter of children entering school in Chicago are already overweight. This clearly establishes a need for local schools to develop protocols and procedures to support the physical and mental health needs of affected and at-risk children. The findings also make it plain that ongoing weight status monitoring is needed and that current plans to implement this should go forward.


This article provides an overview of the study design and baseline preliminary findings of our ongoing school-based intervention study. Randomized intervention trial to test a school-based, environmental obesity prevention program in urban low socioeconomic status (SES) African-American adolescents. The intervention program was developed based on several behavioral theories and was guided by preliminary findings based on focus group discussion and baseline data. Four Chicago public schools in the US. Subjects: Over 450 5-7th graders and their families and schools were involved. School-based obesity prevention programs are urgently needed in the target US urban, low SES, minority communities. These data can be used to inform intervention activities.

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We sought to identify contrastive and comparable districts for childhood obesity and physical activity research studies. We have applied GIS technology to manipulate multiple data sources to generate objective and quantitative measures of school neighborhood-level characteristics for school-based studies. GIS technology integrated data from multiple sources (land use, traffic, crime, and census tract) and available social and built environment indicators theorized to be associated with childhood obesity and physical activity. We used network analysis and geoprocessing tools within a GIS environment to integrate these data and to generate objective social and physical environment measures for school districts. We generated school neighborhood-level social and built environment indicators for all 412 Chicago public elementary school districts. The combination of GIS and cluster analysis allowed us to identify eight school neighborhoods that were contrastive and comparable on parameters of interest (land use and safety) for a childhood obesity and physical activity study. The combination of GIS and cluster analysis makes it possible to objectively characterize urban neighborhoods and to select comparable and/or contrasting neighborhoods for community-based health studies.

This descriptive study was part of a larger case-control study conducted at the University of Illinois at Chicago in which maternal deaths were cases and women with severe maternal morbidity served as controls. Morbidities and mortalities were classified by a team of clinicians as preventable or not preventable. Qualitative analysis of data was conducted to identify and categorize different types of preventable events. The most common types of preventable events were inadequate diagnosis/recognition of high-risk (54.4%), treatment (38.0%), and documentation (30.7%). A descriptive model was illustrated that can be used to categorize preventable events in maternal morbidity and mortality and can be incorporated into quality assurance and clinical case review to enhance the monitoring of hospital-based obstetric care and to decrease medical error.


This study examined factors associated with mortality in pregnant women with severe morbidity. In particular, the Black-White disparity was examined. Illinois vital records data were linked to identify maternal deaths and other pregnant women with severe morbidity. Pregnancy-related deaths and high risk survivors were compared and case fatality rates were computed. Condition-specific and multivariable analyses were conducted, and time of death was examined. The overall risk of maternal death was 37.1 per 10,000 high risk pregnant women in Illinois from 1994 to 1998. Women who were older, African American, unmarried, or living in Chicago were at elevated risk of death. Medical risk status alone cannot explain disparities in maternal mortality. The Black-White disparity for risk of death persisted in both overall and condition-specific analyses.


This study sought to determine whether neighborhood poverty modifies the relationship between maternal age and infant birth weight among urban African Americans. Stratified analyses were performed on the vital records of African Americans born in Chicago by means of 1992-1995 computerized birth file with appended 1990 US Census income and 1995 Chicago Department of Public Health data. Four neighborhood-level variables (low median family income, high rates of unemployment, homicide, and lead poisoning) were analyzed. This is a population-based study. Neighborhood poverty did not modify the association of advancing maternal age and the risk of very low birth weight (<1500 g). Neighborhood poverty accelerates the rise in moderately low birth weight but not very low birth weight; rates were associated with advancing maternal age among urban African Americans.

To estimate the degree to which the proportion of homicides and suicides committed with a gun is associated with reported availability of firearms across Chicago neighbourhoods. Data were collected as part of the Project on Human Development in Chicago Neighborhoods (PHDCN), a combined neighbourhood and individual level study of the city of Chicago. The study used data from 837 PHDCN participants between the ages of 17 and 22, residing in 170 different neighbourhoods. Gun availability was measured via participant reports on whether they had carried a gun and whether they perceived gun access to be easy in their community. Data on suicides and homicides were obtained from the Chicago Department of Health. A 10% change in the proportion of homicides committed by a gun in a neighbourhood was associated with a 20% increase in both the odds of reported gun access and reported gun carrying (p=0.002 and 0.048, respectively). The proportion of firearm related suicides was not associated with either of those self reported measures. The proportion of firearm related homicides, but not the proportion of firearm related suicides, is a useful predictor of gun availability across small areas such as neighbourhoods.


To assess the effects of undercover police stings and lawsuits against gun dealers suspected of facilitating illegal gun sales in three US cities (Chicago, Detroit, Gary) on the flow of new firearms to criminals. An interrupted time series design and negative binomial regression analyses were used to test for temporal change in the recovery of guns used in crimes within one year of retail sale in both intervention and comparison cities. The announcement of police stings and lawsuits against suspect gun dealers appeared to have reduced the supply of new guns to criminals in Chicago significantly, and may have contributed to beneficial effects in Detroit. Given the important role that gun stores play in supplying guns to criminals in the US, further efforts of this type are warranted and should be evaluated.

Pelvic fractures comprise a small number of annual Level I pediatric trauma center admissions. This is a review of the University of Chicago Level I Pediatric Trauma Center experience with pediatric pelvic fractures. This is a retrospective review of the University of Chicago Level I Pediatric Trauma Center experience with pediatric pelvic fractures during the 12-year period from 1992 to 2004. From 1992 to 2004, there were 2850 pediatric trauma admissions. Thirteen patients were identified with pelvic fractures; seven were boys and six were girls. The average age was 8 years old. Although pelvic fractures are an uncommon injury in pediatric trauma patients, the morbidity associated with these injuries can be profound. The majority of pelvic fractures in children are treated nonoperatively, however, more than one-half of these patients have concomitant injuries requiring operative management. When evaluating and treating pediatric pelvic fractures, a systematic multidisciplinary approach must be taken to evaluate and prioritize the pelvic fracture and the associated injuries.


Community psychologists often conduct research in collaboration with marginalized communities in which safety is an issue. However, we rarely talk about what specific safety issues we experience and how we deal with them. Our story describes the realities and myths of neighborhood safety that were experienced in a low-income African American neighborhood of Chicago, while collaborating on a project designed to increase access to the Internet to obtain health information. We examine both the challenges experienced and our responses in the context of a community intervention planned, implemented, and evaluated by a partnership team composed of various stakeholders. Critical lessons such as the importance of building on community strengths and the need to be aware of our own biases are discussed.

This study’s goal is to identify differences in background, assault, and postassault factors according to the victim-offender relationship. A mail survey is conducted with more than 1,000 female sexual assault survivors (response rate 90%) recruited from college, community, and mental health agency sources. Stranger assailants are associated with a greater victim perceived life threat, more severe sexual assaults, and ethnic minority victims. Positive social reactions do not vary according to the victim-offender relationship, but stranger victims report more negative social reactions from others than do victims of acquaintances or romantic partners. Assaults by strangers and relatives are associated with more posttraumatic stress disorder (PTSD) symptoms than assaults by acquaintances and romantic partners. As expected, survivors’ social cognitive responses to rape and social reactions from support providers are stronger correlates of PTSD symptoms than demographic or assault characteristics in general, but correlates vary across victim-offender relationship groups.

We examined the mercury concentration of six types of fish purchased in supermarkets in Chicago, Illinois in 2005. We measured total mercury (methylmercury accounts for about 90% of the total mercury in fish). One key question was whether the concentrations of mercury in fish available locally were similar to those reported in other areas of the country and in the FDA U.S. national database. Such information is critical for the public, especially pregnant women or those planning on pregnancy, making decisions about types and quantities of fish to consume. Some fish are available generally throughout the U.S., but others are more locally available, suggesting a need for site-specific information. There were significant differences in mercury concentrations among three types of canned tuna (Thunnus spp): “gourmet tuna” had the least amount of mercury, and white tuna had the most. The mean concentrations reported in this study were generally similar to those reported by the FDA, but there were important differences. Further, the FDA has virtually no data on walleye and none on “gourmet tuna”. These conclusions suggest that there are enough variations between the local data (Chicago) and the FDA data to warrant periodic local monitoring of commercial fish to provide up-to-date information to consumers about mercury in the fish they eat.


Public housing developments across the United States are being demolished, potentially increasing local concentrations of particulate matter (PM) in communities with high burdens of severe asthma. Little is known about the impact of demolition on local air quality. In conclusion, individuals living near sites of public housing demolition are at risk for exposure to high particulate concentrations. This increase is characterized by relatively large particles and high short-term peaks in PM concentration.


The purpose of our study was to develop a method to identify and prioritize “high-risk” buildings in Chicago that could be targeted for childhood lead poisoning prevention activities. Linking blood lead surveillance, environmental inspection, and building footprint databases allowed us to identify individual high-risk buildings. This approach prioritizes lead hazard control efforts and may help health, housing, and environmental agencies in targeting limited resources to increase lead-safe housing for children.

Homeless individuals experience high rates of physical and mental illness, increased mortality, and frequent hospitalizations. Respite care provides homeless individuals with housing and services allowing more complete recovery from illnesses and stabilization of chronic conditions. We investigated respite care’s impact on 225 hospitalized homeless adults consecutively referred from an urban public hospital during a 26-month period. The cohort was separated into 2 groups: (1) patients referred and accepted into the respite center and (2) patients referred but denied admission because beds were unavailable. All patients met the center’s predefined eligibility criteria. Respite care after hospital discharge reduces homeless patients’ future hospitalizations.


The primary objective was to document the frequency and types of medication-related problems (MRPs) identified by a pharmacist or pharmacy student during medication reviews at senior community housing centers. The setting included five urban senior community housing centers in Chicago, Illinois. Two pharmacists and pharmacy students practicing in a community health center. The health center provides outreach to the community, with a focus on the senior population. Pharmacists and pharmacy students developed an outreach program to provide medication reviews within senior community housing centers. To show the value of the services provided by the health center to the community, a system for tracking the identified MRPs was implemented. In urban senior community housing centers, a MRP by pharmacists is a means to identify MRPs and to provide community service.


Ethnomedical questionnaires were distributed in Chicago, Costa Rica, and Colombia to identify the most common over-the-counter (OTC) plant or plant-based products advocated for treating oral pain, ulcerative conditions, and cancer within these locations. Over 100 plants or plant-based commercial products purchased from local botanical markets and pharmacies, were advocated for the treatment of oral medicine conditions. Locally familiar and common language names were attributed to the plant products at the time of purchase. Plant products or plant-based commercial products containing plant-based essential oils, anesthetic constituents, and or chemical compounds recommended as OTC oral medicine preparations were systematized, tabulated, and correlated with the published phytotherapeutic literature. Furthermore, epidemiological research is needed to verify the use and standardized dosage for OTC ethnomedicine preparations for oral medicine conditions. Pharmacognostic research and clinical trails which can verify taxonomy, dose, safety, active principles, and efficacy of these OTC oral medicine products must be enhanced in order to verify the claimed validity in contemporary, global, oral medicine practice.

This study examined substance abuse treatment providers’ perceptions of the gender-specific service needs of women in treatment as well as the obstacles that impede the delivery of services to meet those needs. Most participants reported that their treatment agencies delivered gender-specific services but also described the numerous barriers to addressing women’s specific needs, such as limited resources and the psychosocial challenges experienced by women in treatment (e.g., depression, child care, and family responsibilities).