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A negotiation of respiratory risk in the first phase of the Covid-19 pandemic.

During the initial phase of the Covid-19 pandemic, rapid clinical adaptations were required. Policy and guidance on pandemic infection control was scarce and evidence was developing. Countries published differing guidance on infection control and use of Personal Protective Equipment (PPE) (Birgand et al., 2020). This shifting guidance led to clinical uncertainty, particularly in respiratory nursing where aerosol generating procedures (AGP) are commonplace. Local and personal adaptions evolved to minimise infection risk to staff, public and patients in clinical areas (Gov.UK, 2020).

We distributed an e-survey to UK respiratory nurses via professional respiratory societies. Demographic data was collected alongside clinical role, use of PPE and work/life balance.

Just under half of respondents (48.6%,124/255) reported undertaking AGPs; of these most wore eye protection (96.8%, 120/124), face masks (99.2%, 123/124) and gloves (99.2%, 123/124). Only 70% (87/124) wore surgical gowns. Participants were asked for their concerns about their working environment. Over a quarter focused on PPE (72/255, 28.2%) and unsafe working practices (56/255, 22.0%). Free text comments from participants reported concerns about inadequate/poor quality PPE; inconsistent advice and physical toll of working environment in full PPE.

Those working in AGP areas were significantly more worried about a lack of PPE (49/124), 39.5% versus 22/96 (22.9%) compared to non AGP areas (P = 0.001).

Clear guidance on infection control for all health settings is required to ensure clinical safety in future respiratory pandemics. Health systems need to adopt evidenced international policy on PPE and provide need clear and consistent guidance on PPE to healthcare workers.

Figure 1. Respiratory Risk in Covid-19.

	Yes AGP (n=124)		No AGP (n=96)	
Eye protection	120	(96.8%)	54	(56.3%)
Face mask	123	(99.2%)	76	(79.2%)
Apron	117	(94.4%)	74	(77.1%)
Gloves	123	(99.2%)	74	(77.1%)
Hazard suit	10	(8.01%)	0	(0.0%)
Surgical gown	87	(70.2%)	3	(3.1%)
Hair protection	60	(48.4%)	3	(3.1%)
Breathing apparatus	5	(4.0%)	0	(0.0%)
Over shoes	10	(8.1%)	5	(5.2%)
Other	0	(0.0%)	2	(2.1%)
Not applicable	0	(0.0%)	19	(19.8%)

BIRGAND, G., MUTTERS, N. T., OTTER, J., EICHEL, V. M., LEPELLETIER, D., MORGAN, D. J. & LUCET, J.-C. 2020. Analysis of national and international guidelines on respiratory protection equipment for COVID-19 in healthcare settings. *medRxiv*, 2020.04.23.20077230.

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