

# November Literature Review 2003

## A. Global Health, Globalization and Cities B. Urban Physical and Social Environment C. Morbidity D. Health Services

### A. Global Health, Globalization and Cities

1. Source: Economist , 10/11/2003, Vol. 369 Issue 8345, p16, 2/3p, 1c

Title: **What to do about slums**

Author; DE Soto, Hernando;

Abstract: The article focuses on slums and how property rights might be a solution. Whatever the local name for slums, there are a lot of them and they are growing fast. A new report, "The Challenge of Slums" by UN-Habitat, the United Nations agency responsible for "human settlements", says that in 2001 just under a billion people were living in slums--about a third of the world's city dwellers. In the last decade, urban populations in less developed regions increased by a third. On present trends, says the UN report, 2 billion people could be living in slums by 2030. In Africa, many parts of the Middle East, Latin America and Asia, migrants are leaving farm land which is unable to support them, and arriving in cities which are unprepared to deal with them. Government-aided "self help" and loans for home improvement and investment in infrastructure are crucial for upgrading slums. But the central problem is that slum residents rarely have the formal rights to remain on the land they occupy. Hernando de Soto, a well-known economist from Peru, has long advocated another solution: giving formal title deeds to the poorest slum dwellers. The Peruvian government has issued well over a million property titles to the great benefit of impoverished families. If governments are brave enough to try it, slums could yet become an engine of growth in poor countries, rather than a crisis in the making.

2. Source: Diabetes Metab Res Rev. 2003 Jan-Feb;19(1):3-7.

Title: **The changing world demography of type 2 diabetes**

Author: Green A, Christian Hirsch N, Pramming SK.

Institution: Department of Epidemiology and Social Medicine, University of Aarhus, Aarhus, Denmark.

Abstract: In recent years it has been estimated that the current global prevalence of type 2 diabetes amounts to about 150 million patients. Projections suggest that by the year 2025 the number of prevalent patients in the world will reach approximately 300 million. It is assumed that the increase in the number of patients will be most pronounced in nations currently undergoing socio-economic development including increasing urbanization. The technique used to provide these estimates is based on results from available, contemporary survey results, combined with expected future trends in demographic indicators. We suggest that the currently available methods for the estimation of the future global burden of type 2 diabetes mellitus yield underestimates. Further modifications and validity tests of the modelling techniques are necessary in order to develop a reliable instrument to globally monitor the effects of the struggle against the diabetes problem. Copyright 2002 John Wiley & Sons, Ltd.

3. Source: Cities 20:265-78 no 4 Ag 2003 Journal Code: Cities Periodical Record

Title: **Globalization and the dominance of large cities in contemporary China**

Author: Zhao, Simon X. B. ; and others

Abstract: Analyzes growth and concentration of population foreign direct investment, and employment availability; data from the Urban Statistics Yearbook of China of 1991 (for 1990) and 2000 (for 1999).

4. Source: Cities 20:175-80 no 3 Je 2003 Journal Code: Cities Periodical Record

Title: **Are South Africa's cities too small?**

Author: Naude, W. A. ; Krugell, W. F.

Abstract: Analyzes the absolute and relative sizes of the country's big cities, including a rank-size distribution of the 123 largest places; city growth and dispersion.

5. Source: Cities 20:167-74 no 3 Je 2003 Journal Code: Cities Periodical Record

Title: **Urbanization and development in sub-Saharan Africa**

Author: Njoh, Ambe J.

Abstract: Analyzes the relationship between the percentage of a country's population living in cities with at least 20,000 inhabitants and the country's human development index (HDI) score; data from The Human Development Report 2000 and the World Development Indicators 2000.

7. Source: Environment and Urbanization 15:149-58 no 1 Ap 2003

Title: **Participatory action planning in the peri-urban interface: the twin city experience, Hubli-Dharwad, India**

Author: Halkatti, Meera ; and others

8. Source: Int J Hyg Environ Health. 2003 Aug;206(4-5):269-78.

Title: **Global urbanization and impact on health.**

Author: Moore M, Gould P, Keary BS.

Institution: Office of Global Health Affairs, U.S. Department of Health and Human Services, Rockville, Maryland 20857, USA. mmoore@osophs.dhhs.gov

Nearly half the world's population now lives in urban settlements. Cities offer the lure of better employment, education, health care, and culture; and they contribute disproportionately to national economies. However, rapid and often unplanned urban growth is often associated with poverty, environmental degradation and population demands that outstrip service capacity. These conditions place human health at risk. Reliable urban health statistics are largely unavailable throughout the world. Disaggregated intra-urban health data, i.e., for different areas within a city, are even more rare. Data that are available indicate a range of urban health hazards and associated health risks: substandard housing, crowding, air pollution, insufficient or contaminated drinking water, inadequate sanitation and solid waste disposal services, vector-borne diseases, industrial waste, increased motor vehicle traffic, stress associated with poverty and unemployment, among others. Local and national governments and multilateral organizations are all grappling with the challenges of urbanization. Urban health risks and concerns involve many different sectors, including health, environment, housing, energy, transportation, urban planning, and others. Two main policy implications are highlighted: the need for systematic and useful urban health statistics on a disaggregated, i.e., intra-urban, basis, and the need for more effective partnering across sectors. The humanitarian and economic imperative to create livable and sustainable cities must drive us to seek and successfully overcome challenges and capitalize on opportunities. Good urban planning and governance, exchange of best practice models and the determination and leadership of stakeholders across disciplines, sectors, communities and countries will be critical elements of success.

## **B. Urban Physical and Social Environment**

9. Source: Journal of Structured & Project Finance , Summer2002, Vol. 8 Issue 2, p46, 7p, 2 diagrams, 4 maps

Title: **Market-Oriented Planning for Mass Transit Systems in Metro Manila**

Author: Gavieta, Rommel C.

Abstract: Discusses the market-oriented planning for mass transit systems in Manila, Philippines. Factor that fueled the urbanization of mega-cities; Market profile and urban pattern of Manila; Spatial characteristics of Manila.

10. Source: Bull World Health Organ. 2003;81(6):444-50. Epub 2003 Jul 25.

Title: **Transport and land-use policies in Delhi**

Author: Tiwari G.

Institution: Transportation Research and Injury Prevention Program, Indian Institute of Technology-Delhi, India.

Abstract: Current transportation policies in mega-cities worldwide lead to major threats to health through traffic injuries, air pollution, noise, reduction in physical activities, and adverse impact on urban quality of life. In addition, a large section of the population in cities in low-income countries has to live in informal-sector, substandard housing. Many transportation policies fail to take enough account of their impacts on poverty and social exclusion, and they neglect the access and transportation demands of the more economically disadvantaged groups of society, who rely mostly on public transportation, walking, and cycling. Delhi, the capital city of India, is an interesting case because failure to consider the broad spectrum of health effects that may result from transport and land-use policies and investments has resulted in decisions that penalize the least affluent groups of the population and make it more difficult for them to get to jobs, education, health care, amenities, and services.

11. Source : Jpn J Infect Dis. 2003 Apr;56(2):48-53.

Title : **Seasonal models of herpangina and hand-foot-mouth disease to simulate annual fluctuations in urban warming in Tokyo**

Author: Urashima M, Shindo N, Okabe N.

Institution: Department of Pediatrics, Jikei University School of Medicine, Tokyo 105-8461, Japan.

Abstract: In order to investigate the effects of global warming, we attempted to establish seasonal models to predict fluctuations in rates of herpangina (HA) and hand-foot-mouth disease (HFMD) associated with weather conditions and calendar months in Tokyo, Japan. Surveillance data tracking HA/HFMD incidences in Tokyo was retrieved from the Infectious Agents Surveillance Report, published by the National Institute of Infectious Diseases in Japan. From the Meteorological Agency, we obtained data for 54 weather condition parameters. The annual fluctuations in reported HA cases comprising start, peak, and end weeks almost exactly matched the model, although peak levels for each fluctuation did not always match in HFMD. Furthermore, for the HA model, 88% of the variations among observed HA cases were explained by the linear relationship with the seasonal parameters investigated, which was higher than the 64% observed for the HFMD model. The HA and HFMD models were applied to data from the years 1999 to 2002, and demonstrated correlations of 86% and 64%, respectively. These models predicted that warmer climate conditions would lead to an increased number of HA and HFMD cases. These results suggest that our seasonal models may quantify the dependency of infectious diseases on seasonal parameters and simulate the impact of global warming.

12. Source: Community Development Journal 38:151-63 no 2 Ap 2003

Title: **Unmasking the "naturalness" of "community eclipse": the case of Hong Kong**

Authors: Chui, Ernest

Abstract: Examines the role of economic, socio-cultural, and political factors in the demise of community spirit and neighborliness in the 1970s during urbanization and economic modernization under British colonial rule; some focus on the role of social capital in revitalizing communities since the 1997 retrocession to China.

13. Source: Social Science & Medicine v. 56 no8 (Apr. 2003) p. 1693-703 Journal Code: Soc Sci Med

Title: **Developing a framework for assessment of the environmental determinants of walking and cycling**

Author: Pikora, Terri. ; Giles-Corti, Billie. ; Bull, Fiona.

The focus for interventions and research on physical activity has moved away from vigorous activity to moderate-intensity activities, such as walking. In addition, a social ecological approach to physical activity research and practice is recommended. This approach considers the influence of the environment and policies on physical activity. Although there is limited empirical published evidence related to the features of the physical environment

that influence physical activity, urban planning and transport agencies have developed policies and strategies that have the potential to influence whether people walk or cycle in their neighbourhood. This paper presents the development of a framework of the potential environmental influences on walking and cycling based on published evidence and policy literature, interviews with experts and a Delphi study. The framework includes four features: functional, safety, aesthetic and destination; as well as the hypothesised factors that contribute to each of these features of the environment. In addition, the Delphi experts determined the perceived relative importance of these factors. Based on these factors, a data collection tool will be developed and the frameworks will be tested through the collection of environmental information on neighbourhoods, where data on the walking and cycling patterns have been collected previously. Identifying the environmental factors that influence walking and cycling will allow the inclusion of a public health perspective as well as those of urban planning and transport in the design of built environments.

14. Source: *Trans R Soc Trop Med Hyg.* 2003 Mar-Apr;97(2):129-32

Title: **Common themes in changing vector-borne disease scenarios.**

Author: Molyneux DH.

Institution: Lymphatic Filariasis Support Centre, Liverpool School of Tropical Medicine, Pembroke Place, Liverpool L3 5QA, UK. fahy@liv.ac.uk

Abstract: The impact of climate change on disease patterns is controversial. However, global burden of disease studies suggest that infectious diseases will contribute a proportionately smaller burden of disease over the next 2 decades as non-communicable diseases emerge as public health problems. However, infectious diseases contribute proportionately more in the poorest quintile of the population. Notwithstanding the different views of the impact of global warming on vector-borne infections this paper reviews the conditions which drive the changing epidemiology of these infections and suggests that such change is linked by common themes including interactions of generalist vectors and reservoir hosts at interfaces with humans, reduced biodiversity associated with anthropogenic environmental changes, increases in *Plasmodium falciparum*: *P. vivax* ratios and well-described land use changes such as hydrological, urbanization, agricultural, mining and forest-associated impacts (extractive activities, road building, deforestation and migration) which are seen on a global scale.

15. Source: *AJS.* 2003 Mar;108(5):976-1017.

Title: **Neighborhood mechanisms and the spatial dynamics of birth weight.**

Author: Morenoff JD.

Institution: University of Michigan.

Abstract: This study addresses two questions about why neighborhood contexts matter for individuals via a multilevel, spatial analysis of birthweight for 101,662 live births within 342 Chicago neighborhoods. First, what are the mechanisms through which neighborhood structural composition is related to health? The results show that mechanisms related to stress and adaptation (violent crime, reciprocal exchange and participation in local voluntary associations) are the most robust neighborhood-level predictors of birth weight. Second, are contextual influences on health limited to the immediate neighborhood or do they extend to a wider geographic context? The results show that contextual effects on birth weight extend to the social environment beyond the immediate neighborhood, even after adjusting for potentially confounding covariates. These findings suggest that the theoretical understanding and empirical estimation of 'neighborhood effects' on health are bolstered by collecting data on more causally proximate social processes and by taking into account spatial interdependencies among neighborhoods

16. Source: *Am J Public Health.* 2003 Sep;93(9):1576-82.

Title: **Moving to opportunity: an experimental study of neighborhood effects on mental health.**

Author: Leventhal T, Brooks-Gunn J.

Institution: National Center for Children and Families, Columbia University, 525 W. 120th Street, Box 39, New York, NY 10027, USA. t191@columbia.edu

Abstract: OBJECTIVES: The health consequences of neighborhood poverty are a public health problem. Data were obtained to examine links between neighborhood residence and mental health outcomes. METHODS: Moving to

Opportunity was a randomized, controlled trial in which families from public housing in high-poverty neighborhoods were moved into private housing in near-poor or nonpoor neighborhoods, with a subset remaining in public housing. At the 3-year follow-up of the New York site, 550 families were reinterviewed. RESULTS: Parents who moved to low-poverty neighborhoods reported significantly less distress than parents who remained in high-poverty neighborhoods. Boys who moved to less poor neighborhoods reported significantly fewer anxious/depressive and dependency problems than did boys who stayed in public housing. CONCLUSIONS: This study provides experimental evidence of neighborhood income effects on mental health.

17. Source: Med. 2003 Oct;57(7):1221-35.

Title: **Explaining variation in health status across space and time: implications for racial and ethnic disparities in self-rated health.**

Author: Browning CR, Cagney KA, Wen M.

Institution: Department of Sociology, The Ohio State University, 300 Bricker Hall, 190 N. Oval Mall, Columbus, OH 43210, USA. browning.90@osu.edu

Abstract: We use the Metropolitan Community Information Center-Metro Survey—a serial cross section of adults residing in the City of Chicago, USA, conducted from 1991 through 1999—in combination with 1990 census data to simultaneously examine the extent to which self-rated health varies across Chicago neighborhoods and across time. Three-level hierarchical logit models are employed to decompose individual, spatial, and temporal variance in self-rated health. Results indicate that variation in self-rated health across neighborhoods is explained, in part, by variation in the level of neighborhood affluence. Neighborhood level poverty, however, is not a significant predictor of self-rated health. Community level affluence, moreover, accounts for a substantial proportion of the residual health deficit experienced by African-Americans when compared with Whites (after controlling for individual level SES). The effects of affluence hold when controlling for spatial autocorrelation and when considered in primarily African-American neighborhoods. Findings also indicate that individuals living in the City of Chicago became significantly healthier over the decade of the 1990s, and that this improvement in health is explained largely by the increasing education and income levels of Chicago residents.

18. Source: Am J Public Health. 2003 Sep;93(9):1583-9.

Title: **Relative influences of individual, social environmental, and physical environmental correlates of walking.**

Author: Giles-Corti B, Donovan RJ.

Institution: School of Population Health, University of Western Australia, 35 Stirling Highway, Crawley, Western Australia 6009. billie@cyllene.uwa.edu.au

Abstract: OBJECTIVES: This study sought to examine individual, social environmental, and physical environmental correlates of walking. METHODS: A cross-sectional survey was conducted among healthy workers and homemakers residing in metropolitan Perth, Western Australia. RESULTS: Most respondents walked for transport or recreation, but only 17.2% did a sufficient amount of walking to accrue health benefits. After adjustment, the relative influences of individual, social environmental, and physical environmental factors were found to be almost equally important. CONCLUSIONS: Although walking is popular, few people do enough walking to benefit their health. Those who walk as well as engage in other physical activities appear more likely to achieve recommended levels of activity. Promoting walking may require a comprehensive strategy.

19. Source: Social Forces. 2003 March Vol 81 (3) 937-952

Title : **Spatial Measurement, Geography, and Urban Racial Inequality**

Author : Downey L

Institution : U Colorado, Boulder, CO, US

Abstract : Although many models of urban racial inequality make predictions about the geographic distribution of social groups and social goods, these predictions are rarely tested spatially. This study examined the correlation of polluting manufacturing facilities in the Detroit metropolitan area with residents' race and income, and discusses a geographic information system (GIS) variable construction technique that allows researchers to measure the distance between social

groups and goods. Findings demonstrate the importance of using maps to examine the distribution of social groups and goods within metropolitan areas.

20. Source: American Journal of Community Psychology. 2003 Sep Vol 32(1-2) 115

Title: **Exploring Violence Exposure, Stress, Protective Factors and Behavioral Problems Among Inner-City Youth.**

Author: Youngstrom E, Weist M, Albus, Kathleen E

Institution: Youngstrom, Eric. Department of Psychology, Case Western Reserve University, 10900 Euclid Avenue, Cleveland, OH, US, 44106-7123, eay@po.cwru.edu. Affiliation Youngstrom, E.: Case Western Reserve University, Cleveland, OH, US Weist, M. D.: University of Maryland Medical School, Baltimore, MD, US Albus, K. E.: University of Delaware, Newark, DE, US

Abstract: This study examined relationships between violence exposure, other stressors, family support, and self-concept on self-reported behavioral problems among 320 urban adolescents (aged 11-18) referred for mental health treatment. Overall, participants reported high levels of violence exposure, with a median of six past encounters with violence as a witness, victim, or through the experiences of associates. All forms of violence exposure (witnessing, being a victim, knowing of victims) were correlated with internalizing and externalizing behavioral problems for males and females. Total violence exposure predicted behavioral problems among participants, even after controlling for the effects of other risk, demographic and protective factors. Family support and self-concept moderated the influence of life stress and cumulative risk on problem behavior outcomes, but these protective variables did not significantly moderate violence exposure.

### **C. Morbidity**

21. Source: Social Science & Medicine v. 57 no3 (Aug. 2003) p. 551-60 Journal Code:

Title: **Geographic analysis of diabetes prevalence in an urban area.**

Author: Green, Chris. ; Hoppa, Robert D. ; Young, T. Kue.

The objective of this research is to identify the sociodemographic, environmental, and lifestyle factors associated with the geographic variability of Diabetes Mellitus (DM) prevalence in the City of Winnipeg, Manitoba in Canada. An ecological regression study design was employed for this purpose. The study population included all prevalent cases of DM in 1998 for Winnipeg. Predictor and outcome data were aggregated for analysis using two methods. First, the spatial scan statistic was used to aggregate study data into highly probable diabetes prevalence clusters. Secondly, predictor and outcome data were aggregated to existing administrative health areas. Analysis of variance and spatial and non-spatial linear regression techniques were used to explore the relationship between predictor and outcome variables. The results of the two methods of data aggregation on regression results were compared. Mapping and statistical analysis revealed substantial clustering and small-area variations in the prevalence of DM in the City of Winnipeg. The observed variations were associated with variations in socioeconomic, environmental and lifestyle characteristics of the population. The two methods of data aggregation used in the study generated very similar results in terms of identifying the geographic location of DM clusters and of the population characteristics ecologically correlated to those clusters. High rates of DM prevalence are strongly correlated with indicators of low socioeconomic status, poor environmental quality and poor lifestyles. This analysis further illustrates what a useful tool the spatial scan statistic can be when used in conjunction with ecological regression to explore the etiology of chronic disease.

22. Source: J Adolesc Health. 2003 May;32(5):350-5.

Title: **Adolescent substance use, sexual behavior, and metropolitan status: is "urban" a risk factor?**

Author: Levine SB, Coupey SM.

Institution: Department of Pediatrics, Residency Program in Social Pediatrics, Children's Hospital at Montefiore, Albert Einstein College of Medicine, Bronx, New York, USA.

Abstract: To determine if urban youth ("metropolitan" status) are at greater risk of engaging in risk behaviors than suburban or rural youth. METHODS: We analyzed data on substance use and sexual risk behaviors from the national school-based Youth Risk Behavior Survey (YRBS) conducted in 1999, an anonymous questionnaire self-administered by students in grades 9 through 12. The national survey employs a multistage cluster sample to produce a nationally

representative sample of high school students. Data were analyzed using SUDAAN software to take into account the sampling model. RESULTS: In 1999, metropolitan status was not a significant determining factor for involvement in risk behaviors. Of the specific risk factors examined in this analysis, there were no significant differences between rural and suburban youth, and these two groups were combined as "nonurban." In subsequent analysis of urban vs. nonurban youth, no significant differences in risk behaviors were found on bivariate or multivariate analyses. CONCLUSIONS: This analysis suggests that metropolitan status has little if any association with youth engaging in substance use and sexual risk behaviors. In addition, it appears that urban youth are engaging in these risk behaviors no more frequently than their nonurban counterparts.

23. Source: J Rural Health. 2003 Fall;19(4):470-6.

Title: **Rural-urban differences in ductal carcinoma in situ as a proxy for mammography use over time.**

Author: Schootman M, Kinman E, Farria D.

Institution: Division of Health Behavior Research, Departments of Pediatrics and Medicine, Washington University School of Medicine, 4444 Forest Park Parkway, Box 8504, St. Louis, MO 63108, USA. mschootm@im.wustl.edu

Abstract: With emphasis on increasing use of mammography, the rate of ductal carcinoma in situ (DCIS) of the breast has increased dramatically in the United States starting in the early 1980s. It is unclear if rural and urban women have experienced similar increases. PURPOSE: To describe differences in incidence of DCIS between rural and urban women 50 to 69 years of age over time. This may be a proxy indicator of mammography use for the early detection of breast cancer. METHODS: The study population consisted of women 50 to 69 years of age who were diagnosed with DCIS during 1973-1997 and resided in Iowa, Utah, or New Mexico. Data from the Surveillance, Epidemiology, and End Results (SEER) programs in these states were used in the analysis. Location of the woman's residence was classified into urban when she lived in a county considered a Metropolitan Statistical Area, while she was considered rural if she resided elsewhere at the time of her diagnosis. FINDINGS: Increases in rates were different between rural (annual percentage change [APC]: 15.1) and urban women (APC: 34.4). During the 1990s among urban women, the rate of DCIS was still increasing (APC: 3.8), while there was no increase among rural women (APC: 0.2). Differences between rural and urban women within these 3 states were also identified. CONCLUSIONS: The data suggest differences in utilization of mammography between both populations; the increase was lower and started later for rural women. Possible reasons for such differences over time are discussed.

24. Source: Eur J Epidemiol. 2003;18(11):1065-72.

Title: **Assessing the impact of airline travel on the geographic spread of pandemic influenza.**

Author: **Grais RF, Ellis JH, Glass GE.**

Institution: Department of Geography and Environmental Engineering, Bloomberg School of Public Health, Johns Hopkins University, Baltimore, MD, USA. rfreeman\_grais@yahoo.com

Abstract: The objective of this research is to explore what would happen if the Hong Kong influenza pandemic strain of 1968-1969 returned in 2000. We report the results of a series of simulations of an SEIR epidemic model coupled with air transportation data for 52 global cities. Preliminary results suggest that if the 1968-1969 pandemic strain returned, it would spread concurrently to cities in both the northern and southern hemispheres thereby exhibiting less of the characteristic seasonal swing. In addition, after recognition of pandemic onset in the focal city, the time lag for public health intervention is very short. These findings highlight the importance of coordinated global surveillance and pandemic planning.

25. Source: Psychiatric Bulletin. 2003 May Vol 27(5) 167-170

Title: **A survey of methadone prescribing at an inner-city drug service and a comparison with national data.**

Author: Dunn J

Institution: Department of Psychiatry and Behavioural Sciences, Royal Free Hospital, London, United Kingdom

Abstract: The present survey suggest that UK drugs under-prescribe methadone to opiate-dependent patients. This study investigated methadone prescribing for 169 patients on long-term methadone at a specialist drug service. The mean methadone dose for patients on maintenance was 65.8 mg, and 67.7% were taking 50 mg or more. Mean doses in relation to methadone formulation varied substantially: mixture 57.4 mg, tablets 81.8 mg and

ampoules 113.0 mg. These figures are higher than those reported from national surveys. The proportion of urine screens positive for illicit opiates inversely related both to methadone dose and length of time in treatment. This survey shows the levels of methadone prescribing at an inner-city drug service and gives support to the effectiveness of high-dose methadone maintenance.

26. Source: NeuroRehabilitation. 2003 Vol 18(3) 197-203

Title: **Rural/urban differences in vocational outcomes for state vocational rehabilitation clients with TBI.**

Author: Johnstone P, Bounds T, Schopp L, Schoolman M, Schumate D.

Institution: University of Missouri-Columbia, Columbia, MO, US

Price, T.: The Rehabilitation Institute, Kansas City, MO, US Bounds, T.: University of Missouri-Columbia, Columbia, MO, US University of Missouri-Columbia, Columbia, MO, US Schoolman, M.: Washington University, St. Louis, MO, US Schumate, D.: Division of Vocational Rehabilitation, Columbia, MO, US

Abstract: Evaluated differences in demographics, injury severity, and vocational outcomes for persons with TBI based on rural vs. urban residency. Ss were 78 individuals with TBI (28 from rural counties, 50 from urban counties) who requested services from the Missouri Division of Vocational Rehabilitation (VR) over a 2 year period. Demographics, injury severity, VR services provided, and VR outcomes were measured. All Ss completed a standard neuropsychological evaluation and completed VR services. Rural and urban residency was determined using U.S Office of Management and Budget definitions of metropolitan and non-metropolitan areas. Few if any differences were found between the groups in demographics (i.e., more African Americans in urban areas), injury severity (i.e., more rural residents with multiple TBIs), or neuropsychological test scores. However, individuals from urban areas received significantly more maintenance funds (46% vs. 21%), transportation services (36% vs. 11%), and on-the-job training (28% vs. 7%), and had more spent on them (\$1,816 vs. \$1,242). Although statistically non-significant ( $p < 0.15$ ), 24% of individuals from urban areas were successfully employed at VR case closure, compared to only 7% of individuals from rural areas.

## **D. Health Services**

27. Source: J Rural Health. 2003 Fall;19(4):477-83.

Title: **Diagnosed mental and physical health conditions in the United States nursing home population: differences between urban and rural facilities.**

Author: Dobalian A, Tsao JC, Radcliff TA.

Institution: Department of Health Services Administration, University of Florida, PO Box 100195, Gainesville, FL 32610-0195, USA. adobalia@hp.ufl.edu

Abstract: There has been limited examination of the differences in health characteristics of the rural long-term care population. Recognizing these differences will allow policymakers to improve access to long-term care services in rural communities. PURPOSE: To determine whether differences in likelihood of diagnosis exist between urban and rural nursing home residents for 8 common medical conditions: 4 mental health conditions (depression, anxiety, Alzheimer's, and non-Alzheimer's dementia) and 4 physical health conditions (cancer, emphysema/chronic obstructive pulmonary disease, heart disease, and stroke/transient ischemic attack). METHODS: We used multivariate logistic regression to examine data derived from the 1996 Nursing Home Component of the Medical Expenditure Panel Survey, a multistage stratified probability sample of 815 nursing homes and 5899 residents, representing 3.1 million individuals in the United States who spent 1 or more nights in nursing homes during 1996. FINDINGS: Residents in rural homes were less likely to be diagnosed with depression compared to those in homes in large metropolitan areas, and residents in homes in small metropolitan areas were less likely to have cancer than those in large metropolitan areas. Diagnostic status between urban and rural residents was comparable for the other 6 conditions. CONCLUSIONS: Further research is necessary to determine whether and why depression is inadequately diagnosed in rural nursing homes and to ascertain which types of cancer are responsible for the observed differential. Such research is particularly important for elderly nursing home residents who are more likely to suffer from chronic conditions that require significant medical supervision.

28. Source: J Rural Health. 2003;19 Suppl:321-8.

Title: **Rural and urban physicians' perceptions regarding the role and practice of the nurse practitioner,**

**physician assistant, and certified nurse midwife.**

Author: Burgess SE, Pruitt RH, Maybee P, Metz AE Jr, Leuner J.

Institution: USC College of Nursing, Columbia, SC 29208, USA. stephanie.burgess@sc.edu

Abstract: There is a dearth of literature citing the differences in rural and urban physicians' perceptions of the role and practice of nurse practitioners, physician assistants, and certified nurse midwives (nonphysician providers).

PURPOSE: The purpose of this study was to investigate and compare differences, if any, between rural and urban primary care physicians' perceptions of the role and practice of nonphysician providers. RESULTS: Despite a 15.55% response rate using a mail-out survey in South Carolina, data from 681 rural and urban primary care physicians indicated that they perceived that nonphysician providers possess the necessary skills and knowledge to provide primary care to patients, are an asset to a physician's practice, free the physician's time to handle more critically ill patients, and increase revenue for the practice, but increase the risk of patient care mistakes and a physician's time in administrative duties. Urban physicians' mean scores were higher for perceiving that nonphysician providers are able to see as many patients in a given day as a physician but experience impediments in the delivery of patient care.

CONCLUSIONS: Results will be used to clarify physicians' perceptions regarding the role and practice of nonphysician providers to reduce impediments to patient care access.