

Peer Review

Review of: "Evolution of Occupational Health: From Industrial Medicine to the Digital-Era"

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Review

This is a timely paper addressing a significant area of importance in the framing and delivery of occupational health, with a clear narrative of the development of occupational health over time and how it needs to adapt to the digital era and non-traditional areas (such as the home) from where people work.

There are a number of areas of the article that could bear improvement.

The timeline narrative is clearly set out, but it lacks a sense of analysis of why or what prompted changes in definitions between Phase I and Phase II—only providing such explanation in relation to Phase III.

In relation to delivering on its narrative review of the current and future definition of occupational health, I would suggest the authors provide a concluding guide of areas that occupational health will need to incorporate explicitly, for example, work arrangements that extend beyond employment and mediating the physical and virtual components of the working environment as these relate to the complexities of workers' health needs. The authors state 'Virtual and mobile work complicates ergonomic and environmental risk assessments,' but I think within this they need to acknowledge more explicitly the home as a setting for work in the digital age and the complexity this brings.

This also relates to a significant point made by the authors which could be further explored and, in my view, would provide a significant contribution to this area—that is, their statement about the boundary between human and machine agency. This will become a particularly important area as and when employers hand over greater responsibility to AI to schedule workloads for employees, as this might relate to the psychological and physical 'tyranny' of the algorithm. I suggest the authors put a bit more thought into developing this narrative and its implications for occupational health.

In relation to the above points, I was surprised that the authors do not engage with the concepts of Decent Work and how these interface with both the demands of digital work and the role of occupational health, in which the boundary between home, social, and work environments is increasingly fluid in the era of remote/digital work. I would suggest the authors look at the area of Decent Work and consider its implications for occupational health definitions and concepts.

Minor Editorial Points:

Figure 1 This is in the article but not referenced in the narrative.

Flow: The transition from "Current Challenges" to "Inadequacies" feels slightly repetitive. Could these be more sharply differentiated?

Overall Assessment

This is a good quality, timely, and well-argued review article. It provides a clear historical narrative of the development of OH definitions and concepts that highlights the importance of updating OH frameworks to address the challenges posed by the growth of digital work, remote/mobile/virtual work environments, and the use of AI to control employees' working lives.

Declarations

Potential competing interests: No potential competing interests to declare.