Research in occupational medicine in the Netherlands: responsiveness to societal needs

In the past two decades, research in occupational health in the Netherlands has grown rapidly. In a recent bibliometric analysis, the contribution of Dutch authors in 10 leading occupational health journals more than doubled during that period to almost 8% in 2005, whereas the contribution of British authors remained relatively stable at 11–13% [1]. This increase in scientific productivity is also visible in the journal *Occupational Medicine*, which has published over 25 articles from Dutch researchers in the past 5 years. This special issue contains another seven research papers from the Netherlands. The distribution of topics in these contributions is heavily dominated by studies on sickness absence and disability (*n* = 18). Other topics addressed were occupational diseases (*n* = 4), professional activities of occupational physicians (*n* = 4), chronic diseases (*n* = 2), psychosocial factors (*n* = 20) and miscellaneous topics (*n* = 2).

This rapid growth in research and its strong focus on sickness absence raises two important questions. Firstly, what are the drivers for the research agenda in the Netherlands? And secondly does the research address the needs in occupational health and the society at large? The Dutch Advisory Council on Health Research recently concluded that three mechanisms have determined the research agenda in occupational health. First, the availability of external funding has pushed research towards sickness absence and disability. Substantial research programmes during 1997–2002, made available through the Netherlands Organization for Health Research and Development, were targeting interventions aimed at reducing sickness absence and promoting timely return to work, collaboration between occupational physicians and other health professionals in primary and specialized health care and interventions for preventing musculoskeletal complaints. The priorities in these research programmes reflected the high proportion of persons with a disability pension, ~9% of the workforce, and the high sickness absence with ~6% of all workdays lost. Second, the international development in occupational health research with a strong shift from occupational toxicology and cancer towards psychosocial factors, stress at work and musculoskeletal complaints. This development is noticeable in many occupational health journals as well as conferences and is partly a reflection of increased attention for common complaints and disorders with large consequences for employability. Third, the presence of specified societal needs as demonstrated by the rapid introduction of several laws and guidelines that tightened the eligibility criteria for disability pension and introduced incentives for employers and employees to do everything they can to remain active at work or return to work quickly [2]. The topics addressed in the Dutch publications in *Occupational Medicine* reflect that the research community has been responsive to major issues in occupational health and societal debates on necessary measures to reduce health-related productivity loss.

The Dutch research on sickness absence covers the complete spectrum from descriptive studies on occurrence of sickness absence in different occupational populations [3], etiological studies on work-related determinants of sickness absence [4,5], to prospective studies predicting the onset of sickness absence and disability [6–8]. This research has not only underpinned the need for a pro-active policy in companies but also demonstrated the complexity of predicting sickness absence and subsequent design of appropriate interventions. The studies on occupational diseases are tailored towards the unique characteristics of the Dutch welfare system whereby any worker on sickness absence or permanently on disability pension will be compensated regardless whether the absence from work is caused by a work-related disorder or not. The Register of Occupational Diseases relies on notification by physicians and, thus, research is aimed at establishing and evaluating appropriate mechanisms and procedures to decrease the systematic underreporting of the occurrence of occupational diseases [9,10]. The third topic of interest is research on professional activities of occupational physicians, ranging from evaluation of the adherence to guidelines in occupational health [11] to promoting evidence-based occupational medicine [12]. Since occupational health in the Netherlands is completely privately financed, there is a strong focus in daily occupational health care on economically affordable activities that may jeopardize the effectiveness of occupational health services [13]. However, the development and appropriate use of evidence-based guidelines seems a problem throughout the international occupational health community [14].

In this special issue, seven new articles from Dutch authors are published. Two studies are aimed at sickness absence and work performance, a familiar topic on the Dutch research agenda. Among workers on sick leave due to Epstein–Barr virus infectious mononucleosis,
the return to work pattern was described. Interestingly, the median duration of sickness absence was 91 days, but the authors concluded that occupational physicians should advise gradual return to work from 4 weeks after the onset of disease. Unfortunately, work-related prognostic factors were not investigated and also facilitators and barriers in the return to work process remained unknown [15]. The study among workers with chronic diseases nicely illustrates the importance of these factors in sickness absence or work disability. Employees reported several practical and psychosocial barriers in their work performance, such as lack of possibilities to adjust working hours, lack of job control and work–home interference [16]. The insight into facilitators and barriers for workers with chronic diseases is rapidly growing, but is not mirrored by development and evaluation of workplace interventions based on these factors.

An emerging issue in the Netherlands is the employability of elderly workers. Most Western countries with an ageing population face the challenge of a need to increase work participation, especially at older age. Governmental policies are implemented to increase the age of full retirement in order to balance the ratio of employed over dependent persons. In the Netherlands, these policies are primarily financially based regulations that do not take into account the strenuousness of work. Work demands that are not sufficiently attuned to physical and mental capacities of workers may increasingly cause health problems and subsequently displacement from the workforce [17]. In the near future, it is expected that three topics will gain priority on the research agenda in the Netherlands, partly due to a recently launched research programme on work participation and health. First, measurement and evaluation of physical demands at work in relation to individual fitness. An example in this issue of Occupational Medicine is the study on a job-related fitness test for police officers [18]. Research is needed to develop tests to determine the magnitude of physical demands and to evaluate the consequences of these physical demands for employability at older age. Second, quantification of the time-dependent role of hazardous working conditions as well as unhealthy behaviours in displacement from the labour market. Detailed knowledge on time windows between strenuous work and deteriorated health is required for designing interventions that increase sustained employability and health in the working age population. Third, cost-effectiveness studies of interventions on working conditions, social work environment and health. There is almost no evidence for interventions that will support workers to be engaged in paid employment until a delayed pension age.

The agenda of Dutch research groups is increasingly determined by the priorities in calls for proposals from national funding agencies. Their programmes are primarily tailored to the perceived societal needs of important stakeholders. The existing research groups have to balance interesting scientific challenges with the strong pressure to conduct applied research on methods and interventions in the field of occupational health. Dutch researchers will continue to submit their work to Occupational Medicine and its readers will be able to follow their progress to strengthen evidence-based occupational medicine.

Alex Burdorf
e-mail: a.burdorf@erasmusmc.nl

References


