Review article on the future of work: Online labour exchanges, or 'crowdsourcing': implications for occupational safety and health

SUMMARY

Since the 1970s it has been recognised that the combination of information and communications technologies has the potential to enable the relocation of work involving the processing of digitised information. In the 1980s, attention focussed on 'teleworking', 'telecommuting' or 'networking' involving the relocation of work from a traditional office to the worker's home. In the 1990s it became apparent that work could be shifted internationally, in a development that became known as 'offshore outsourcing'. The next decade saw the emergence of large international companies supplying telemediated services, increasingly using practices described as 'global sourcing', in which workers from different parts of the world could be brought together on a just-in-time to basis to deliver particular services, regardless of location. In the present decade, these developments have reached critical mass, enabling the emergence of entirely new forms of work organisation, co-ordinated by online platforms.

The focus of this article is on 'crowdsourcing', defined here as *paid work organised through online labour exchanges*. This encompasses a range of forms of work, which can be differentiated along several dimensions including: their professional status, whether they are carried out online or of offline (with online coordination); the location of work (the home, the employer's premises or elsewhere); the employment status of the workers; and whether the work is carried out for a company or a private client. Other variables include whether it is carried out as a main job or a supplementary source of income and how it is rewarded.

After surveying the (scant) evidence on the extent of crowdsourcing and the characteristics of its workforce, the article goes on to examine the risks to the safety and health both of crowdworkers and of the members of the public with whom they come into contact. These fall into three broad categories: physical risks to online workers associated with intensive use of ICTs in environments not designed for work; physical risks to the public and workers involved with offline work; and psychosocial risks to crowdworkers, whether working online or offline, especially those linked to precariousness, high work intensity, requirements to respond to unpredictable demands at short notice and lack of clarity about where responsibility lies.

It then examines some major unresolved regulatory and policy issues that have arisen in relation to crowdsourcing: What is, or should be the legal status of online work exchanges? Who, in the triangular relationship between platform, worker and client should be regarded as the employer? Where should responsibility lie for insurance and professional and legal liability? How should EU Directives and national labour regulations be applied? How can consumer protection and public safety regulations be enforced? How can qualifications be accredited and checked?

After discussing some of the risks and benefits at a societal level, the article concludes by drawing attention to major gaps in the existing knowledge and making recommendations for future research.