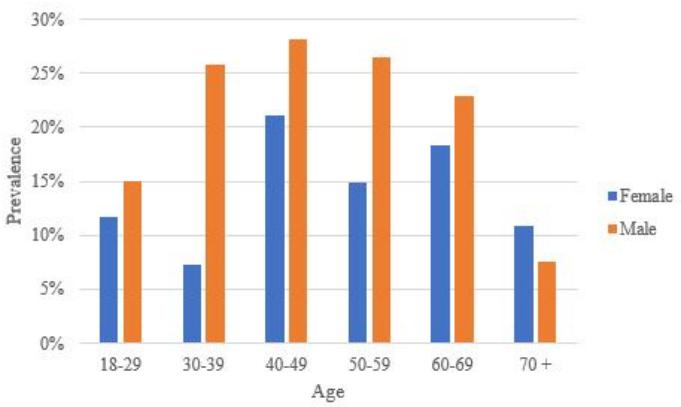
Prevalence and characteristics of low back pain in a rural Ghana primary care clinic population

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Abstract:

INTRODUCTION:
Low back pain (LBP) is the leading cause of disability in the developed world. Less is known about the impact of LBP in the developing world, and particularly the rural developing world. In 2015, the World Health Organization (WHO) issued an urgent call for additional research into the prevalence and effect of LBP on developing world populations.
OBJECTIVE:
To calculate the prevalence of LBP in a rural Ghana primary care clinic population.
DESIGN:
Survey of LBP prevalence and severity.
SETTING:
Primary care mission clinic in rural Southeastern Ghana.
PARTICIPANTS:
Six hundred eighty-four adult patients.
METHODS:
All adult patients were screened for LBP using the definition "any pain occurring within the region between the lower margin of the 12th ribs and the gluteal folds." The Oswestry Disability Index (ODI) was used to further characterize LBP in those screening positive. Chi-square test was used to assess statistical significance of difference in prevalence between groups, and ordinary least squares regression was used to assess the relationship between LBP severity and gender and age.
MAIN OUTCOME MEASUREMENTS:
LBP prevalence and LBP severity as assessed using the ODI.
RESULTS:
Overall LBP prevalence was 15.7%, with no statistically significant differences observed by age or gender. The activities of standing, traveling, and walking were most severely affected. Of those with LBP, 10.3% were considered "crippled" based on ODI responses, whereas a further 31.8% were "severely disabled." No statistically significant relationship between LBP severity and age or gender was found.
CONCLUSIONS:
LBP is a cause of significant disability within this region of rural Ghana; however, prevalence appears to be lower than in the developed world and parts of the urbanized developing world. Increased attention to screening and treatment of LBP represents an opportunity to improve the health of rural Africans.

Image: Figure 1: Low back pain prevalence by gender and age



Recent Publications:

1. Louw, Q. A., Morris, L. D., & Grimmer-Somers, K. (2007). The prevalence of low back pain in Africa: a systematic review. BMC Musculoskeletal disorders, 8(1), 105.
2. Hoy, D., Bain, C., Williams, G., March, L., Brooks, P., Blyth, F., ... & Buchbinder, R. (2012). A systematic review of the global prevalence of low back pain. *Arthritis & Rheumatism*, *64*(6), 2028-2037.
3. Hoy, D., March, L., Brooks, P., Woolf, A., Blyth, F., Vos, T., & Buchbinder, R. (2010). Measuring the global burden of low back pain. Best practice & research Clinical rheumatology, 24(2), 155-165.
4. Steffens, D, et al. "Prevention of Low Back Pain: A Systematic Review and Meta-Analysis." Current Neurology and Neuroscience Reports., U.S. National Library of Medicine, Feb. 2016, www.ncbi.nlm.nih.gov/pubmed/26752509.
5. Oppong-Yeboah, B, and S May. "Management of Low Back Pain in Ghana: a Survey of Self-Reported Practice." Current Neurology and Neuroscience Reports., U.S. National Library of Medicine, Dec. 2014, www.ncbi.nlm.nih.gov/pubmed/24659513.



Biography (150 word limit)

Derrick Miller has his BS in biochemistry, is in the process of earning an MD, and is an aspiring physiatrist. His passion is in self-improvement through medicine, lifestyle, and sports. He is currently involved in the VIGOR trial at VCU testing virtual reality interventions as therapy for low back pain.

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