**The research capability and capacity of UK respiratory nurses: A training needs analysis.**

Mrs Emma Ray1,2, Dr Lindsay Welch2, Dr David Culliford3, Dr Carol Kelly4

1. Sovereign Health Network, Fareham, Hants.
2. Faculty of Environmental and life sciences, School of Health Sciences, University of Southampton, Building 67. University Road, Southampton
3. NIHR Applied Research Collaboration Wessex, Faculty of Environmental and Life Sciences, School of Health Sciences, University of Southampton.
4. Respiratory Research Centre, Faculty of Health, Social Care & Medicine, Edge Hill University, Lancashire

**Background**

Respiratory nurses possess specialist skills that support the management and treatment of patients with complex disease. This necessitates skills in evidencing, reporting, and promoting advances in clinical care to improve respiratory patients’ outcomes and enhance efficiency. This requires competence and capability in research and quality improvement.

**Objectives**

The aim of this study was to measure the current research capacity and capability of UK respiratory nurses, highlight specific research training needs and outline deficiencies in the current infrastructure. This study was undertaken to inform the implementation of the Association of Respiratory Nurses (ARNS) research strategy which aims to develop targeted measures to support, enhance and signpost research training and development opportunities for respiratory nurses.

**Method**

A cross-sectional online survey using the validated ‘Research Capacity and Culture Tool’ (RCC) was distributed to UK respiratory nurses via professional respiratory organisations between 1st Sept and 31st Oct 2020.

**Participants**

In total, 62 nurses participated in the study: 9.7% (6) consultant respiratory nurses, 5.5% (4) academics, 3.2% (2) respiratory research nurses, 25.8% (16) primary care respiratory nurses, 22.6% (14) community respiratory specialist nurses, and 27.4% (17) secondary care specialist nurses.

**Results**

Nurses working in junior clinical roles reported little research activity, low research skills and limited support at individual, team, and organisational level, although confidence in finding and reviewing literature. Consultant nurses and academics reported higher research skill and more confidence in study design and delivery. Barriers to research involvement across all role categories included lack of skill and success in gaining ethical approval and funding, lack of time and backfill and conflicting work priorities, nevertheless the majority expressed an interest in developing and being involved in research.

**Conclusions**

Our study showed low self-reported level of research success and skill from nurses in junior clinical roles. Specific funding rounds tailored to respiratory and open to respiratory nurses need to be available. Aligned with access to research support networks and research education to be available so respiratory nurses lead patient-centred research to improve care and outcomes for patients. Structural barriers, such as backfill, need to be addressed by organisations to allow respiratory nurses to be involved with research.