

Musculoskeletal health disparities in america

Abstract

Arthritis affects over 20% of American adults and nearly 50% of adults 65 and older. Arthritis is the most common reported cause of disability and the third leading cause of work limitation in the United States. Persistent racial/ethnic differences have been documented in the prevalence of arthritis and the limitations caused by arthritis. There are many theories on the persistence of disparities in ethnic minorities and women including differences in health-care access, use of available health-care services, language barriers, higher prevalence of obesity, and differences in types of work. A comprehensive multi-pronged strategy is key to effectively addressing the complex problem of persistent musculoskeletal health disparities. If musculoskeletal health professionals do not act, healthier patients may be “picked” for surgical interventions while complex patients with multiple co-morbidities (often from underrepresented minority groups) are “dropped” as potential surgical candidates.

Keywords: Disparities, Arthritis, Women, African Americans, Hispanics, Health Policy, Education, Knee pain, Obesity, Physical Activity

Volume 7 Issue 6 - 2017

Tamara Huff,¹ Michelle Scott²

¹Office of Health Disparities Research, Mayo Clinic, USA

²School of Medicine, Meharry Medical College, USA

Correspondence: Tamara Huff, Mayo Clinic, 4500 San Pablo Rd, Jacksonville, Florida 32224, Tel (904) 953-2000; Email huff.tamara@mayo.edu

Received: March 31, 2017 | **Published:** April 12, 2017

Introduction

Arthritis affects over 20% of American adults and nearly 50% of adults 65 and older.^{1,2} Arthritis is the most common reported cause of disability,³ and the third leading cause of work limitation in the United States.⁴ Persistent racial/ethnic differences have been documented in the prevalence of arthritis and the limitations caused by arthritis.^{5,6} In 2003, the Institute of Medicine addressed differences in healthcare quality between minority and majority groups.⁷ When compared with Caucasians, a higher proportion of African Americans have arthritis-attributable activity limitations, work limitations, and severe joint pain. When comparing Caucasians to Hispanics, a higher proportion of Hispanics had arthritis-attributable work limitations and severe joint pain.^{8,9} Women also have significantly higher age-adjusted prevalence of arthritis (24.3% versus 18.3%) than men.¹⁰ These disparities are not limited to arthritis. Dy et al.¹¹ have demonstrated the persistence of health disparities into hip fracture care as well.¹¹

There are many theories on the persistence of disparities in ethnic minorities and women including differences in health-care access, use of available health-care services, language barriers,¹² higher prevalence of obesity, and differences in types of work.¹³ The obesity epidemic is rampant among women in communities of color with 82% of African American women and 77% of Hispanic women who are obese or overweight.¹⁴ As clinicians, we play a role in the persistence of these disparities, specifically through unconscious bias.¹⁵

Discussion

A comprehensive multi-pronged strategy is key to effectively addressing the complex problem of persistent musculoskeletal health disparities. One of the many organizations seeking solutions is Movement is Life. Movement is Life (MiL) is a consortium of stakeholders representing primary care physicians, orthopaedic surgeons, health advocacy organizations, community organizations, academia, faith-based leaders, community advocacy organizations, and nurse associations seeking increase visibility of this national public health issue and implement sustainable changes. MiL has partnered with the J. Robert Gladden Society, American Academy of Orthopaedic Surgeons, and industry leaders to produce culturally concordant patient education materials addressing the importance of weight loss and increased activity in decreasing knee pain. MiL is educating nurses, midlevels and physicians on the role of cultural

and ethnic differences in the treatment of musculoskeletal disorders through continuing education modules. These resources are available free of cost to providers and patients. In addition, MiL advocates for culturally concordant community based programs to address obesity and inactivity in African American and Hispanic women. While these programs vary in location, size, and target groups, they share many core values.

What else can we do as musculoskeletal healthcare professionals to stem this tide? As providers, we must engage in local and national health care advocacy and public policy. We must advocate for risk stratification in any payment model. If not, healthier patients may be “picked” for surgical interventions while complex patients with multiple co-morbidities (often from underrepresented minority groups) are “dropped” as potential surgical candidates. This idea of “cherry picking and lemon dropping” will further widen the existing disparities in musculoskeletal health in the United States.

Conflicts of interests

One of the authors or her family is a member of the American Academy of Orthopedic Surgeons, J. Robert Gladden Society, and the steering committee for the Movement is Life Caucus.

Acknowledgments

None.

Conflicts of interest

None.

References

1. Lethbridge-Çejku M, Schiller JS, Bernadel L Summary health statistics for U.S. adults: National Health Interview Survey, 2002. National Center for Health Statistics. *Vital Health Stat* 2004;10(222).
2. Barbour KE, Helmick CG, Theis KA et al. Prevalence of doctor-diagnosed arthritis and arthritis-attributable activity limitation—United States, 2010–2012. *Morb Mortal Wkly Rep*. 2013;62(44):869–873.
3. CDC Prevalence of disabilities and associated health conditions among adults—United States, 1999. *Morb Mortal Wkly Rep*. 2001;50:120–125.
4. Stoddard S, Jans L, Ripple JM et al. Chartbook on work and disability in the United States, 1998. Washington, DC: *US National Institute on Disability and Rehabilitation Research*. 1998

5. CDC Prevalence and impact of arthritis by race and ethnicity—United States, 1989—1991. *Morb Mortal Wkly Rep.* 1996;45:373–378.
6. CDC Racial/ethnic differences in the prevalence and impact of doctor–diagnosed arthritis – US 2002. *Morb Mortal Wkly Rep* 2005;5:119–123.
7. Institute of Medicine, Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care. *National Academy Press, Washington, DC, US.* 2003
8. CDC Prevalence and impact of arthritis by race and ethnicity—United States, 1989—1991. *Morb Mortal Wkly Rep.* 1996;45(18):373–378.
9. CDC Racial/ethnic differences in the prevalence and impact of doctor–diagnosed arthritis – US 2002. *Morb Mortal Wkly Rep.* 2005;54(5):119–123.
10. Barbour KE, Helmick CG, Theis KA et al. Prevalence of doctor–diagnosed arthritis and arthritis–attributable activity limitation—United States, 2010–2012. *Morb Mortal Wkly Rep.* 2013;62(44):869–873.
11. Dy C, Lane J, Pan T et al. Racial and socioeconomic disparities in hip fracture care. *JBJS.* 2016;98:858–865.
12. Escalante A, del Rincon I Epidemiology and impact of rheumatic disorders in the United States Hispanic population. *Curr Opin Rheumatol* 2001;13(2):104–110.
13. CDC Racial/ethnic differences in the prevalence and impact of doctor–diagnosed arthritis – US 2002. *Morb Mortal Wkly Rep.* 2015;5:119–123.
14. Wang Y, Beydoun MA The Obesity Epidemic in the United States – Gender, Age, Socioeconomic, Racial/Ethnic, and Geographic Characteristics: A Systematic Review and Meta–Regression Analysis. *Epidemiol Rev* 2007;29:6–28.
15. Borkhoff CM, Hawker GA, Kreder HJ et al. The effect of patients’ sex on physicians’ recommendations for total knee arthroplasty. *CMAJ.* 2008;178(6):681–687.