

Review of: "An Oriental Physician's Views and Thoughts on the Global Prevalence of Lumbar Spondylosis – The traditional shoulder-carrying culture and traditional spine of a large eastern country are disappearing silently"

Clarence Nicodemus¹

1 Michigan State University

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While the author does not use the "standard" format or organization for the presentation of his ideas, the point he makes is a valid one, although mis directed. Overall, the author is headed in the correct direction when searching for a cause in chronic low back pain (CLBP). NOTE: I believe we are discussing CHRONIC low back pain, not ACUTE low back pain (muscle strains or ligament strains) which are generally self correcting). Changes in culture from farming to industrial based labor does influence the strength of the core, or what I believe he calls "waist" strength. Certainly, carrying heavy loads on the shoulders over a lifetime will enhance the strength and stability of the core of the body. Core strength has long been established as the main factor in preventing and recovering from based CLBP.

Based on my own research for the past 20 years, I offer the following points as a review and or critique of his paper.

- Spondylosis is not a typical cause of CLBP. Wear and aging of the vertebra and its discs do not cause CLBP, in fact, 85% of cases of CLBP do not involve the spine.
- 2. Spinal pain does arise from spinal sources such as fractures, osteomyelitis, moderate to severe spinal stenosis and verified radiculopathies (i.e., radiculopathies with matching pain, numbness and positive EMG/NCV tests), aneurisms, severe scoliosis, severe spondylolisthesis, herniated or extruded discs, and the like; but again, these pain generating conditions amount to about 15% of the presenting cases of CLBP.
- 3. Pain arises from the supportive structures of the spine, including ligaments (iliolumbar, posterior sacral and others), contracted stabilizing muscles of the lumbosacropelvic (LSP) structures (there are over 65 muscles attached to the LSP structures) that are part of the CORE and serve to activate and stabilize the not only the lumbar spine but also the sacroiliac joints (SIJ).
- 4. The sacrum is the key element in the balancing or reacting of all upper body loads (body elements and well as weights carried on shoulders or in arms) and the ground reactive loads transmitted through the lower extremities and innominate bones through the SIJs.
- 5. The painful elements as described by patients who have CLBP most typically comes from hip flexor muscles, iliotibial bands, iliolumbar ligaments, not from the spine, although facet syndrome and true disc herniation may be present as well, they are secondary.
- 6. Manual manipulation and core strengthening exercises are necessary to help patients recover from CLBP, but it is



seldom done effectively without a comprehensive knowledge of the biomechanics of the LSP structural region. This is not to suggest that just one thing is the cause of CLBP, but rather there are 23 joints within the LSP structure as an integrated region and it all must be examined and considered. Most importantly, however, it must be stabilized.

I suspect the historic Chinese agrarian culture of carry loads on shoulders served to strengthen the core muscles and stabilize the LSP structure in protecting against developing CLBP. Modern industrial or digital jobs do not serve this same function, leaving laborers more vulnerable.

I also might mention (without benefit from any research) that the reproductive organs of the body are more appropriately associated with the sacral nerves than the lumbar plexus and the rise in infertility rates may be more related to sacral dysfunction than lumbar dysfunction as well.