

19 **CHALLENGES AND FACILITATORS OF OCCUPATIONAL EPIDEMIOLOGY RESEARCH IN THE UK: A SURVEY OF STAKEHOLDERS' PERCEPTIONS**

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Introduction This study is part of a larger programme exploring current challenges to and facilitators of occupational epidemiology (OE) research in the UK. The programme was motivated by the current UK-based regulatory and ethical frameworks, which have impeded research of clear public value, despite being designed to provide public protection. In a previous phase, key UK-based OE researchers were interviewed to explore their experiences/perceptions of these issues. This study aimed to explore whether the broader OE stakeholders' views/experiences are similar to those of the key-researchers, and whether they report experiencing other challenges/facilitators.

Methods A questionnaire was developed based on themes identified in the interview phase, and the literature. A convenience sample of stakeholders, comprising mostly researchers, was identified from the delegate list of "International Conference on Epidemiology in Occupational Health" (Oxford-UK, 2011) followed by snowball sampling.

Results The response rate was 37.5% (54/144). The top challenges identified were: low response rate (86.8%); inaccessibility (79.7%), inaccuracy and incompleteness (68.0%) of workers' records; lack of funding (73.1%); and difficulties accessing data/participants due to ethical and governance regulations (67.3%). Top facilitators were: government interest and support (87.0%); pre-study negotiations, with relevant stakeholders, for approval (85.1%). These findings support key-researchers' views although the emphasis varied slightly.

Conclusions Practical challenges were highly ranked by the respondents, whereas key-researchers had placed greater emphasis on the lack of resources. This is, perhaps, because key-researchers deal mostly with setting-up and funding aspects of studies; other members are mainly involved in the operational aspects of studies. Especially noteworthy is that OE community is currently small and scattered in the UK; key-researchers are retiring and junior ones are difficult to recruit. There is a need for a national professional body/society in this field to promote communication, offer opportunities for networking and research and lobby for its interests.

20 **THE IMPACT OF OCCUPATIONAL EXPERIENCE ON COGNITIVE AND PHYSICAL FUNCTIONAL STATUS AMONG OLDER KOREAN ADULTS**

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Objectives Despite growing employment levels in the geriatric population, there exists little evidence regarding the specific relationship between occupation and health for older individuals. We investigated the impact of occupation on cognitive and physical function within an occupational window of the past 15 years using a nationally representative sample in Korea.

Methods A total of 4,408 subjects aged 60 and older were selected from the Korean Longitudinal Study of Ageing (KLoSA). Functional health was evaluated using the Korean versions of the Mental State Examination (K-MMSE), Instrumental Activities of Daily Living (K-IADL), and Activities of Daily Living (K-ADL) measures. Work duration during the past 15 years was based on subjects' occupational history record and classified into four categories; unemployment, ≤ 7 years, 8~15 years, and ≥ 15 years. Sociodemographic characteristics, and general health information were recorded as key independent variables.

Results The risks of cognitive impairment and disability in women were higher than those in men, and currently employed subjects displayed good cognitive and physical function. Longer work duration significantly and positively affected all measures of function (MMSE p for trend = 0.0151; IADL p for trend = 0.0007; ADL p for trend = 0.0002) in men, whereas it only improved physical function in women (IADL p for trend = 0.0449; ADL p for trend = 0.0362). Manual labourers exhibited improved functional capacity with longer work durations over the past 15 years (MMSE p for trend = 0.0328; IADL p for trend = 0.0044; ADL p for trend = 0.0004), although they presented lower functional scores compared with their counterparts. There was a curvilinear relationship between work duration and function among men and manual labourers.

Conclusions Older Korean people in our study who continued to work exhibited improved cognitive and physical function. We suggest that longer work duration, especially for men and for manual labourers, is a significant contributor to better cognitive and physical function of older people.

21 **TRENDS IN UK-BASED OCCUPATIONAL EPIDEMIOLOGY AND PUBLIC HEALTH EPIDEMIOLOGY RESEARCH PUBLICATIONS: A BIBLIOMETRIC ANALYSIS**

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Background The study is part of a larger programme exploring the challenges to and facilitators of occupational epidemiology (OE) research in the UK. The OE field is currently facing many challenges. Based on findings from a previous phase of this study, lack of human and financial resources is of utmost concern for key-researchers in this area. The challenges are perceived to have increased over time resulting in a smaller and more scattered OE community, and subsequently less influential. These challenges are perceived to have negatively affected its members' ability to conduct high quality research projects compared to those within similar fields, yet perceived more successful, such as public health epidemiology (PHE). This phase aims to explore how time trends in research publications in OE compare with those in PHE, in the cancer field. Cancer is a well-established topic in both fields; thus, rich data is anticipated for analysis.

Methods A systematic search, using EBSCO/Medline database (1960–2011), will be conducted using a strategy combining descriptors listed in the EBSCO Medical Subject Headings (MeSH) Thesaurus primarily; epidemiology, neoplasms, and UK. Cancer epidemiology studies, published in English and conducted in the UK, will be selected. Data will be extracted and analysed using bibliometric methods including; counts of papers,

citation analysis, authorship analysis, and collaboration indicators. The publication trends and characteristics of the included articles/journals will be assessed, including, where possible, funding bodies' characteristics. Any association between these characteristics and the level of research productivity/output will be evaluated.

Result/Conclusions This study will identify time-periods where, UK-based, OE publications volume had been high/low, and provide insights into OE research contribution to cancer epidemiology, and its strengths and weaknesses compared with PHE. The identified time-periods will be the focus of a subsequent phase, documentary review, where OE challenges/facilitators will be examined compared to those in PHE.

22 A NETWORK OF OCCUPATIONAL RISK EXPERTS FOR EVALUATION OF UNUSUAL WORKPLACE HEALTH EVENTS

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Background The French Institute for Public Health Surveillance (InVS) monitors the health status of the population according to all health determinants, including occupational risks.

Since several years, we noted an increased number of unusual workplace health events notified to InVS but also to other stakeholders (occupational medicine consultations, Labour Ministry, etc.).

A network of occupational risk experts at local level was implemented by InVS with the aim to organise the evaluation and the investigation of unusual workplace health events with a prompt and consensual response.

Methods The network is composed of a Labour medical inspector, an occupational physician of the hospital consultation, and two trained epidemiologists of InVS.

The regional office of InVS coordinates the network and informs the experts when an unusual occupational health event is notified to the local health emergency platform.

A prompt telephone meeting based on first information about the event allows the experts to assess the signal, and to come to a consensual decision about its validation, and further investigations.

Results The first network was implemented in 2008 in the region of Aquitaine (South West France). Since, eight other French regions are involved.

Several signals have been analysed, mostly cancers clusters and sick building syndromes. The networks allowed to validate unusual events and to highlight relation with occupational environment. In some cases, the networks proposed some recommendations on prevention and control measures.

With several examples, the authors show how this network works, its added value and the limitations of epidemiological workplace investigations.

Conclusion The result of the experimentation of this network was positive. Demonstrated added value of this network was a rational response leading to better reactivity, accuracy and efficiency when treating the signal, and potential detection of emergent problems.

23 THE BURDEN OF DISEASE FROM OCCUPATIONAL EXPOSURES

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Objectives To present the main results from the GBD2010 study in terms of the burden of disease arising from occupational risk factors.

Methods As part of the GBD 2010 project, the burden of disease from occupational risk factors was estimated. These risk factors and conditions were a range of carcinogens; asthmagens; vapours, gases, dusts and fumes (causing COPD); asbestosis, silicosis and coal workers' pneumoconiosis; ergonomic exposures leading to low back pain; injuries and occupational noise (leading to hearing loss). The primary methodology used involved estimating the population attributable fraction by estimating exposure prevalence and identifying appropriate relative risks. Some other estimation approaches were also used.

Results The key results of the work will be presented and discussed.

Conclusions Work-related exposures result in a substantial burden of ill health in workers. The results identify exposures and exposure settings that should be looked at when prioritising interventions.

24 PRACTICE AND QUALITY OF WORK CAPACITY EVALUATIONS: A SURVEY AMONG SWISS PSYCHIATRISTS

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Objective Psychiatric expertises for determining a person's work capacity are being criticised in Switzerland. Issues of concern are lack of transparency and variation in the judgment on work capacity. The aims of this study were (1) to learn about current practice among Swiss psychiatric experts in evaluating and reporting on work capacity, (2) to compare the practice to professional guidance, and (3) to identify sources for the variation and lack of transparency that may be amenable to improvement.

Methods National online survey among psychiatrists experienced in evaluation of work capacity. We identified issues of concern through the literature and discussion with opinion leaders in psychiatric expertises. We inquired current practice of disability evaluation, aspects of quality, and suggestions for improvement.

Results 129 psychiatrists participated (response rate 31%). The job description, reference for determining work capacity in the current job, was perceived as mandatory information by 90%, but was usually missing or deficient in files (74%). The psychiatrists expressed work capacity as free text plus percentage of work capacity (49%), percentage only (23%), or free text only (14%). 13% used instruments to report on work capacity. Psychiatrists reported diverse interpretations for 'percentage of work capacity'; three interpretations were reported as applicable in equal frequency around 80%. Psychiatrists usually used report forms of the insurers (77%), peer consulting (65%), and process guidelines (51%), but rarely evidence-based information. Current guidelines attach low importance to job descriptions and instruments, and recommend percentage of work capacity' without reflecting the pros and cons.