The COVID-19 pandemic has put a strain on the National Health Service secondary to the unprecedented number of acute admissions requiring high dependency (HDU) and intensive care (ITU) support due to respiratory failure and sequela of hypercoagulability. The long-term complications of COVID-19 pneumonia are also beginning to emerge with growing clinical experience directing us to focus on integrating disease severity with the likelihood of long-term multiorgan complications alongside the psychosocial holistic care support requirements in these patients.1-3

We describe our multidisciplinary (MDT) observational experience at Gloucestershire Hospitals NHS Foundation Trust of delivering personalised holistic multifunctional interventions for all patients discharged from an HDUT/ITU using a unified follow up pathway to address multi-organ complications and psychological trauma by setting rehabilitation goals and GP action plan to improve long term outcome of these patients.

METHODS

The MDT follow up consisted of an interprofessional carousal with review from intensive care, respiratory, therapy, psychology, pharmacy, dietician and community well-being colleagues using a unified proforma adapted to address individual patient needs.

Table 1. Multi-disciplinary Follow up Clinic Findings in COVID-19

<table>
<thead>
<tr>
<th>Persistent Anosmia</th>
<th>Dry Mouth</th>
<th>Visual Concerns</th>
<th>Social Issues</th>
<th>Renal dysfunction</th>
<th>Sleep disturbance</th>
<th>Neuropathic pain/ Brachial Plexus injury/</th>
<th>Ongoing Memory</th>
</tr>
</thead>
<tbody>
<tr>
<td>38% (n=14)</td>
<td>57% (n=21)</td>
<td>73% (n=27)</td>
<td>76% (n=28)</td>
<td>78% (n=29)</td>
<td>78% (n=29)</td>
<td>78% (n=29)</td>
<td>78% (n=29)</td>
</tr>
</tbody>
</table>

RESULTS

The proportion of ongoing biopsychosocial complications identified from the MDT follow up of COVID-19 patients are summarised (Image 2 - Table 1).

Onward referrals for subspecialist input were made from clinic and action plans relayed to primary care in all patients.

DISCUSSION AND RECOMMENDATIONS

Long term complications of COVID-19 may cause substantial morbidity. Our observations demonstrate a range of persistent clinical sequelae on follow up. Fatigue and breathlessness were expected but the persistent decline in functional status with impaired exercise tolerance, mental health decline with poor memory and concentration despite normal cognitive assessment scores alongside connotations associated with hair loss, visual disturbance and persistent anosmia were less likely to be anticipated. Further studies are clearly required to evaluate the long-term effects of COVID-19 in patients.

We advocate a multidisciplinary follow up approach to enhance the rehabilitation and outcomes in patients with severe COVID-19 previously treated in a HDUT/ITU setting. This will allow us to better address the potential life limiting complications by implementing personalised holistic multicomponent interventions including social prescribing to deliver high quality care for patients and their families. Additionally failing to address COVID-19 related complications may incur long term costs for the health care. These can be avoided by adopting a pragmatic perspective using individualised action plans where patients making a full recovery are not overinvestigated whilst ensuring those requiring additional support are adequately managed in both primary and secondary care.

REFERENCES