Perspectives of Interstitial Lung Disease Healthcare Professionals during COVID-19

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Abstract

We examined the impact of COVID-19 on the daily lives, mental wellbeing, training and support needs of healthcare professionals (HCPs) working in interstitial lung disease (ILD), and implications for ILD patient care. We invited ILD HCPs to participate in a quantitative survey, following which respondents (n=49) self-selected to participate in structured telephone interviews (n=9). Worry (43%, n=21) and frustration (43%, n=21) were the most commonly reported emotions by survey respondents. Interviewees reported significant impacts on their daily lives and mental wellbeing. Few of the interviewees had received self-care (n=1, 11%) or mental healthcare training (n=2, 22%). Wellbeing supports were available, but interviewees reported deprioritising self-care. Interviewees reported concern about the impact of appointment cancellations on ILD patients. Virtual clinics were considered useful, but interviewees reported some limitations. COVID-19 profoundly impacted the daily lives and mental wellbeing of ILD HCPs and affected ILD care delivery, with implications for occupational health, HCP training and ILD patient services.

Introduction

Irish Lung Fibrosis Association (ILFA), a patient organisation founded to support patients and families affected by Interstitial Lung Disease (ILD), conceived and supported research which aimed to gain a deeper understanding of the impact of the COVID-19 pandemic on ILD patients, their caregivers and healthcare professionals (HCPs) working in the ILD therapeutic area. The findings and clinical implications of this research as it relates to patients and caregivers will be published separately.¹ Here we focus on research conducted with HCPs.
Specialist care for ILD patients is delivered by respiratory multidisciplinary care teams at 8 clinical centres across Ireland. It is these same teams that provide “frontline” care to patients hospitalised due to COVID-19. This research examined the impact of COVID-19 on the daily lives, mental wellbeing and future outlook and training and support needs of ILD HCPs, as well as the consequences for ILD patient care.

**Methods**

HCPs working in the field of ILD who are registered with ILFA were invited to participate in an online survey via an email from ILFA to its stakeholders and postings on ILFA’s social media. Those who had completed the survey could self-select to participate in an in-depth structured telephone interview. Interviews were conducted by independent market research professionals and subsequently transcribed. The full survey questionnaire and interview guide used for this research can be accessed via the ILFA website.

**Results**

A total of 49 HCPs participated in the online survey, which was conducted from April 16th to May 5th, 2020. Nine HCPs, comprising 3 respiratory nurses, 4 doctors and 2 allied healthcare professionals, participated in structured in-depth telephone interviews, conducted from April 28th to May 20th, 2020.

**Worry in Relation to COVID-19**

There was a high degree of variability in HCPs worry in relation to COVID-19. On a scale of 1 (not at all worried) to 10 (extremely worried) 6% (n =3) of HCPs were extremely worried. The average worry rating was 6.5. The most common sources of worry in relation to COVID-19 were the health of family and friends (65%, n=32, of respondents indicated “quite a lot” or a “great deal” of worry), contracting COVID-19 (47%, n=23) and the economy (45%, n=22).

**Impact on Daily Life**

Interviews indicated that COVID-19 caused significant upheaval to HCP’s daily lives, including longer working hours, changes to work schedule and/or roles. It was evident that many of these work practice changes were achieved because of the goodwill and personal commitment of healthcare staff. HCPs reported taking extensive measures to limit their exposure to others, including physical distancing from other household members. Less than half (41%, n=20) of respondents were sleeping well and 39% (n=19) reported worse sleep quality since the COVID-19 situation.
Emotional Wellbeing, Self-Care and Available Supports

Worry (43%, n=21) and frustration (43%, n=21) were the most commonly reported emotions experienced “a lot” on the day preceding the survey (figure 1).

HCPs interviewed reported multiple stresses due to COVID-19 and noted similar experiences of colleagues. These included managing significant uncertainty, juggling extreme work schedules with family responsibilities, fear of contracting COVID-19 and concerns for their existing (non-COVID) patients. Childcare was a significant practical issue and was identified as an unmet need. It was evident that the emotional demands of providing care to COVID-19 patients and their families were significant: “I’m not prepared for this at all. It should have come with a warning that this is going to have an emotional impact…. with the no visiting and all that kind of stuff, I found that really, really hard” and “Healthcare workers will be affected mentally. Nurses on my ward cry every day because people are so sick, it’s so stressful”.

HCPs interviewed were aware of healthcare staff supports for mental wellbeing provided by the Health Service Executive, including a stress and resilience course and an employee assistance programme. A number indicated that they did not have the time to avail of such support. Just one HCP had received advice on self-care as part of their professional training. Others were aware self-care training was available but admitted it was not a priority: “I think we are very bad at that. Usually self-care is at the bottom of the pyramid of things that need to be done.” Others found the best support came from colleagues.
Training and Support Requirements

Two of the nine interviewees had received training on providing mental healthcare. There were suggestions for training on stress management and coping strategies, including cognitive behavioural therapy, both for self-care and patient care. There were also telemedicine training requirements, including technology use and telephone triaging.

With regard to support provided by ILFA, more communication, information or online meetings (41%, n=20), support to advance telemonitoring/telehealth (12%, 6) and advocating and campaigning for patients (8%, n=4) were the three most commonly identified areas of need.

Impact of COVID-19 on Healthcare Delivery and Use of Telemedicine for ILD Patients

Interviewees were concerned about the impact of cancelled appointments and tests on ILD patients. Some found virtual clinics useful for continuity of care but also noted limitations: “Body language, facial expression, these are all very subtle cues that we pick up the traits of understanding a situation.” There were reservations about the use of telemedicine in certain cohorts including elderly patients, new patients, those unfamiliar with technology and for end-of-life conversations. This was mainly due to limitations of telephone communication, although it was recognised this could be improved through use of video consultations. For other patients, HCPs cited the significant advantages of virtual clinics in patient convenience, maintaining patient routines, avoiding unnecessary travel, and better use of resources. It was largely considered that virtual and face-to-face clinics could be complementary and may co-exist in the future: “It will never absolutely replace a clinic appointment and the dynamic is different……. But a proportion of what I would do with an outpatient clinic, it could certainly be done remotely.”

ILFA Advocacy for ILD Patients

In relation to ILFA’s advocacy work, HCPs prioritised advocating for a clinical care pathway for lung fibrosis (average importance ranking of 2.3 on a 5-point scale, where 1 = most important) over access or awareness issues.

Long Term Implications of COVID-19

A number of HCPs expressed concern for the longer-term impacts on their mental health and that of colleagues: “Staff may have post-traumatic stress disorder” and “There should be a debriefing or occupational health course put in place”. Others noted the long-term health implications for COVID and non COVID patients, changes in healthcare delivery and societal impacts on mental health and children’s education.
**Discussion**

This research indicates that providing care to patients during the COVID-19 pandemic had profound effects on HCPs’ daily lives and emotional wellbeing. This is consistent with findings from a meta-analysis which showed that healthcare staff delivering frontline patient care in emerging virus outbreaks, including COVID-19, had greater levels of acute and post-traumatic stress and psychological distress than controls.\(^4\) Our research revealed unmet needs for HCPs in the frontline of the COVID-19 patient care, including practical supports (e.g. childcare) and mental health training. Whilst HCPs were aware of available psychological supports, the tendency was to prioritise patient care over self-care. These findings have significant implications for occupational health services and HCP training. Based on findings from other pandemics, it has been suggested HCP psychological training should be based on models of adaptation and resilience, as a way of “future proofing” staff to cope with such situations as they arise.\(^5,6\)

COVID-19 impacted HCPs’ ability to provide ILD patient care. Whilst telemedicine was considered to have benefits in enabling continuity of care there were concerns regarding its feasibility for certain ILD patient cohorts, predominantly due to limitations of telephone versus face-to-face communication. Investment in video consultation technology, with appropriate training for both HCPs and patients, may improve the feasibility of virtual clinics for more ILD patient cohorts.\(^7\) Although studies are needed on the long-term effects of replacing face-to-face consultations\(^8\), data indicates telemedicine is generally well accepted by patients with chronic respiratory conditions, including ILD.\(^1,8-12\) The use of home spirometry to enable continuity of ILD patient care was not reported in this research, but available evidence shows this approach is both feasible and valuable.\(^10-14\)

Whilst some studies have found significant variability with home reported spirometry measures\(^15\), it has been suggested this is due to insufficient patient instruction and/or technical problems, masked by blinding in trial settings.\(^8\) Other studies have shown good correlation with clinic spirometry, particularly when attention is given to technique, with home spirometry associated with improvements in patient reported well-being and better predictability of disease progression than less regular clinic measurement.\(^10-14\) With UK survey data showing almost 50% of patients with idiopathic pulmonary fibrosis believe the cancellation of appointments due to COVID-19 has impacted their health\(^16\), virtual care may be more favourably received than HCPs expect.

ILFA wish to acknowledge the professional dedication and personal commitment of HCPs working with ILD patients during this unprecedented crisis. ILFA will continue to provide supports and training to HCPs so they may provide the best possible care for ILD patients and their families.

**Declaration of Conflicts of Interest:**
The authors have no conflicts of interest to declare.
References:


