



CHICAGO RESEARCH YEAR IN REVIEW: 2007

POPULATION HEALTH AND HEALTH SERVICES



Chicago Research Year in Review: 2007 Population Health and Health Services

Kirsti A. Bocskay, Ph.D., M.P.H.

Girma Woldemichael, Sc.D.

Sandra D. Thomas, M.D., M.S.

Copyright Information

All material appearing in this report is in the public domain and may be reproduced or copied without permission; citation as to source, however, is appreciated.

Suggested Citation

Bocskay KA, Woldemichael G, Thomas SD. Chicago Research Year in Review: 2007 Population Health and Health Services. Health Status Index Series Volume XVII No. I. Chicago, Illinois: Chicago Department of Public Health Office of Epidemiology, 2008.



TABLE OF CONTENTS

INTRODUCTION

METHODS

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 2007, 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.

We utilized PubMed within Reference Manager® to look for articles. Reference Manager® is software designed for searching databases, managing references and publishing bibliographies. PubMed is a public use search engine from the U.S. National Library of Medicine and the National Institutes of Health. “Chicago” as a keyword and “2007” as the publication date were used to search for potential articles. Four hundred eight articles were retrieved and reviewed. One hundred forty-one articles met our criteria for inclusion. Each article was then grouped under one of the following topic headings:

- Chronic Disease,
- General Health,
- Health Services,
- Infectious Disease (including sexually transmitted diseases),
- Injury,
- Maternal and Child Health,
- Mental Health,
- Mortality,
- Nutrition,
- Other,*
- Physical Activity,
- Sexual Behavior,
- Substance Use, and
- Weight.

*Collection of articles of which only one article for a specific topic met our selection criteria.

CHRONIC DISEASE

Cameron KA, Francis L, Wolf MS, Baker DW, Makoul G.

Journal of General Internal Medicine. **Patient Educ Couns.** **68(2):145-52, 2007.**

OBJECTIVE: We assessed knowledge, attitudes, and behavior regarding colorectal cancer (CRC) screening to inform the development of messages that promote screening among Hispanic/Latino patients. **METHODS:** In-person structured interviews with Spanish-speaking adults age 50-80 at two clinics and a senior center in a Hispanic/Latino community (N=234). **PRACTICE IMPLICATIONS:** Messages to increase CRC screening knowledge and behavior in the Hispanic/Latino community should address risk factors, identify relevant anatomy, explain polyps and their asymptomatic presentation, and clearly describe options.

Hirschman J, Whitman S, Ansell D.

Journal of General Internal Medicine. **Cancer Causes Control.** **18(3):323-33, 2007.**

In order to gain insight into this disparity in Chicago, we examined mortality data together with other important measures associated with breast cancer. Trends in black:white female breast cancer mortality, incidence, stage at diagnosis, and mammography screening in Chicago were examined using data from the Illinois State Cancer Registry, Illinois Department of Public Health Vital Records, and the Illinois Behavioral Risk Factor Surveillance System. The breast cancer mortality rate for

Hlubocky FJ, Ratain MJ, Wen M, Daugherty CK. C

Journal of Clinical Oncology. **J Clin Oncol.** **25(5):548-54, 2007.**

We sought to describe complementary and alternative medicine (CAM) usage among phase I trial participants and to describe these patients' treatment decision-making preferences, awareness of prognosis, survival, and quality of life. Advanced cancer patients enrolling onto phase I trials were surveyed regarding biologically based CAM use. Decision-making preferences and awareness of prognosis were assessed using validated and/or standardized instruments. The Functional Assessment of Cancer Therapy-General instrument was used to assess quality of life. Univariate and multivariate analyses were performed to detect differences between CAM users and nonusers. Prior CAM use among phase I cancer trial patients studied was common and associated with age, stated acknowledgment of prognosis, and quality of life.

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



CHRONIC DISEASE

Stankus N, Hammes M, Gillen D, Worcester E. *Urol Res.* **35(2):83-7, 2007.**

We compared the prevalence of pre-end stage renal disease (ESRD) stones in an African-American (AA) hemodialysis (HD) population to the estimated stone prevalence in a nationally representative cohort of AA persons as obtained by the Third National Health and Nutrition Survey (NHANES III). Face-to-face questionnaires were administered to a sample of 300 AA HD patients undergoing dialysis therapy at the University of Chicago to determine pre-ESRD NL prevalence. After adjustment for age and sex, it was estimated that the prevalence of pre-ESRD kidney stones among AA HD patients is significantly higher than the prevalence of kidney stones found in the general AA population.

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



Arora VM, Georgitis E, Woodruff JN, Humphrey HJ, Meltzer D.

Arch Intern Med. 167(16):1738-44, 2007.

We assessed the effectiveness of a 60- to 90-minute lecture, the Sleep, Alertness, and Fatigue Education in Residency (SAFER) program, on sleep loss and recovery sleep in residents adhering to Accreditation Council for Graduate Medical Education duty hours. From July 1, 2003, through June 24, 2005, interns from the inpatient medicine service at the University of Chicago were asked to wear wristwatch activity monitors. In March 2005, interns received the SAFER program intervention. We used fixed-effects linear regression to estimate within-subject mean sleep per call day. These estimates were compared with recommended minimum levels of preventive and recovery sleep in healthy populations using 2-tailed t tests. These analyses were repeated to test the effect of the SAFER program. The SAFER program had no significant beneficial effect on intern sleep. Under the current duty-hour regulations of the Accreditation Council for Graduate Medical Education, residents continue to be sleep deprived.

Arora VM, Johnson M, Olson J, Podrazik PM, Levine S, Dubeau CE, Sachs GA, Meltzer DO.

J Am Geriatr Soc. 55(11):1705-11, 2007.

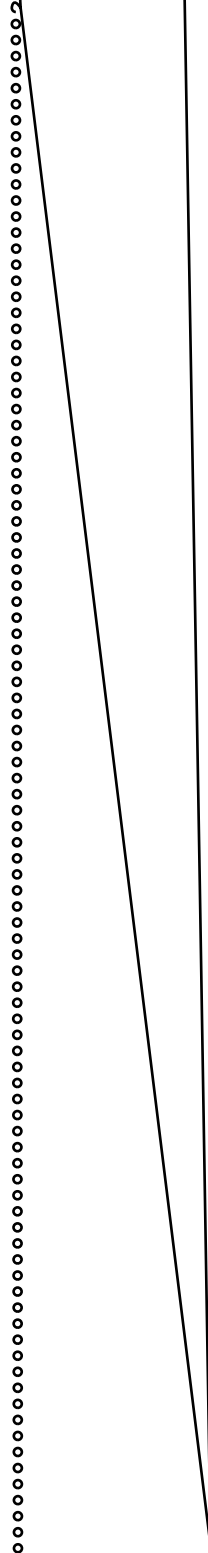
OBJECTIVES: To assess the quality of care for hospitalized vulnerable elders using measures based on Assessing Care of Vulnerable Elders (ACOVE) quality indicators (QIs). **DESIGN:**

MRSA

Bach HG, Stefan B, Chhadia AM, Kovachevich R, Gonzalez MH.

J Hand Surg [Am]. 32(3):380-3, 2007.

The purpose of this study was to determine prospectively the incidence of methicillin-resistant *Staphylococcus aureus* (MRSA) in



Abram KM, Washburn JJ, Teplin LA, Emanuel KM, Romero EG, McClelland GM.

Psychiatr Serv. **58(10):1311-6, 2007.**

This study examined the prevalence of post-traumatic stress disorder (PTSD) and comorbid psychiatric disorders among juvenile detainees. The sample consisted of a stratified random sample of 898 youths aged ten to 18 years who were arrested and detained in Chicago. Among participants with PTSD, 93% had at least one comorbid psychiatric disorder; however, among those without PTSD, 64% had at least one comorbid psychiatric disorder. Over half (54%) of the participants with PTSD had two or more types of comorbid disorders--that is, affective, anxiety, behavioral, or substance use disorders--and 11% had all four types of comorbid disorders.

Corrigan PW, Larson J, Sells M, Niessen N, Watson AC.

Community Ment Health J. **43(2):171-81, 2007.**

This study examines the impact of two versions of anti-stigma programs--education and contact--presented on videotape. A total of 244 people were randomly assigned to education or contact conditions and completed pre-test, post-test, and follow-up measures of stereotypes. Results suggest that the education videotape had limited effects, mostly showing improvement in responsibility (people with mental illness are not to blame for their symptoms and disabilities). Watching the contact videotape showed significant improvement in pity, empowerment, coercion, and segregation.

Devlieger PJ, Albrecht GL, Hertz M.

Soc Sci Med. **64(9):1948-59, 2007.**

This paper contributes to the discussion by examining how disability is conceived and disability culture is developed in a poor, African-American community. In 1998 we began a 5 year ethnographic research project concerning young African-American men in the spinal cord injury unit of an inner city re-

habilitation hospital in Chicago USA. Based on this research, we argue that there are three necessary conditions for a disability culture to emerge in a group of African-Americans who acquired their disability violently. Our analysis allows us to understand a change in identity among these young men and the emergence of a shared disability culture represented through signs, symbols, language, rules and ceremonies. This analytical framework also permits us to re-examine disability culture in white society and in specific disability cultures such as deaf culture and to suggest that while there are similarities across groups, disability culture is not monolithic.

Hankin BL, Mermelstein R, Roesch L.

Child Dev. **78(1):279-95, 2007.**

Stress exposure and reactivity models were examined as explanations for why girls exhibit greater levels of depressive symptoms than boys. In a multiwave, longitudinal design, adolescents' depressive symptoms, alcohol usage, and occurrence of stressors were assessed at baseline, 6, and 12 months later (N=538; 54.5% female; ages 13-18, average 14.9). Girls reported more depressive symptoms and stressors in certain contexts (e.g., interpersonal) than boys. Sex differences in depression were partially explained by girls reporting more stressors, especially peer events. Girls reacted more strongly to stressors in the form of depression.

Hoste RR, Hewell K, le Grange D.

Eur Eat Disord Rev. **15(2):152-8, 2007.**

OBJECTIVE: To examine family adaptability, cohesion and satisfaction among white and ethnic minority families of adolescents seeking treatment for bulimia nervosa. **METHOD:** Families completed the Family Adaptability and Cohesion Evaluation Scales (FACES). **RESULTS:** No differences were found between white and ethnic minority families on any of the variables. **CONCLUSIONS:** Ideal levels of family cohesion and adaptabil-



Rao D, Feinglass J, Corrigan P.

J Nerv Ment Dis. 195(12):1020-3, 2007.

The present study sought to examine whether racial/ethnic differences exist in stigmatizing attitudes towards people with mental illness among community college students. Multiple regression models were used to investigate racial/ethnic differences in students' perceptions of dangerousness and desire for segregation of persons with mental illness both before and after participation in an antistigma intervention. Similar patterns emerged postintervention, except that Asians' perceptions changed significantly such that they tended to perceive people with mental illness as least dangerous of all the racial/ethnic groups. These findings suggest that racial/ethnic background may help to shape mental illness stigma, and that targeting antistigma interventions to racial/ethnic background of participants may be helpful.

Tsang HW, Angell B, Corrigan PW, Lee YT, Shi K, Lam CS, Jin S, Fung KM.

Soc Psychiatry Psychiatr Epidemiol. 42(9):723-33, 2007.

We developed a lay model based on Chinese beliefs and values in terms of Confucianism, Taoism, Buddhism, and folk religions which may be used to explain cross-cultural variation in mental illness stigma, particularly in the arena of employment discrimination. In this study, we tested this lay approach by comparing employers' concerns about hiring people with psychotic disorder for entry-level jobs in US and China. One hundred employers (40 from Chicago, 30 from Hong Kong, and 30 from Beijing) were randomly recruited from small size firms and interviewed by certified interviewers using a semi-structured interview guide designed for this study. Content analysis was used to derive themes, which in turn were compared across the three sites using chi-square tests. Although some concerns were raised with equal frequency across sites, comparisons showed that, relative to US em-

Weinstet relaM ofwer (parinnr5F-equeJ -7.14e7 Tfb7m
*iol.*36(12):82-943, 2007.

urences

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

MORTALITY

cancer; and other comorbidities. In the derivation cohort, 1-year mortality was 11% in the lowest-risk group and 48% in the highest-risk group. **CONCLUSION:** Reasonable prognostic information for 1-year mortality in older patients discharged from general medicine services can be derived from administrative data to identify high-risk groups of persons.

Pae SJ, Carr JA. *Am Surg.* 73(9):912-6, 2007.

Our objective is to determine if the mortality and functional outcome of patients with ruptured abdominal aortic aneurysms treated at community hospitals is more a function of patient factors and comorbidities or hospital system and surgeon-controlled variables. We used a retrospective review of all patients with infrarenal ruptured abdominal aortic aneurysms treated at three large community hospitals in Chicago from 1996 to 2005. Age and intra-operative factors play a major role in the survival or mortality of patients with ruptured abdominal aortic aneurysms. Short operative time combined with minimizing blood loss and transfusion requirements improve survival, especially in the elderly.

Bryant Borders AE, Grobman WA, Amsden LB, Collins ET, Holl JL.

J Health Care Poor Underserved. 18(1):100-15, 2007.

To examine the acceptability of non-medical, community-based interviewers obtaining blood samples during in-home interviews from low-income study participants. Two separate focus groups were conducted, one with ten non-medical community-based in-

sseshey* .4298

Boyle PA, Buchman AS, Wilson RS, Bienias JL, Bennett DA.

J Am Geriatr Soc.
55(2):195-201, 2007.

OBJECTIVES: To examine the association



WEIGHT

Aaron DJ, Hughes TL.

Obesity (Silver Spring). 15(4):1023-8, 2007.

Our goal was to examine the association between childhood sexual abuse (CSA) and obesity in a community-based sample of self-identified lesbians. A diverse sample of women who self-identified as lesbian was recruited from the greater Chicago metropolitan area. Women (n=416) were interviewed about sexual abuse experiences that occurred before the age of 18. Self-reported height and weight were used to calculate BMI and categorize women as normal-weight, overweight, obese, or severely obese. The relationship between CSA and BMI was examined using multinomial logistic regression analysis. Mean BMI was significantly higher among women who reported CSA than among those who did not report CSA. CSA was significantly related to weight status; 39% of women who reported CSA compared with 25% of women who did not report CSA were obese. After adjusting for age, race/ethnicity, and education, women who reported CSA were more likely to be obese or severely obese.

Hicks C, Zhu X, Luke A, Kan D, Adeyemo A, Wu X, Cooper RS.

Obesity (Silver Spring). 15(5):1207-14, 2007.

The objectives were to identify quantitative trait loci linked to serum adiponectin concentration and to estimate heritability in two populations of African descent. Genome-wide microsatellite markers were typed in an African-American population consisting of 203 families from the Chicago area and in a Nigerian Yoruba population consisting of 146 families. Linkage analysis was performed to identify loci. Variance component model was used to estimate heritability. Consistency of the finding on chromosome 11 suggests that this region is likely to be involved in regulation of adiponectin, either through a primary influence on hormone levels or through pathways in influencing body composition. These results suggest that adiponectin could be a potential therapeutic target for obesity.

Wang Y, Liang H, Tussing L, Braunschweig C, Caballero B, Flay B.

Public Health Nutr. 10(9):927-38, 2007.

OBJECTIVES: To assess overweight and related risk factors among urban low socioeconomic status (SES) African-American adolescents in an attempt to study the underlying causes of ethnicity and gender disparities in overweight. **METHODS:** Cross-sectional data collected on anthropometric measures, diet, physical activity and family characteristics from 498 students in grades 5-7 in four Chicago public schools were analysed to study the risk factors for overweight using stepwise regression analysis. **RESULTS:** Overall, 21.8% were overweight (body mass index (BMI) \geq 95th percentile); and 39.8% had a BMI \geq 85th percentile. Compared with national recommendations, they had inadequate physical activity and less than desirable eating patterns. Their vegetable and fruit consumption was low, and they consumed too many fried foods and soft drinks. Gender, physical activity and pocket money were significant predictors of overweight. **CONCLUSIONS:** Several factors in the students' behaviours, school and family environments may increase overweight risk among this population.

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



City of Chicago
Richard M. Daley
Mayor

