Review of: "Research on the Existence of Chinese Load-bearing bow of Spine – Report on 2 Cases of Standing full spine radiographs of Typical Traditional Chinese Spine and several very interesting photos worth studying"

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Potential competing interests: No potential competing interests to declare.

The author presents an interesting thesis, that the traditional Chinese and modern ("Western") lifestyles have resulted in differences in spinal postures. While it seems likely that the more sedentary modern lifestyle would have an effect on the human body, the traditional Chinese spine is not well defined and this work would have benefited from more supporting evidence.

The author states that there are differences in the four curvatures of the traditional Chinese spine, and that there is limited lumbar mobility, but does not provide any data to support this claim. The only evidence presented are radiographs of two traditional Chinese spines, but without any direct comparisons to modern or “Western” spines. As the author states, “two cases are not enough”- it is not clear if those presented are typical examples or outliers, or if they would fall within the range of variation of “Western” spines.

Future areas to consider could be to increase the Chinese sample, with a “Western” comparison group, but the author should also consider if the difference is specific to the traditional Chinese method of carrying heavy objects, or if there is a greater difference between the modern, sedentary spine compared with a more pre-modern phenotype seen in other cultures that engage in manual agricultural or hunter-gather practices. Put another way, is the difference between Chinese and Western spines, or between modern and pre-modern spines (or perhaps a combination), and if so, what specific phenotypic differences can be seen? It would seem likely that a more sedentary lifestyle would result in differences in postures, especially to those that engage in carrying heavy objects on their shoulder throughout their life, but stronger data would be needed to better support this claim.