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**Assessment of Frontline Healthcare Workers Quality of Work Life (QoWL) during the Covid-19 pandemic - A comparative study between China and UK**

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Introduction: The COVID-19 epidemic left high proportion of healthcare workers (HCWs) faced with considerable levels of anxiety, depression, and insomnia. Previous studies have shown excessive workload and inadequate working conditions are two main issues among HCWs. Assessing QoWL has been considered as an important way of understanding how HCWs evaluate their work environment.

Material and Methods: A cross section survey among frontline HCWs from China and UK (n = 345) was undertaken based on seven dimensional QoWL factors: General Well-Being (GWB); Home-Work Interface (HWI); Job & Career Satisfaction (JCS); Control at Work (CAW); Working Conditions (WCS); Stress at Work (SAW); employee engagement (EEN). Cronbach α was used to measure the internal consistency within each domain and to test the exploratory factor structure confirmatory factor analysis (CFA) was applied. Descriptive analysis and One-way ANOVA was performed to examine the association between demographic and job characteristics with QoWL. Ethics clearance was granted by faculty ethics committee.

Results: Acceptable Cronbach α score, and CFA were achieved. Overall, 72.8% of the HCWs confirmed working under pressure during the pandemic and 54.2% felt excessive level of stress associated with workload. Significant differences were found between gender and three dimensions, i.e. EEN (F = 6.51, p = 0.011), GWB (F = 3.91, p =0.049), HWI (F = 5.22, p = 0.023).

Conclusions: The study conclude organisations and related stakeholders should invest in workplace programmes aimed at alleviating stress at work and excessive work issue among frontline HCWs.

**Comparison of job insecurity, quality of life, and work ability between age-matched temporary and permanent workers in the healthcare sector**

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Introduction: Previous studies have addressed the association between non-permanent employment and adverse outcomes in health and quality of life. Aim of this cross-sectional study was to compare job insecurity, quality of life, and work ability between employees in a tertiary hospital, working under permanent or temporary terms.

**Occupational Exposures to Radiofrequency Electromagnetic Fields and the risk of cancer**

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Introduction: Previous cohort and case-control studies have investigated possible associations between occupational exposure to radiofrequency (RF) electromagnetic fields (EMF) and a range of cancers. The findings to date give no consistent evidence of a causal relation between occupational RF EMF exposure and cancer, however previous studies have too many deficiencies to rule out an association and further research is warranted. A key concern across all previous studies is the quality of the RF EMF exposure assessment.

Methods: We plan to overcome previous methodological shortcomings by applying a newly developed job exposure matrix (JEM) to three separate case-control studies investigating glioma, follicular lymphoma and multiple myeloma, respectively. We further plan to investigate the validity of the JEM by conducting personal exposure measurements of workers in the highest exposure occupations identified by the JEM. We will also investigate how the level of occupational RF EMF exposure correlates with the level of risk perception to environmental RF EMF exposure.

Results: Initial results from this long-term project will be presented on the possible risk of occupation RF EMF and cancer. We will also present initial results on the agreement between local measurements and the highest exposure occupations identified by the JEM.