

Re: Non-radiation occupational hazards and health issues faced by radiologists - A cross-sectional study of indian radiologists' by Kawthalkar AS *et al.*

Dear Editor,

I read with interest the article of Jan-Mar issue titled 'Non-radiation occupational hazards and health issues faced by radiologists - A cross-sectional study of Indian radiologists' by Kawthalkar AS *et al.*^[1] The article had clearly described the high prevalence of musculoskeletal,

ophthalmic problems, issues like burnout, along with unique mental stressors such as PCPNDT-related issues. Atwal *et al.* also had raised similar issues in the Indian radiologists.^[2]

I would like to re-emphasize another more dangerous but under recognised health issue associated with

radiology – the sedentary working condition of the diagnostic radiologists.^[3] Fidler *et al.* recognised this issue in 2008 and sought to determine the utility and efficacy of a walking workstation during CT scan reporting.^[4] Lamar *et al.* sought to quantify the sedentary work life of the radiologist by surveying the levels of at-work and out-of-work sitting among radiology, paediatric and general medicine residents in 2016 and unsurprisingly found that the radiology residents led a more sedentary occupational lifestyle.^[5] However, radiology residents had showed better activity during the interventional radiology postings.

The workstation-based diagnostic radiology reporting typically occurring in the seated position for around 8 hours compromises metabolic health thereby increasing incidence of cardiovascular disease, diabetes, obesity and premature mortality risk.^[6-8] Increased rates of burnout and decreased concentration have been associated with sedentary behaviour.^[9] A recent study of middle-aged and older adults has found a positive association between sedentary behaviour and reduced medial temporal lobe thickness, which causes impaired episodic memory.^[10] It was also noted that risks associated with sedentary work life do not abate with compensatory physical activity outside working hours.^[6] Buckley *et al.* determined that those in full-time and predominantly desk-based occupation should initially aim for 2 hours per day of standing and light walking at work, with the goal of reaching 4 hours per day.^[8]

Radiologists must understand the health risks associated with sedentary behaviour and protect their health by implementing the changes in their work routine like frequent standing (short active standing breaks), intermittent walking, Non Exercise Activity Thermogenesis (NEAT) like moving the legs and tapping the feet, stretching exercises and using height adjustable dynamic workstations.^[4-8] A curriculum providing strategies to increase physical activity and healthy behaviour was effective in increasing awareness of potential unhealthy behaviour and motivating radiologists to implement healthy changes.^[9]

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Conflicts of interest

There are no conflicts of interest.

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