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SHEFFIELD WOMEN IN MEDICINE

A newsletter highlighting the work of amazing women during the COVID-19 pandemic

Welcome to our first newsletter!

In this issue:

- Page 1 Introduction by Dr Alenka Brooks
- Page 2 Sheffield Helping Hands by Leah Lam
- Page 3 Q&A with Dr Danny Bryden
- Page 4 Track & Trace By Dr Liz Dunningham
- Page 5 Locked into Lockdown by Dr Katy Owen
- Page 6 Lessons from COVID-19 with Dr Judith Hudman

**DO YOU KNOW
SOMEONE WHOSE
HARD WORK IS IN
NEED OF
RECOGNITION?**

Email us with ideas or
submissions for the next
issue:
swim@sheffield.ac.uk



Welcome to Sheffield Women In Medicine's Newsletter

An Introduction from SWiM's Dr Alenka Brooks

COVID-19 has changed so much of our lives both at home and at work. Our world as we knew it has changed, perhaps forever. Our experiences will shape a generation and no one can predict what the new normal really will look like. Yet despite the adversity, we see locally that silver linings are plentiful. New voices have been heard, new leaders' born, new ways of providing care tested and purpose refocused.

Due to COVID-19 we were forced to cancel our year of intimate workshops featuring local inspirational nurses and midwives as part of the international celebration of the year of the Nurse led by the WHO. Sadly, it seems unlikely our hugely popular networking events will be able to resume in 2020. Yet we want to provide powerful local stories with bags of inspiration to remind us how to support each other and achieve all that we want. SWiM's silver lining in the new normal is to test a regular newsletter to bring these stories to your inbox, and hope that you will share your stories with us to amplify the voices and actions of the women in healthcare around our region.

We will all be following in Jacinda Arden's footsteps doing "a little dance" when COVID-19 departs from our lives, even temporarily. Whilst in the UK we live and work around so much uncertainty, we must still remember to dance together to celebrate success. Our stories featured in our first SWiM newsletter highlight that exceptional leadership is found all around us, and is at its best when both compassionate and strong.

"One of the criticisms I've faced over the years is that I'm not aggressive enough or assertive enough, or maybe somehow, because I'm empathetic, I'm weak. I totally rebel against that. I refuse to believe that you cannot be both compassionate and strong."
Jacinda Arder

Sheffield Helping Hands

Third year medical student Leah Lam talks about her experience of setting up the student volunteering network with fellow student Lucy Pinder

COVID-19 has certainly been a challenging and completely new experience for me. Lucy and I were elected as the MedSoc Welfare team and only a week later, all clinical placements had been suspended and I found myself self isolating due to my house mate having symptoms. Medsoc felt that it was really important to give something back and set up a volunteering scheme and as welfare reps, Lucy and I were asked to take on this role.

On the 18th of March the Sheffield helping hands scheme was born. The volunteering requests and volunteers signing up took off so much faster than we had thought it would, within the space of a couple of days we were getting so many requests, the assignments took us all day. We realised our little uncomplicated spreadsheet was not going to suffice. We had to completely re-think how we would organise our data and this took a huge amount of work.

Fast forward to now, and we are still spending at least 2 hours a day co-ordinating volunteers. We have been absolutely astounded by the willingness of students to volunteer, at present we have over 180 students working in assignments including playing a vital role in Sheffield's COVID vaccine trial.

"We have been absolutely astounded by the willingness of students to volunteer"

Whilst overall the scheme has been a huge success and we really do believe it has helped the community and struggling healthcare systems, it has not always been easy. Lucy and I have really had to build our logistical skills at a fast pace in order to cope with the demand for volunteers and make sure everyone was getting a fair chance at roles. The pandemic was also changing so quickly it meant we lost volunteers to self isolation or those returning home to their families.

We also had to liaise with all of the hospitals affiliated with the Medical School, as baby Medical Students at first we felt really out of our depth on huge video calls working with senior clinicians. Co-ordinating the volunteering scheme has been unbelievably rewarding for both of us, and we really are passionate about helping as many people as we can and it's been amazing to see how the volunteers we have assigned have stepped up.

The whole process has also been a huge learning curve for both of us, and the last thing we expected to be doing. I also did want to take this opportunity to thank every single volunteer who has worked with us, Lucy and I would've had nothing to do had it not been for the overwhelming response to help.

It has really made us appreciate how amazing people can be in times like this and what happens when our medical community comes together.



Intensive Care: Preparing for the Pandemic

Sheffield Intensive Care Consultant Danny Bryden was involved in Covid planning at the national level in her role as Vice Dean of the Faculty of Intensive Care Medicine. She combined this with sessions running the Covid Intensive Care units on both STH sites. We caught up with her.

How were you involved in Covid planning?

I was involved in all the central planning for critical care services across the UK. This meant working with NICE to produce clinical guidance, other Royal Colleges to produce toolkits and training and writing guidance documents for approval and dissemination by NHS England. It also meant liaising with people who had key roles in the other home nations to give advice on behalf of the Faculty. I also had to do a lot of media (TV, radio and print press), particularly around the time the Prime Minister was admitted to Critical Care. The Dean and I gave over 50 interviews in one 24 hour period.

How did it work practically?

It was an awful lot of work that needed to be done very quickly to a high standard. Everyone worked 7 day weeks in addition to any clinical duties they had in that time. Paradoxically although it was such hard work, it was also extremely productive and co-operative as everyone was very keen to share knowledge and expertise.

What skills did you draw on for this?

Most of my non clinical time was spent in meetings, either chairing or in a representative capacity, writing documents and presenting an opinion. They're generic skills using my ICM knowledge and contacts to apply it to the unknown situation that was Covid.

From my own experiences working on the wards and ITU units in Sheffield, it felt like we were really well prepared and our mortality rate was lower than the national rate. What do you think might have contributed to this?

STH Critical Care is a really high quality service, and a huge amount of effort was put in across the Trust to organise our response to Covid. We have had fantastic support from some many groups within the hospital as well as within the Critical Care team. Our ICU mortality from Covid is much lower than the national average, which will be due in part to the efforts put in by so many people to prevent and detect patient deterioration as well as deliver the best quality care under challenging circumstances.

What will you remember most?

Personally, the lack of sleep. At STH it was the way all the people I work with on ICU just got on with it and contributed what they could in really difficult circumstances.

Follow Dr Bryden on twitter
[@dannythebaker](https://twitter.com/dannythebaker)

Track & Trace

Written by Dr Liz Dunningham

A group of retired doctors from Sheffield has attracted national media and local government attention with its own track and trace pilot of Coronavirus patients. The group has now published its findings which outline some of the difficulties of contact tracing.

The idea was conceived during a Zoom call in mid March between Joan Miller, a retired public health consultant, and some like minded friends. Shocked at government's inaction on contract tracing, a cornerstone of public health, they realised they could simply launch their own project to see if it was feasible. Along the way, they have garnered more support. "I think that people are listening now, and are starting to speakout," said Dr Miller, "It is so shocking that GPs don't get all the test results and Public Health has not got all the geographical data."

Within a week they had remotely trained six volunteers they had a local GP on board who agreed to refer consenting patients. The volunteers offered advice and practical help about isolating, and also found out who their contacts have been over the past week.

The report on the study has been published and covered in the BMJ, the BBC, Channel 4 News among others. It details the time spent on each case, and the perseverance of the volunteers, who even posted letters to participants when they could not get through to on the phone. The report raised considerations any track and trace project should take into account. They realise they had little authority to force contacts to isolate but even so, employers who perhaps should have listened did not. One care home contacted by volunteers refused to participate. 13 patients took part and 58 contacts were traced, one of whom became ill and became an index case.

It's a great achievement for the group and Dr Miller, who has ME, "I am proud that I did something in the face of the UK stopping testing and contact tracing on the 12 March, and that I got to use my public health knowledge. It has been a real team effort and a stupendous team at that. It has been frustrating at times, mainly because of my ME, but also it's been interesting to see that my brain can work very fast at times and I think that might be rage. I have learned to manage over the years using prioritisation. With this contact tracing I think it's been extreme prioritisation."

The group has been speaking to Sheffield City Council about its initial findings and will continue its work, with a self-referral project in the Calder Valley now up and running.



Community Contact Tracers

<https://www.communitycontacttracers.com/>



Locked In to Lockdown: Learning and Wellbeing From a Junior Clinical Academic's Perspective



We all gathered around my laptop screen on Monday 16th of March to watch the briefing. I was sitting in the Medical Education office at Sheffield Medical School and my colleagues and I all listened in awe as Boris outlined the plan: “we must all work from home”, “don’t go to pubs or clubs”, “stop all contact with others outside your household”. I looked around at everyone sadly, and wondered if I would remember this moment for years to come.

After setting up a workspace in the spare room the following day, the reality dawned. I was desperately sad that all my face-to-face teaching had been cancelled and the university closed. As a junior teaching fellow that meant my core job responsibilities were no more: no anatomy demonstrating, no clinical skills, no seminar groups, no simulation. I was guiltily torn between the necessity of lockdown, and my usual *raison d’être* grinding to a sudden halt.

An email landed in my inbox on the second day of lockdown: “Fancy doing some more mindfulness sessions, but online...?”. As a long-held passion of mine, I had previously run staff mindfulness sessions and been planning to offer sessions to students. Thus! I began to run online student mindfulness sessions, and had my first taste of virtual teaching. I stressed to them that I wasn’t formally qualified and this was an informal venture based on my ten years of experience, but no-one minded. Both the students and I needed the contact of others in a safe space to find calm, and I still regularly meet with an enthusiastic following to do different exercises together. #Selfcare and all that.

Between mindfulness sessions at the beginning of lockdown, I admit that I was grumpy and restless; all my get-up-and-go was confined within the four walls of my flat. My line manager suggested I write a “useful resources” sheet for the interim FY1 starters (FiY1s), and such was my unchanneled energy that within two weeks it was a 22-page document on preparedness for practice. The early graduates were appreciative, and I was gratified to have had the time to write down all that I wish I had known before starting as a doctor. There were some positive sides to this situation after all...

As lockdown has set in, rearranged curricula and requirement for online facilitation mean I have recently found a new normal, bouncing between facilitating seminars from first to fourth years, with groups ranging from chatty to shy, interactive to lonely monologues to my laptop screen. My usual wildly enthusiastic manner that I employ during teaching has hit a new level, as I attempt to channel my interest about the relevant topics at (sometimes) a blank screen. The next project is working out how the students can learn clinical examinations and prescribing from the comfort of their own homes...

Between my own highs and lows of lockdown, grasping teaching opportunities with both hands has kept me positive, and I can only thank those kind seniors looking out for me and sending things my way. We have all had to grow and adapt, and hope that our tech skills don’t embarrassingly fail us in front of our captive online audiences. Who knows what new normal will rise from the ashes of face-to-face teaching in Spring 2020? Stubborn optimism has got me this far, so onwards and upwards I say!*

*But still from home please.

By Dr Katy Owen, Teaching Fellow in the Academic Unit of Medical Education at the University of Sheffield, 2019-20, BMBS, FHEA

“I was gratified to have time to write down all that I wish I had known before starting as a doctor”

Lessons from the COVID-19 Pandemic so far

By Dr Judith Hudman

It's difficult to believe that it is only 3 months since the WHO declared COVID-19 a pandemic. We have now moved from a state of waiting to see patients with COVID-19 first hand to building clinical experience and refining our systems. I was asked to review what Respiratory Medicine have learnt so far through responding to the following questions.

What are the signs of severe COVID pneumonia?

COVID-19 positive patients presenting with breathlessness can be considered as having disease of at least moderate severity.

Severe illness most commonly affects adults with underlying medical conditions or more advanced age. Signs that suggest a patient has severe COVID pneumonia include:

- Oxygen sats \leq 93% on air
- RR $>$ 30/min
- More than 50% lung parenchyma involved on Chest X-ray

Although COVID-19 was initially thought to be a respiratory predominant illness it has become clear that there is multi-organ involvement. Other features associated with severe disease include:

- DDimer $>$ 1000ug/L
- CRP $>$ 100mg/L
- Elevated Troponin
- Elevated Ferritin - seen in the 'cytokine storm'
- Progressively elevated liver enzymes
- Severe lymphopenia
- Acute kidney injury

What is the pattern of respiratory failure in COVID and how should this be managed?

In the acute phase patients present with:

- Marked hypoxaemia, in some cases without the patient exhibiting high levels of breathlessness.
- Most patients develop hypoxaemic respiratory failure (T1RF):
 - Monitor the trend in oxygen saturation.
 - Arterial blood gases are useful in patients at risk of hypercapnic respiratory failure (T2RF) eg a patient with COPD, but outside of these 'at risk' groups may not offer additional useful information above oxygen saturation monitoring.
- Escalation and resuscitation status should be defined on admission allowing discussion with patients and their family wherever possible. This also informs decisions about frequency of nursing observations and detailed criteria for triggering medical review.
- Early detection of deterioration is important.
 - Admission to critical care and intubation should not be delayed if patients are appropriate and require this.
 - Of note, in the early stages of the pandemic there was the belief that the use of high flow oxygen and CPAP was inappropriate and through delays to intubation may have resulted in increased mortality. However, as the pandemic has unfolded this belief has lost traction with CPAP being considered a reasonable intervention in an attempt to avoid intubation. High mortality is seen in those requiring intubation.

Continued on next page

- For those managed on medical wards:
 - Positioning awake patients prone for as long as tolerated may improve oxygenation by optimising ventilation-perfusion matching. If full prone position is not tolerated, three-quarters prone or side lying can be employed.
 - CPAP can be used in designated areas with appropriate cohorting and PPE for aerosol generating procedures.

Do you accept lower target saturations for COVID-19 patients acutely or during recovery phase?

- Guidelines suggest that initial management should include standard oxygen saturation targets depending on whether a patient has type 1 or 2 respiratory failure.
- To facilitate weaning in those with T1RF sats targets may be reduced on an individual basis on the advice of senior clinicians.
- When preparing for the predicted surge in hospital admissions the use of lower target saturations was discussed in order to preserve hospital oxygen supplies but this has been avoided by flattening of the curve and is considered an unlikely eventuality.

Are there specific treatments for COVID-19 pneumonia?

- The RECOVERY trial has just published that dexamethasone reduced 28-day mortality among those hospitalised receiving oxygen or mechanical ventilation.
- Remdesivir is available via an early access to medicine scheme and may improve outcomes in severe COVID-19 pneumonia.

When to give antibiotics for bacterial pneumonia?

- COVID-19 pneumonia and associated ARDS may cause clinical worsening in the absence of superadded bacterial infection.
- A low procalcitonin is helpful as this argues against bacterial superinfection.
- Bacterial pneumonia should be investigated and managed as per standard local microbiology policies.

What have we learnt about venous thromboembolism (VTE) in COVID-19?

There is an increased prevalence of VTE in COVID-19 especially in more severe COVID-19. PEs range from proximal PEs likely to be true emboli to more distal, small vessel microthrombi postulated to relate to in-situ thrombosis.

Prophylaxis

- At STH, enhanced VTE prophylaxis is considered for patients requiring critical care until medically fit for discharge.
- Prescribe 1 month of VTE prophylaxis at discharge for any patients with COVID-19 considered high risk of VTE if bleeding risk allows.
- Any patient taking warfarin or DOAC for a previous VTE on admission to hospital with COVID-19 should be switched to therapeutic dose LMWH until discharge.

Diagnosis

- A low threshold for suspecting VTE is required in COVID-19
- The utility of non-specific markers such as an elevated d-dimer and right heart strain on ECHO in the diagnosis of VTE is unclear.
- Investigation for VTE may be more difficult in patients with COVID-19 (eg if CPAP dependent unable to attend for CTPA) Therefore, although every effort should be made to radiologically confirm suspected PE, in some cases a presumptive diagnosis of PE may have to be made after MDT discussion.

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How can we support patients after discharge?

Early supported discharge for patients with ongoing oxygen requirements to allow them to recover at home while weaning from oxygen

Structured follow up as advised by national guidelines

Pulmonary rehabilitation services are challenged to work differently due to social distancing but will play a crucial role in rehabilitating patients, especially after long admissions.

In addition to usual clinical pathways the community respiratory mental health team have implemented a self-referral hotline.

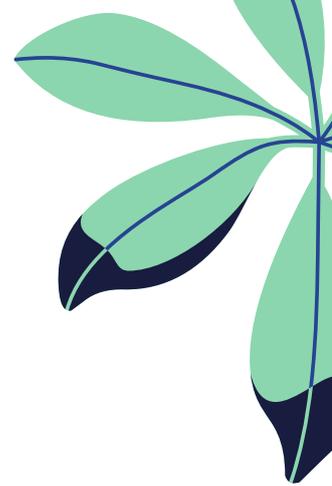
Conclusions

Throughout the COVID-19 pandemic, there have been many challenges posed to our clinical systems, ranging from co-ordinating PPE to recognising that standard assessment tools such as Well's score are not validated in COVID-19. There have been many new skills to master against an ever changing and uncertain landscape. Our primary focus has been to attempt to define our clinical protocols in a disease where knowledge about best treatment is limited. In the absence of robust evidence, whilst it is crucial that we learn lessons from bedside observation, this must be carefully balanced against abandoning years of established evidenced based practice because this is a new disease entity behaving differently. We await with interest the findings of international patient registries and high quality clinical trials to adequately assess therapeutic options and optimal strategies for management of patients with COVID-19 infection.



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An enormous thank you is owed to the contributors of this issue for giving up their limited time to write and reflect and for allowing us to share their experiences.

Thank you!

Edited by Yasmin Ghafor
& Dr Liz Dunningham

With assistance from the
SWiM committee &
SWiM Students



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