

# Rural Healthcare Access for Hispanics in the United States: Barriers and Possible Solutions

## *Acceso a la salud rural para los hispanos en los Estados Unidos: barreras y posibles soluciones*

**Melinda L. Lewis**

University of West Florida  
Pensacola, Florida.  
(Estados Unidos de Norte América)  
mlewis1@uwf.edu

**Recibido:** 04/07/2016

**Revisado:** 25/08/2016

**Aprobado:** 06/10/2016

### **ABSTRACT**

Barriers to accessing primary, specialty, and preventive healthcare among rural Hispanic immigrant residents in the United States (U.S) are examined using ecological systems theory and a capabilities approach perspective. National and rural Latino population demographics are described with a focus on healthcare obstacles frequently encountered by rural Hispanic populations. Possible systemic solutions for accessible and culturally competent medical care to address rural access disparities among rural Latino populations are presented.

**Keywords:** Rural healthcare, Rural Hispanic/Latino populations, Healthcare access, Healthcare disparities.

### **RESUMEN**

Las barreras para acceder a la atención primaria, especializada y preventiva entre los residentes de inmigrantes hispanos rurales en los Estados Unidos (EE.UU.) se examinan utilizando la teoría de sistemas ecológicos y una perspectiva de enfoque de capacidades. Los datos demográficos nacionales y rurales de las poblaciones latinas se describen con un enfoque en los obstáculos sanitarios frecuentemente encontrados por las poblaciones rurales hispanas. Se presentan las posibles soluciones sistémicas para la atención médica accesible y culturalmente competente para abordar las disparidades de acceso rural entre las poblaciones rurales latinas.

**Palabras clave:** Salud rural, Poblaciones hispanas/latinas rurales, Acceso a servicios de salud, Disparidades sanitarias.

## Introduction

Healthcare disparities are an unfortunate reality for rural Latino residents in the United States (U.S). Access barriers to culturally competent primary, specialty, and preventive medical care is a primary concern for social work practitioners working with Hispanic immigrant populations in rural areas. The purpose of this article is to examine unequal healthcare access for rural Hispanics in the United States using ecological systems theory and a capabilities approach perspective. Additionally, national and rural Latino population demographics are presented with a focus on identifying systemic rural healthcare access obstacles and offering possible solutions to provide accessible and culturally competent medical care for rural Latino residents.

## Conceptual Frameworks

Developed by Urie Bronfenbrenner (1979), ecological systems theory views the process of human development as influenced by patterns of interaction between the individual and her/his external environment. This theory identifies and describes five intersecting environmental layers of influence on the individual. These layers are the microsystem, mesosystem, exosystem, macro-system, and the chronosystem (Bronfenbrenner, 1977, 1979). These system layers range from smaller or closer to the individual to larger societal influences. The larger layers are those farther away from the individual and over which the individual has less control, although changes or conflicts within one of system layer may ripple over to influence other systems. Ecological systems theory provides social work researchers and practitioners a systemic lens through which to view and interpret how interactions between the individual, family, community and larger societal structures affect behavior. According to Paat (2013), the contextual significance of each layer is particularly important to the healthy development of immigrant children as, *“social experiences cannot be comprehended effectively without investigating the interconnectedness between these multiple layers of social structure”* (p. 956). For social science researchers, ecological systems theory is

helpful in explaining how certain problems develop and the different ways in which interactions between smaller subsystems may simultaneously influence a particular situation (Bronfenbrenner, 1979). Its application can provide useful information on underlying causes of frequently complex social problems and allow new insights on diverse possible responses of individuals, families, groups, organizations and communities in stressful situations. Moreover, discerning the various patterns of intersecting contextual interactions within and between subsystems can help supply direction for possible solutions in social policy changes to ameliorate disparities and promote social justice (Cook, Purdie-Vaughns, Meyer, & Busch, 2014).

The capabilities approach provides a conceptual framework to assess issues of human well-being, optimal development and social justice (Sen, 1982). While not a precise theory, elements of this approach can be applied to the evaluation of social policy impacts and utilized to justify policy change proposals. Sen (1999) proposed that we differentiate what individuals can be and do (functions) from the actual freedoms that individuals possess in order to live the life they value (capabilities). Differences in the capabilities of individuals, communities and populations may arise from variations in physical environment, income levels, healthcare access, and availability of community resources (Hick, 2012; Law & Widdows, 2008; Ruger, 2004, 2007; Sen, 1982). From this perspective, rural status, poverty, lack of healthcare access and scarcity of community services could be regarded as capability deprivation variables. This approach may be particularly applicable to marginalized rural populations when considering the diminished capacity or absence of a common voice in making social policy decisions (Law & Widdows, 2008, Ruger, 2004). Additionally, impoverished marginalized populations may experience deprivation of basic necessities, such as access to adequate nutrition and healthcare. In turn, these deprivations could result in the further diminishing of coping mechanisms or buffers needed to deal with any new social, health or environmental stressors.

### **Hispanic Population Overview**

Hispanics comprised 55.3 million U.S. residents in 2014 or 17.3% of the total U.S. population (United States Bureau of the Census, 2015). According to the United States Department of Agriculture (USDA, 2014), *“the Hispanic population in the United States [including both foreign and U.S. born] increased from 22.4 million to 54.1 million”* from 1990 to 2013, creating the nation’s largest and fastest growing racial or ethnic minority. This represents an increase of 142% compared to a 16% increase among non-Hispanic populations during the same time period (USDA, 2014). Demographics within U.S. Hispanic populations are also very diverse with many cultural, ethnic and national backgrounds represented (Furman, Negi, Iwamoto, Rowan, Shukraft, & Gragg, 2009; Warren, Smalley, Rimando & Barefoot, 2014). An estimated 64% of Hispanics residing in the U.S. identified themselves as of Mexican decent (United States Bureau of the Census, 2015). Other identified backgrounds include 9.5% Puerto Rican, 3.7% Cuban, 3.7% Salvadoran, 3.3% Dominican, and 2.4% Guatemalan (United States Bureau of the Census, 2015). Additionally, 23.5% of Hispanic U.S. residents in 2013 resided in poverty and 24.3% lacked health insurance coverage (United States Bureau of the Census, 2015).

### **Rural Hispanic Demographics**

As residential demographics of contemporary rural America continue to change, Hispanic populations in rural areas have increased dramatically in recent decades (Furman, Negi, Iwamoto, Rowan, Shukraft, & Gragg, 2009; Warren, Smalley, Rimando & Barefoot, 2014). An estimated 46 million U.S. residents live in rural areas, or approximately 15% of the total U.S. population (USDA, 2014). According to the Housing Assistance Council (HAC, 2012), Latino populations comprise 16.3% of the total U.S. population with 9.3% of these residing in small town and rural communities. The growth of rural Hispanic U.S. populations now outpaces all other ethnic groups in the U.S., numbering just greater than 6 million (HAC, 2012), more than doubling since 1990 (Kandel, Henderson, Koball, & Capps, 2011). Although growth patterns have occurred predominately in the Midwestern region, rural southern communities have also experienced substantial Hispanic population increases in recent years (United States Bureau of the Census, 2015). Likewise, Kandel,

et.al, (2011) note increasing diversity since the 1990s, *“by region and character, in the communities Hispanics live in, including substantial settlement in the Southeast and in rural and suburban communities”* (p. 4).

### **Rural Healthcare Barriers**

Although rural life in America is commonly perceived as less stressful than life in urban areas, rural environments oftentimes contain unique stressors not present in more densely populated urban environments. These stressors, or diminished buffers, may include geographic isolation and the absence of vital community resources (Grama, 2000). An estimated, *“forty-seven percent of rural Hispanic babies are born poor, compared to 41 percent of Hispanic babies in urban areas”* (Pew Charitable Trusts, 2015). Furthermore, approximately 25% of newborns in the U.S. are of Hispanic origin and are more likely to be born into impoverished immigrant rural families (Pew Charitable Trusts, 2015). Moreover, almost half of rural Latino infants are born to non-native mothers (Pew Charitable Trusts, 2015). From a capabilities perspective, poverty is a form of capability deprivation which interferes with individual abilities to fully participate in society (Hick, 2009). These constraints and stressors may become causal pathways for additional limitations on multidimensional levels.

Rural Latino families may experience greater difficulty than their non-Hispanic counterparts in accessing federal and state assistance programs and consistent healthcare, *“particularly if the parents are undocumented and are fearful of being discovered and deported – even though the children are U.S. citizens”* (Pew Charitable Trust, 2015). Although approximately half of rural Hispanic families are able to obtain access to food stamps, other welfare programs are accessed by only about 12% of rural Hispanic families (Pew Charitable Trust, 2015). Juckett (2013) purports additional barriers to healthcare that recent Latino immigrants are likely to encounter which include, *“illegal immigration status [fears of deportation], illiteracy, and a radically different set of health beliefs”* (p. 48).

Perez-Escamilla, García, and Song (2010) examined patterns of healthcare access among Latino immigrant populations in the U.S. and found that Hispanic children access conventional

healthcare less frequently than their peers from other racial/ethnic groups. Moreover, children of migrant workers are at even greater risk for insufficient access to healthcare. Possible explanations include, *“poverty, immigration status, unfavorable labor policies, language barriers, discrimination, geographical isolation, acculturation status, and the complex interrelationship among them”* (Perez-Escamilla, Garcia, & Song, 2010, p. 49). Likewise, Research findings by Blewett, Smaida, Fuentes, & Zuehlke (2003) suggest that Hispanic populations in rural communities are confronted with multiple obstacles to accessing healthcare, including income, insurance, language and system navigational barriers. Their focus group study identified predominant healthcare access barriers to include, *“cost of health care services and frustration with the complexity of the U.S. health care system, as well as language and cultural issues that adversely affect patient-provider relationships”* (Blewett, et.al, 2003, p. 33). These systemic and contextual constraints may help to explain underutilization of health and mental health care among Latino populations.

Underutilization and delaying healthcare and mental health services is an important public health concern for rural Hispanic populations (Ziller, 2014). According to Ziller (2014), higher poverty rates and lower private insurance rates contribute to disparities in specialty care services, care for chronic health conditions, and medication access for rural Latinos. Community-based primary care clinics are simply not equipped to address complex and chronic medical needs and

Hispanic patients must often struggle to navigate language and cultural barriers to develop relationships with providers in complex medical systems (Ziller, 2014). Thus, despite high rates of chronic conditions and increased need for more comprehensive care, rural racial and ethnic minorities utilize medical services less each year than their urban counterparts (Ziller, 2014). Additionally, Furman et.al, (2005) posit that the stigma associated with mental illness combined with perceived provider discrimination may lower the likelihood of Latinos seeking appropriate mental health services and may actually increase tendencies to seek mental health care through primary healthcare clinics or via informal helpers.

The capability approach and ecological systems theory can be applied to the analysis of healthcare disparities in relation to poverty, inequality, power, and perceived stigma. Sherrill, et.al

(2005) identified socioeconomic barriers to accessing comprehensive quality medical care in rural Latino communities, including language and cultural barriers and lack of adequate insurance. Likewise, Casey and Blewett (2004) purport that, "*rural health care systems are being challenged to ensure access to care for a population with low rates of health insurance coverage, limited financial resources, language and cultural differences, and special health care needs*" (p. 1709). In addition to limited English language proficiency, Warren et.al (2014) identified lower educational attainment and employment in lower skill-level jobs, "*such as agriculture, construction, and manufacturing*" as contributors to healthcare disparities among rural Latino populations (p. 207). Similarly, Furman, et.al, (2009) identified a scarcity of culturally competent providers, perceived discrimination, and language miscommunications between providers and patients as possible reasons for medical mistrust among Latinos. Of even greater concern, these medical miscommunications may result in, "*misdiagnosis, confusion related to treatment options, and incorrect prescription of medications*" (Furman, et.al, 2009, p. 170). The interplay of these differentials (power, socioeconomic status, language, perceived stigma) between Hispanic patients and healthcare providers may deepen issues and perceptions of inequality. Ameliorating potentially harmful healthcare barriers requires the linkage of systemic practice standards with capability building social justice dimensions which promote human dignity.

Although federally funded community health centers may provide some primary care services in rural areas, many macro-level systemic gaps remain evident (Ziller, 2014). A dearth of medical providers in many rural communities further compounds the problem by creating a lack of continuity in available healthcare services for Hispanic patients (Butler, Kim-Godwin, & Fox, 2008). According to Ziller, "*the shortages in rural medical professionals cut across multiple professional types and impact all areas of medical care, including office and clinic-based care, emergency and trauma care, mental health and substance abuse treatment, dental health services, long-term services and supports and advanced specialty care*" (Ziller, p. 16). Oftentimes, public assistance programs are unavailable to rural immigrant families and adequately trained medical interpreter services are simply nonexistent. As Casey and Blewett (2004) purport, "*practitioners may be less*

*willing to see patients who need interpreters, because visits take longer when an interpreter is used”* (p. 1710).

Common healthcare access obstacles experienced across rural U.S. populations include: Transportation, distance to clinics, fewer rural hospitals, lower income/financial ability to pay, private insurance issues, and the scarcity of primary and specialty care providers (Rural Health Information Hub, 2016; Ziller, 2014). The absence of vital health resources can create a form of systemic capability deprivation which interferes with individual abilities to make important healthcare choices. For rural Latino populations, *“cultural mistrust coupled with a predisposition to seek alternative care first”* may delay Latino decisions to seek conventional medical treatment (Juckett, 2013, p. 48). Cultural barriers may involve the importance of Curanderos – traditional indigenous healers, and the valued practice of folk medicine which appears radically different from established modern American medicine (Juckett, 2013). Additionally, *“many Latinos are accustomed to self-treating because most pharmaceuticals are available without prescription in their home countries”* (Juckett, 2013, p. 48). Research by Lopez-Cevallos, Harvey, and Warren (2014) also found medical mistrust and perceived discrimination to be significantly associated with healthcare dissatisfaction among rural Hispanic populations in the U.S. Conflicting cultural medical practices may further exacerbate health status and outcomes among rural Latino populations (Sherrill, et.al, 2005).

### **Possible Healthcare Access Solutions**

The ability to discriminate contextual patterns of interactions within and between subsystems is key in applying ecological systems to help identify and describe myriad possible responses of individuals, families, groups, organizations and communities in stressful situations (Cook, Purdie-Vaughns, Meyer, & Busch, 2014). Furthermore, recognizing how systemic structural healthcare inequalities impact Latino populations creates new opportunities for strengths-based, relational social policy changes focused on building capabilities in rural communities. Moreover, increasing access to comprehensive rural healthcare may ultimately improve overall health and quality of life



for all rural U.S. residents (Rural Health Information Hub, 2016; Ziller, 2014). For Latino populations, Sherrill, et.al (2005) noted, *“access related factors are among the most significant barriers to equitable care and must be addressed in order to eliminate healthcare disparities”* (p. 366). Solutions that provide affordable, accessible and culturally competent primary and preventive care are essential (Sherrill, et.al, 2005). Likewise, Casey and Blewett (2004) advocate the services of qualified medical interpreters as integral in the provision of comprehensive healthcare provision for Hispanic populations in the U.S. Additionally, Dominguez, et.al (2015) call for, *“increasing the proportion of Hispanics with health insurance and a medical home [patient-centered, team-based, comprehensive, coordinated health care with enhanced access]”* (p. 469). The creation of adequate, affordable and reliably available healthcare for rural Hispanics requires creative approaches that utilize individual community strengths in order to address critical healthcare needs. In doing so, it is increasingly important that rural leaders and stakeholders, *“pay close attention to the makeup of their population in terms of gender, age, racial/ethnic composition, employment status, and educational attainment in order to identify community strengths and needs”* (National Research Center on Hispanic Children and Families, 2016, p. 4).

One innovative solution described by Sherrill, et.al (2005) involved a multidisciplinary inter-professional collaborative approach to bring needed healthcare services directly to rural Latino communities using a mobile medical clinic. In an effort to provide culturally competent care, the program utilized health professionals from various disciplines, academic educators, students, medical residents, bilingual medical interpreters, and even trained indigenous helpers to serve as support resource persons providing informal education and referrals (Sherrill, et.al, 2005). These researchers described several successful outcomes, such as patients reporting fewer trips to hospital emergency rooms to receive primary care and the establishment of new professional collaborative relationships among disciplines (Sherrill, et.al, 2005). Similar findings by Vitale and Bailey (2012) recommend that creative delivery strategies be developed to address healthcare accessibility disparities for rural Hispanic populations. They also suggest that mobile health clinics run by county health departments employing bilingual medical providers be established to take

medical services directly to farming communities and factory workplaces to provide basic healthcare services for Latino employees on a regular basis Vitale & Bailey (2012).

Although migrant healthcare clinics and other federally subsidized medical care centers have emerged in many rural areas, their presence varies greatly from state to state (Ziller, 2014). Likewise, Ziller (2014) asserts that traditional public health centers provide only basic primary care services to uninsured low-income populations. Another possible solution for access disparities is the establishment of comprehensive rural community healthcare clinics with regularly scheduled rotation of culturally competent specialty care service providers. Furman, et.al (2009) suggest combining mental health and medical care services within rural community health centers that serve Latino populations to increase the utilization of needed mental health services. Whether health services are provided in publicly funded medical facilities or through privately funded or faith-based health and social service centers, the need is clear for greater variety of available services based on specific rural Latino community health needs. In fact, faith-based rural health centers may be best equipped to branch out into specialty care and ancillary service provision as a mission due to being unencumbered by federal and state policies that could limit these possibilities in publicly funded health centers.

An additional solution, described by Ziller (2014), involves the implementation of a creative healthcare program incorporating the skills of emergency medical technicians (EMTs) and case management services to assist underserved rural at-risk elderly residents. This program utilized EMTs to administer routine medical screenings and case managers to conduct home-based psychosocial assessments and referrals while other programs also described by Ziller (2014) incorporated knowledge and skills of pharmacists and students from various health disciplines to conduct basic screening clinics for various medical conditions (Ziller, 2014). These innovative uses of specific professional skill sets could easily be adapted to reach underserved Hispanic populations in rural U.S. communities. Moreover, as creative healthcare delivery solutions are deployed, methods should be coordinated and team-based, patient-centered and comprehensive in nature (Dominguez, et.al, 2015, p. 469).

Solutions that provide affordable, accessible and culturally competent primary and preventive care are essential (Sherrill, et.al, 2005). This said, decreasing the proportion of Latinos who are without insurance or healthcare providers is paramount (Dominguez, et.al, 2015, p. 469). Also, the inclusion of qualified medical interpreter services as an integral aspect of comprehensive healthcare provision is key to minimizing the risk of miscommunications and resulting mistrust between rural Hispanic patients and their providers (Casey & Blewett, 2004; Furman, et.al, 2009). As stated by Metzl and Hansen (2014), "*addressing stigma and inequality in clinical settings requires that clinicians attend to the social structures that shape and enable stigma's underlying assumptions*" (p. 131). The National Research Center on Hispanic Children and Families (2016) advocates that stakeholders and policy makers also consider the increasing diversity among Latino populations across various rural communities as solutions are developed and deployed. Capabilities are fundamentally created by social interactions between individuals and their environments; therefore, ongoing professional training and support within provider organizations utilizing strengths-based relationship-building methods is crucial in alleviating perceived power differentials. The National Standards for Culturally and Linguistically Appropriate Services (CLAS, 2001) recommends: 1) Cross-cultural training for medical professionals to increase competency of care; 2) qualified language services with trained interpreters; and 3) organizational supports to provide ongoing professional development opportunities (United States Department of Health and Human Services, 2001).

In conclusion, recognizing the marginalization effects created by existent structural inequalities in program delivery is key to bring about policy change which would promote rural community strengths and thereby enhance individual capabilities (Metzl & Hansen, 2014; Cook et.al, 2014). Moreover, health care delivery systems could play a central role in promoting the capabilities of rural communities. Toward this end, Dominguez & Arford (2010) posit that U.S. public health systems are uniquely positioned throughout society to, "*implement the theory, research, and practice of social capital and social networks through micro- and macro-level intervention practices*" (p. 120). In doing so, they could increase patient capabilities as well as, "*the likelihood of successful*

*prevention and treatment outcomes*" (Dominguez & Arford, 2010, p. 120). This collaborative inclusive approach would thereby demonstrate a collective commitment to upholding the worth, dignity and human rights of all patients.

## References

- Blewett, L.A., Smaida, S. A., Fuentes, C. & Zuehlke, E. U. (2003). "Health care needs of the growing Latino population in rural America: Focus group findings in one midwestern state". In: *Journal of Rural Health*, 19.
- Bronfenbrenber, U. (1977). "Toward an experimental ecology of human development". In: *American Psychologist*, 32.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- Butler, C., Kim-Godwin, & Fox. (2008). "Exploration of health care concerns of Hispanic women in a rural southeastern North Carolina community". In: *Online Journal of Rural Nursing and Health Care*, 8.
- Casey, M. M., Blewett, L. A., & Call, K. T. (2004). "Providing health care to Latino immigrants: Community-based efforts in the rural Midwest". In: *American Journal of Public Health*, 94.
- Centers for Disease Control and Prevention: Morbidity and Mortality Weekly Report, 64(17), 469-478. Retrieved from [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6417a5.htm?s\\_cid=mm6417a5\\_w](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6417a5.htm?s_cid=mm6417a5_w)
- Cook, J.E., Purdie-Vaughns, V., Meyer, I.H. & Busch, J.T.A. (2014). "Intervening within and across levels: A multilevel approach to stigma and public health". In: *Social Science and Medicine*, 103.
- Dominguez, K., Penman-Aguilar, A., Chang, M., Moonesinghe, R., Castellanos, T., Rodriguez-Lainz, A., Schieber, R. (2015). *The CDC Vital signs: Leading causes of death, prevalence of diseases and risk factors, and use of health services among Hispanics in the United States – 2009 – 2013*.

- Dominguez, S. & Arford, T. (2010). "It is all about who you know: Social capital and health in low-income communities". In: *Health Sociology Review*, 19.
- Furman, R., Negi, N. J., Iwamoto, D. K., Rowan, D., Shukraft, A., & Gragg, J. (2009). "Social work practice with Latinos: Key issues for social workers". In: *Social Work*, 54.
- Grama J. L. (2000). "Women forgotten: Difficulties faced by rural victims of domestic violence. In: *American Journal of Family Law*". 14.
- Hick, R. (2012). The capability approach: Insights for a new poverty focus. In: *Journal of Social Policy*, 41.
- Housing Assistance Council. (2012). *Rural Research Brief: Race & Ethnicity in Rural America*. Retrieved from [http://www.ruralhome.org/storage/research\\_notes/rrn-race-and-ethnicity-web.pdf](http://www.ruralhome.org/storage/research_notes/rrn-race-and-ethnicity-web.pdf)
- Juckett, G. (2013). "Caring for Latino patients". In: *American Family Physician*, 87.
- Kandel, W., Henderson, J., Koball, H., & Capps, R. (2011). "Moving up in rural America: Economic attainment of nonmetro Latino immigrants". *Rural Sociology*, 76.
- Law, I. & Widdows, H. (2008). "Conceptualising health: Insights from the capability approach. *Health Care Analysis*, 16.
- Lopez-Cevallos, D. F., Harvey, S. M., & Warren, J. T. (2014). "Medical mistrust, perceived discrimination, and satisfaction with health care among young-adult rural Latinos". In: *Journal of Rural Health*, 30.
- Metzl, J.M. & Hansen, H. (2014). "Structural competency: Theorizing a new medical engagement with stigma and inequality". *Social Science and Medicine*, 103.
- National Research Center on Hispanic Children and Families, (2016). *Implications of Hispanic population growth, change, and diversity*. Retrieved from <http://www.childtrends.org/wp-content/uploads/2016/01/Emerging-Communities.pdf>
- Paat, Y.F. (2013). "Working with immigrant children and their families: An application of Bronfenbrenner's ecological systems theory". In: *Journal of Human Behavior in the Social Environment*, 23.

- Pew Charitable Trusts. (2015). *Hispanic Poverty in Rural Areas Challenges States*. Retrieved from <http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2015/08/14/hispanic-poverty-in-rural-areas-challenges-states>
- Ruger, J. P. (2004). "Health and social justice". In *Public Health Lancet*, 364.
- Ruger, J. P. (2007). "Rethinking equal access: Agency, quality and norms". In: *Global Public Health*, 2.
- Rural Health Information Hub. (2016). *Healthcare Access in Rural Communities*. Retrieved from <https://www.ruralhealthinfo.org/topics/healthcare-access#barriers>
- Sen, A.K. (1982). "Equality of what?". In: A.K. Sen (ed.), *Choice, Welfare and Measurement*, New Dehli, Oxford University Press.
- Sen, A.K. (1999). *Development as Freedom*. Oxford University Press.
- Sherrill, W. W., Crew, L., Mayo, R. M., Mayo, W. F., Rogers, B. L. & Haynes, D. F. (2005). "Educational and health services innovation to improve care for rural Hispanic communities in the U.S". In: *Education for Health*, 18.
- Turner, K., Wildsmith, E., Guzman, L., & Alvira-Hammond, M. (2016). *The changing geography of Hispanic children and families*. National Research Center on Hispanic Children and Families. Retrieved from <http://www.childtrends.org/wp-content/uploads/2016/01/Emerging-Communities.pdf>
- United States Bureau of the Census. (2013). *American Community Survey: Table B03001*. Retrieved from [http://www.census.gov/content/dam/Census/newsroom/facts-for-features/2015/cb15-ff18\\_hispanic\\_heritage\\_month.pdf](http://www.census.gov/content/dam/Census/newsroom/facts-for-features/2015/cb15-ff18_hispanic_heritage_month.pdf)
- United States Bureau of the Census. (2015). *Profile America facts for features: CB15-FF.18*. Retrieved from [http://www.census.gov/content/dam/Census/newsroom/facts-for-features/2015/cb15-ff18\\_hispanic\\_heritage\\_month.pdf](http://www.census.gov/content/dam/Census/newsroom/facts-for-features/2015/cb15-ff18_hispanic_heritage_month.pdf)
- United States Department of Agriculture. (2015). *Rural America at a Glance: 2015 Edition*. Retrieved from <http://www.ers.usda.gov/media/1952235/eib145.pdf>

- United States Department of Agriculture: Economic Research Service. (2014). "Rural Hispanic population growth mirrors national trends". In: *Economic Information Bulletin* 145. Retrieved from <http://www.ers.usda.gov/data-products/chart-gallery/detail.aspx?chartId=49195>
- United States Department of Health and Human Services, Office of Minority Health. (2001). *National standards for culturally and linguistically appropriate services in health care: Final report*. Retrieved from <http://minorityhealth.hhs.gov/assets/pdf/checked/finalreport.pdf>.
- Vitale, M. & Bailey, C. (2012). "Assessing barriers to health care services for Hispanic residents in rural Georgia". In: *Journal of Rural Social Sciences*, 27.
- Warren, J. C., Smalley, B., Rimando, M. & Barefoot, K. N. (2014). "Rural minority health: Race, ethnicity, and sexual orientation". In: Warren, J. C. & Smalley, K. B., (Eds.). *Rural public health: Best practices and preventive models*, (pp. 203-225). New York, NY: Springer.
- Ziller, E. (2014). "Access to medical care in rural America". In: Warren, J. C. & Smalley, K. B., (Eds.), *Rural public health: Best practices and preventive models*, (pp. 11-28). New York, NY: Springer.