

NDA JOURNAL 2020

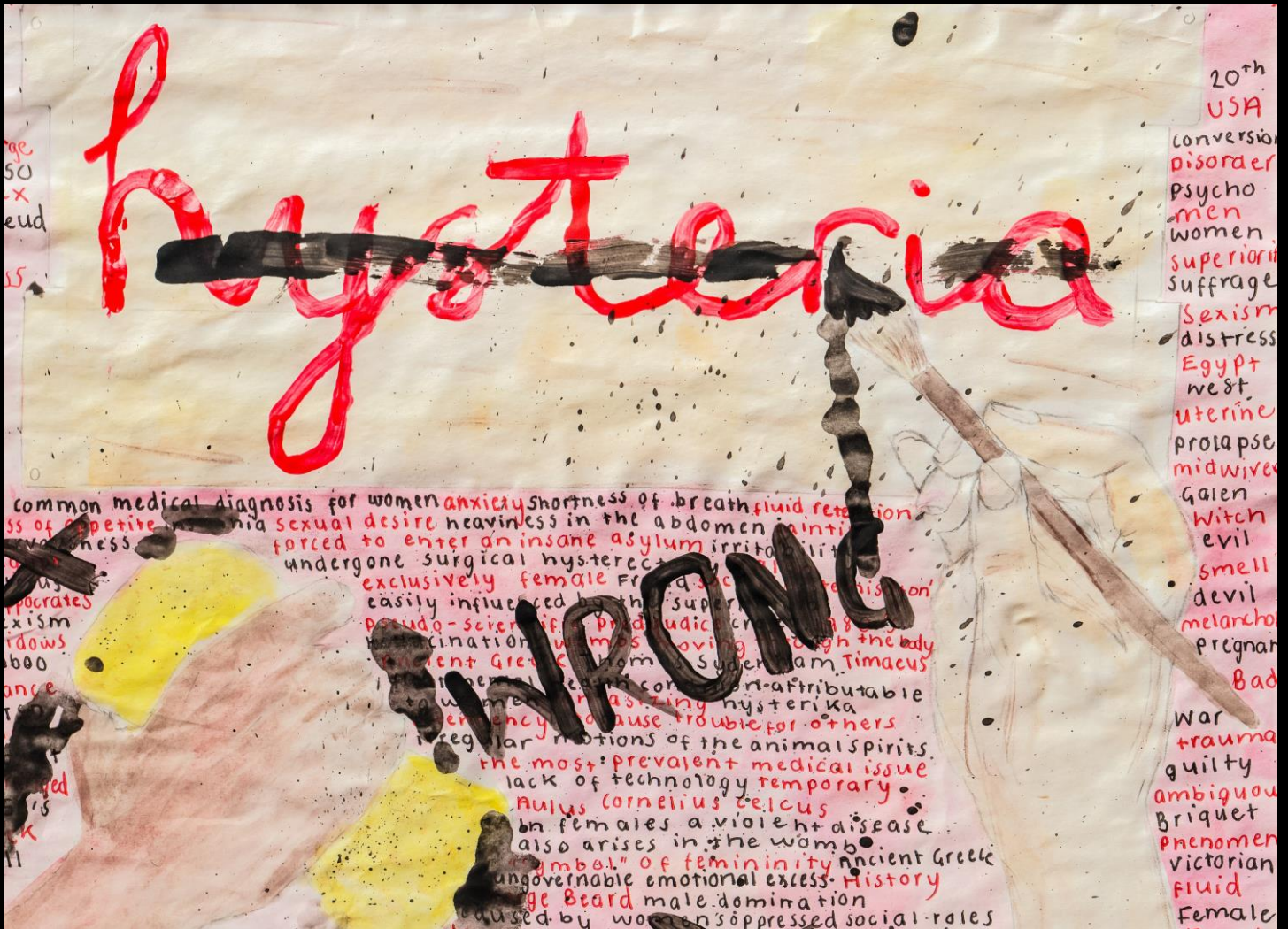
COVID-19 SPECIAL



N.D.A (U.K.)
Established 1985



UNDER 16's ART COMPETITION 2020 WINNER
'MEDICAL BREAKTHROUGHS'



The medical breakthrough I have chosen is the end of 'Hysteria' and advent for Women's' Health.

Female hysteria was once a common diagnosis to degrade women and comply with the stereotype that women are inferior. Symptoms included irritability, insomnia, shortness of breath etc, now understood to be related to mental or physical conditions.

This often led to women being refused positions of power due to them being deemed mentally unstable and incapable to perform as well as men. However research disproving hysteria lead to an increase in women entering the medical profession. Finally, in the 1980s, the term was completely abandoned.

RIA SHARMA, AGED 15

Runner Up: Kajol Aryal (featured on page 51)



WORDS FROM THE EDITOR

MISS DONNA SHRESTHA

Since the first case of COVID-19 in the UK on January 31st 2020 and Matt Hancock announced the beginning of Lockdown on March 16th, the UK is now striving to return to an adjusted reality.

In some ways, this year has been easier than the last in putting the journal together as we all have so many stories to tell. COVID-19 has challenged us in so many ways and I hope the journal serves to reflect this unique time in our lives. I have sought to showcase perspectives from a wide range of areas including Psychiatry, Renal Transplant, Paediatrics and General Practice to Community Pharmacy and Teaching. We are blessed to have such a diverse range of skills and insights from members of our NDA family.

Sadly, 66 Nepalis living in the UK have passed away due to COVID-19 and an estimated 1,558 have succumbed to the infection (NRNA report, June 2020). Dr Sanjeeb Nepali's General Secretary's report describes the NDA's efforts to support the wider Nepali community.

The topic of COVID-19 related deaths in the BAME population and healthcare workers has raised many questions over the last few months. It is unclear how many doctors of Nepali origin are registered in the UK, however an informal verbal report from a GMC representative had estimated around 300 in 2015. As far as we are aware, there has been no deaths of healthcare workers of Nepali origin.

It has been good to have engagement from the junior doctors this year. Our junior doctors from Nepal, who have been stuck in the UK due to cancellations of flights and exams have amongst other Nepali doctors and medical students put together an 'A-Z on Infectious Diseases'. This is a new feature for the Journal this year. Special thanks to Dr Chandani Roka Magar for co-ordinating this.

Thank you to the Junior doctors who have shared their COVID-19 experiences with us at work, which I am sure will be relevant and of interest to our younger members and seniors alike.

This year's winner of the Under 16's Art Competition on the topic of 'Medical Breakthroughs' is Ria Sharma whose artwork is featured in the earlier page. Our Runner Up is Kajol Aryal (Featured on the back page). Thank you to all the entrants.

Thank you also to Mr Kamal Aryal and my father, Mr Badri Shrestha for their editorial assistance and words of encouragement.

Finally, thank you to everyone who has taken the time to write and share their experiences with us all – there would be no journal without your submissions.

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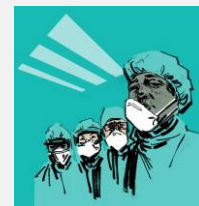
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Editorial Policy

The NDA Journal is published annually from the material provided by doctors, their family members and friends in the UK and abroad.

Opinion and views expressed in the published articles in the Journal are not necessarily the views of the Nepalese Doctors Association (UK)



MESSAGE FROM THE CHAIRMAN

DR RAMESH KHOJU

Namaste!

COVID 19 has changed our way of thinking, socialising and behaving. It's brought a lot of opportunities and challenges. I would like to thank all our frontline NDA members for your hard work in this period and wish you all good health, especially for senior and vulnerable members who have been staying safe.

Unfortunately, we had to cancel our annual events such as the Health Education and Awareness Programme, annual charity dinner etc. However, NDAUK took the opportunity to work with the Nepalese community in the UK by providing telephone advice, translating NHS advice in Nepali language on COVID 19 and engaging in online interactive conversations, including zoom meetings and broadcasting through Facebook Live. I would like to thank all NDAUK volunteers who tirelessly worked remotely. Our fortnightly zoom webinars united and brought us closer together, by sharing frontline experience with each other and colleagues in Nepal. We also engaged with young Nepalese doctors, preparing for their PLAB 2 exam, stranded in the UK during this period due to exam cancellation. We helped them financially, morally and with exam preparation by organising career session webinar and weekly practice sessions via zoom. We have also participated in meetings with fellow Nepalese health workers across the globe and stay connected, in sharing experience and supporting Nepalese people in fighting with COVID 19. During this period we also created a close link with BAPIO while supporting stranded doctors regarding lobbying for re-sitting of the PLAB 2 (GMC) and extension of their visitor visa (Home Office).

Thanks to Donna, Shekhar and Prajwol the NDAUK website took a new look which has been very helpful in disseminating a lot of information and updates on NDA activities, COVID-19 and membership benefits.

Through the hard work of NDAUK charity trustees and executive committee members, we were successful in our application to the charity commission to add the additional objective of advancing the education of healthcare workers. We also would like to request all members to contribute towards NDA online fund raising to support oxygen concentrators in rural health centres in Nepal.

Despite not being able to hold our 35th AGM in Durham, we hope to see all of you at our virtual AGM on 25th of July 2020. We also hope to see you in a few months time in charity fundraising dinner in Norwich.

Finally, I would like to thank once again all NDAUK and executive committee members, working tirelessly in this hard time and wish you all stay safe.



TREASURER'S REPORT

DR K P KARN

The income for our association comes from subscription paid by our members; some us are life members whereas some pay annually. Subscription paid as life membership has been deposited as fixed account in Santander Bank some time ago which earns a small amount of interest annually. Annual membership money coming to the membership account with Barclays, is used to fund our activities around UK. We haven't had sponsorship from the pharmaceutical industry, hence funds in this account is relatively low and will benefit from collectively making an effort to improve our membership. Finances of our AGM is managed through this account as well.

Separate from these accounts, we have the NDA Charity account with Barclays. Income is generated into this account from various fund raising events and expense goes only towards charitable activities in Nepal, according to our objectives in constitution set out with charity commission in 2016 and amended on 31 May 2020. Income and expenditure of this account has to be kept completely separate from the membership account. This account is up to date. Details have been sent to our accountant for reporting and submission to HMRC.

There was a charity dinner to raise funds, planned for April this year but due to COVID-19, it had to be postponed and is planned for reschedule nearer the end of this year. This account also needs increase in its funding for NDA to be able to do charitable activities in Nepal. We are in the process of forging relationship with possible future donors. Other ways to improve money to this account will be from voluntary donation from NDA members independent of the annual membership subscription. Some of you have already setup standing order for this, for which we are very grateful. Some of you have completed standing order on paper for this purpose last year. Unfortunately, we were not able to submit these forms to bank in time, hence bank was not able to set up standing order or send me a new mandate on form on NDA website (<https://www.ndauk.org.uk/nda-uk-charity-wing>) Please accept my sincere apology for this error. May I urge you to check and if not done, complete it on line. Every pound you donate, all is going to be used wisely to fund good work in Nepal.

NDA UK EXECUTIVE COMMITTEE 2019-2021

Chairman
Dr Ramesh Khoju



Vice Chairman
Mr Kamal Aryal



Secretary
Dr Sanjeeb Nepali



Joint Secretary
Mrs Donna Shrestha



Treasurer
Dr Kausalendra Karn



Immediate Past Chairperson
Dr Shabin Joshi



Member
Mr Prajwal Ghimire



Member
Dr Sudarshan Gurung



Member
Dr Sunil Sah



Member
Dr Manohar Budathoki



Member
Mr Shekhar Shrestha



Co-opt Member
Dr Chandani Roka Magar



Co-opt Member
Dr Anil Shrestha





GENERAL SECRETARY'S REPORT 2019-2020

DR SANJEEB NEPALI

Dear colleagues, respected senior members, friends and NDA family,

It is a great privilege for me to present the NDAUK's General Secretary's report in my first year in this role. I have been on the executive committee now for almost five years, the previous three and half years as the treasurer.

I'm delighted to say that I have been blessed and surrounded by my hard working and very talented colleagues within the executive committee who have continuously supported me and made my task so much easier and enjoyable.

Well what a year we've had, especially since March with the seemingly never ending Covid-19 pandemic the likes of which I hope not to witness in my lifetime again. I do hope all of you and your families have coped well and stayed safe in these unprecedented times.

Despite disruption caused by Covid-19 pandemic, notably, the cancellation of our Annual General Meeting in Durham City in July 2020, NDA UK has been more active than ever before. I've been delighted to see so much progress being made by our charity wing and some tremendous work that has been carried out over the past year.

On the membership front, I feel proud to see so much activity on several fronts – on educational activities in Nepal, educational activities for our younger colleagues, tremendous help for PLAB students from Nepal who have been trapped in the UK due to lockdown, and of course the tremendous Covid-19 activities in the form of webinars, helplines and translated advice and documents for our Nepalese community in the UK. Notably too, tremendous work has been done behind the scenes by our executive committee IT crew in creating a brand new interactive website as well as creating Instagram and twitter accounts to cater for all ages & generations.

Charity News and Activities

Thanks to the hard work of our NDA UK charity trustees, Dr. Beena Subba & Dr. Ramesh Khoju as well as input from the NDA UK executive committee members, our charity has managed to change our objectives with approval from the Charities Commission. Our original aims only limited NDA UK charity to provide medical aid & assistance in Nepal for natural disasters. However, we are now also able to carry our educational training for health care workers in all settings in Nepal to help improve the general health of the population in Nepal in all settings.

Our current charity set up has 4 trustees:

Dr. Shabin Joshi (Chairman)

Dr. Sanjeeb Nepali (Secretary)

Dr. Kaushalendra Karn (Treasurer)

Dr. Kamal Aryal (Trustee)



Dr Manohar Budathoki delivered essential medical equipment to a birthing centre in Dang, Nepal

In total, over £8600 was utilised for our charitable activities during the past year. These were:

- 1) **Donation to America Nepal Medical Foundation (ANMF) July 2019 - £750**
- 2) **Supporting Birthing Centres in Nepal**

As a continuation from the previous year, one of the aims of NDA UK charity is to equip a birthing centre in each of the 7 provinces in Nepal. During the previous years Provinces 2,3 & 4 have been helped. This year Dr. Manohar Budathoki of our executive committee member visited a health centre in Province 5 and donated the much needed relevant equipment for this health centre.

Likewise, Dr. Bhawani Lekhak kindly visited a birthing centre in Dehimandu health post in Baitadi in Province 7, where he too helped out on behalf of NDA UK and donated the much needed equipment for the health centre. A huge thanks to them both.

In July 2019, donations were made to Birthing Centre at Sinam Health Post in Taplejung (Province 1) costing £1500 for various equipment.

This leaves NDA UK charity Province 6 which we would like to help once the covid-19 pandemic is over.



Birthing Equipment donated Birthing Centre at Sinam Health Post in Taplejung

3) Donation to Charity collection for construction of community hospital in Karnali Province, Nepal (July 2019) £250.00

4) Support to Health Camps in remote Nepal by medical student (July 2019) £ 1,600.00

A group of Nepalese origin medical students (Medical Students on a Mission) studying in Bulgaria (led by Susant Acharya) took a mission to go to remote parts of Nepal from 6th to 22nd of August 2019.

In association with Nepalese medics they took part in eye camps and water hygiene projects in Dhading and Gorkha districts, visited orphanage in Pokhara, and helped to conduct medical camp in Chitwan district. This mission provided a good learning opportunity for them.

5) Donation of Simulator to conduct Laparoscopic Surgery course in Pokhara (Sept 2019) costing £860.00

6) Support of Workshop on Peri-operative safety, Kathmandu (December 2019) £696.00

NDA UK Membership News & Activities

This year NDA UK have been so active that it simply would not be possible to mention all the activities. However, here is the summary of the main NDA UK activities.

1) HEAP Basingstoke, August 3rd 2019.

Our Health Education and Awareness Programme was held in Basingstoke in August 2019. Led by Dr. Ang Sherpa, it was a great day which greatly helped especially our elderly population;



-Covid-19 Assistance for Nepal.

With the pandemic just taking off in Nepal and unfortunately the numbers of infections & deaths in Nepal starting to rise, NDA UK are very aware of the potential serious consequences for our Nepalese people back in Nepal. As we all know, the healthcare infrastructure is ill equipped to deal with the potential high number of cases likely in Nepal. Our aim as a charity this year is to help out rural health care centres by providing oxygen concentrators, thus helping covid-19 patients with breathing difficulties. So far we have donated some vital life saving equipment to Garahun Primary Hospital, Waling, Syangja in June 2020:



£1500 was donated to help buy equipment including an oxygen concentrator and baby warmer. We have set up an online donation site for this purpose. We would appreciate any charitable donations for this cause. The link for the virgin money giving site is:

<https://uk.virginmoneygiving.com/fund/nepal-covid-19>

**2) Fourth Career's Day, Frimley Park Hotel , Frimley
24th August 2019**

This years Careers day was a huge success, Under the leadership of Ramesh Khoju, and our very talented & capable Ang Sherpa, this again was a great day full of lectures on various topics presented by our talented younger generation NDA UK members. This interactive day was hugely successful and will continue on an annual basis. Due to Covid-19 this year, it will most likely to be held early in 2021.



3) Joint Workshop NDA UK/ NNA on Acutely Deteriorating Patients:

NDA UK as ever are working closely with NNA (Nepalese Nursing Association) and the past year has been no exception. In September a joint workshop was organised by NNA & NDA UK with Dr. Mohan Thapa from NDA UK leading the way. The event was well attended with great reviews. We will of course continue to work closely with NNA in the forthcoming year.



4) Laparoscopic Surgery Course, Pokhara 20th November 2019.

Our vice chairman Dr. Kamal Aryal in collaboration with Health Exchange Nepal (HeXN) helped conduct a very successful surgical course in Pokhara, with costs of simulator donated by NDA UK



5) Symposium on Perioperative patient safety in Kathmandu 6th December 2019.

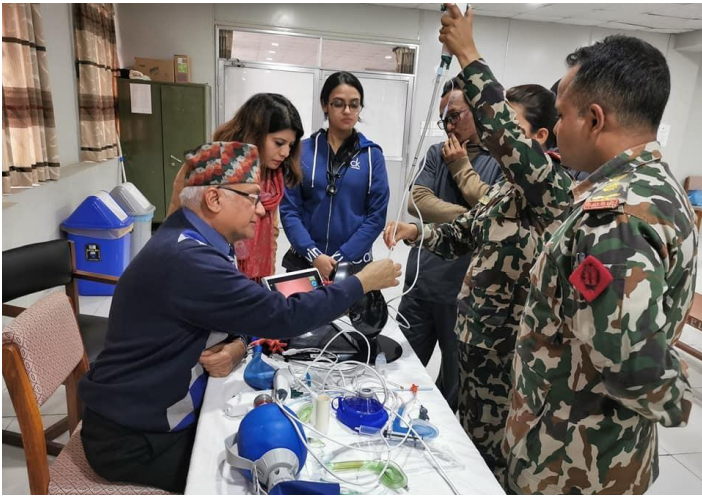
Nepal Critical Care Development Foundation (NCCDF) in association with the Society of Anaesthesiologist of Nepal (SAN), Health Exchange Nepal (HEXN) and NDA UK organised a Symposium on " Perioperative Patient Safety" in Kathmandu, Nepal.

NDA UK vice chairman Dr. Kamal Aryal and treasurer Dr. Kaushalendra Karn were both among the faculties, and delivered talks on "Non-Technical Skills in Surgery" and Human Factors in Peri-operative Care" respectively.



6) Professor T.McCoughey Airway Workshop in Kathmandu in collaboration with HeXN December 13th 2019.

A huge congratulations also to Dr. Shambhu Acharya who spearheaded the Professor Thomas McCaughey Airway Workshop in Kathmandu in December 2019 on behalf of HEXN.



7) Visit Nepal 2020 promotion at the Nepalese Embassy 4th January 2020

As always, NDA UK have kept close ties with our Embassy in London. Prior to the onset of Covid-19, visit Nepal 2020 promotion was very much on the agenda for the embassy. Our NDA UK members did go to the function to elude to the embassy of NDA charitable and medical activities in Nepal which would help the campaign.



NDA AGM 2020 - For the first time since NDA UK was established in 1985, our annual residential AGM has had to be cancelled due to Covid-19 pandemic.



The AGM has now been rescheduled for the last weekend in July 2021 and its sure to be extra special to make up for the lost AGM this year. Please save the date and try not to plan holidays etc then.

NDA UK Activities during Covid-19 Pandemic Period.

Firstly I hope our NDA UK family as well as our other Nepalese communities in the UK have coped well during these very testing times. We know many of our NDA UK family have been unfortunate and suffered from Covid-19 and as far as we know, everyone so far has got through it safely. Many of us being front line staff should be congratulated and praised on the hard work and dedication at work to help the greater cause during these times

Covid-19 And NDA UK helping out to our Nepalese communities.

NDA UK have been at the forefront in trying to help our communities, disseminate the latest medical & scientific knowledge, and share experiences in the medical context, both in the clinical setting as well as the unfortunate Covid-19 sufferer. Our chairman Dr. Ramesh Khoju and vice chairman Dr. Kamal Aryal have taken the lead with tremendous help not only from the executive committee, but also our NDA UK members. There is so much to mention, but I would just like to summarise briefly the NDA UK activities.

1. Translation Services.

A huge thanks to Dr. Ang Sherpa in her tremendous efforts in creating translated Covid-19 documents for our Nepalese. These range from how to get help, to general UK advice given by the government and are available on NDA UK facebook page Having said that I think even our vocabulary has changed since Covid-19 – just to name a few – AGP, non AGP, FFP2, FFP3, valved, non-valved, respirators, fallow time, physical distancing, zoom and the list goes on..

2. Covid-19 Helpline

NDA UK set up a helpline for our community and thanks to all the NDA doctors who volunteered. Again details will be in the NDA UK facebook page and website.

3. Covid-19 Webinars

Our vice chairman Dr. Kamal Aryal has been instrumental in organising our weekly/fortnightly zoom Covid-19 webinars and we have been blessed with our NDA UK members doing talks, lectures as well as sharing their experiences, as well as our colleagues in Nepal and USA who have often joined and also shared their experience from Nepal perspective.

So far 7 webinars have been organised from April 11th onwards and has become a regular Saturday afternoon fixture! Special thanks to those who have shared their experiences. Details on page 10.

Unfortunately several of our colleagues did catch Covid-19, to name a few, Dr. Shiv Gurung & Dr. Sarju Man Shrestha, both of whom thankfully recovered well and shared their uncomfortable experience with us all.

Many of these webinars are available to view in the NDA facebook page and the website (www.ndauk.org.uk)

4. General Media, Social Media & Website resources

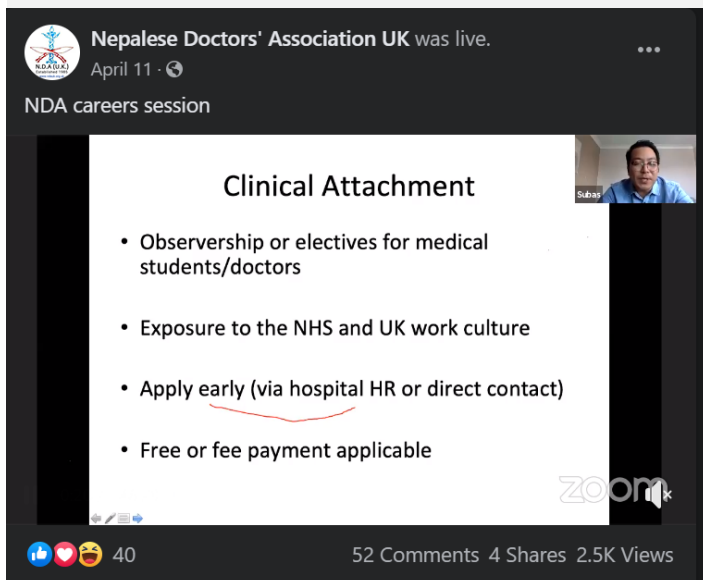
Our IT specialist within the NDA UK executive committee have most of the Covid-19 webinars, advice etc available on the website, facebook, Instagram & twitter feeds.

5. Helping/collaboration with NRNA

NRNA have been also very active amongst the general Nepalese community in the UK. Our executive committee member Dr. Suni Sah is also on the NRNA committee and has been coordinating activities between NRNA & NDA UK, whereby Covid-19 issues and advice have been spearheaded by several of our NDA UK doctors.

6. Careers Zoom Symposium - headed by Dr. Ang Sherpa 11th April 2020

One of the first interactive symposiums was held earlier this year via zoom. Once again a huge thanks to Dr Ang Sherpa who organised it from her new home in sunny Florida. Great contributions too from our speakers including Dr. Donna Shrestha and Dr Subash Tulachan. This was one of the first sessions we streamed live on Facebook, which garnered a lot of interaction between doctors in the UK and Nepal, with over 70 participants and over 2.5k views. This proved a successful and easily replicable model for teaching and engaging doctors in both the UK and Nepal in the future.



7. Impact of Covid-19 on training of junior doctors

Training has been affected in every field and it's no different for junior doctors. On 30th May, Mr Samy Mohamed eluded to changes to the ARCP process in different stages of training and current guidance and advises from the relevant training bodies.

8. Helping PLAB 2 students from Nepal, stranded in the UK

Our young doctors from Nepal this year have also fallen victim to Covid-19. Around 30 doctors have been stuck in the UK without long term accommodation and lacking finances, they were unable to return to Nepal.

NDA involvement with Aspiring Nepalese doctors who are stranded in UK

Dr Ramesh Khoju and Dr Manohar Budathoki

In July 2015, the General Medical Council (GMC) provided us figures for doctors of Nepalese origin working in the UK and there were 330 of these on the GMC register, 86 were in training, 31 were on the GP register and 29 were on the specialist register. The number of Nepalese doctors coming to the UK for training and job opportunities has been on the rise in recent years. This year due to the COVID 19 pandemic, many of these doctors who had travelled to the UK to take PLAB 2 licensing examination became stranded, when the UK announced lockdown on 23rd March 2020.

The GMC in April postponed the forthcoming PLAB 2 exam to July 2020, and there was understandably a sense of despair in the group. The Home Office did offer some respite by announcing automatic extension of visitor visas till 31st of July as some of their visas were expiring before that.

On 28th of March, NDAUK received communication from Nepal Medical Association (NMA) requesting support for these young doctors. On 29th of March, we received details of 16 Nepalese doctors, and Dr Angel Magar organised an emergency zoom meeting attended by Dr Ramesh Khoju and Dr Manohar Budathoki (NDA executive committee) Dr Mohan Thapa (Health Exchange Nepal). Dr Lochan Karki (NMA president), Mr Sharad Aran (representative from Nepalese Embassy London) and most of the stranded candidates attended the meeting.

A Whatsapp group was already created (25th March 2020) for communication and NDA UK mentors provided advice to the candidates on various topics- COVID 19 situation, accessing NHS care if needed and generally life in the UK.

There was some light at the end of the tunnel for three doctors (Dr Deborah Gurung, Dr Anusruti Bista, Dr Sonu Basnet) on 3rd April when they received pass grades in their PLAB 2 exams and they could now proceed with GMC registration and could look forward to starting work as doctors in the UK. They were able to mentor other candidates with their exam preparation in future zoom sessions and also in personal communication. On behalf of NDA- Education, Dr Kamal Aryal created a zoom account to organise webinars and he has helped moderating these sessions.

On 11th of April we organized a half day careers session webinar and it was also streamed live on Facebook. It was a successful interactive session and there were 70 participants, including doctors living in Nepal. The following topics were presented:

1. Medical Pathways after PLAB – by Dr Subash Tulachan
2. The Foundation Programme- by Dr Ang Sherpa
3. CV Writing - by Mrs Donna Shrestha.

A small number the group needed financial assistance due to prolonged lockdown and the issue with bringing funds from Nepal and NDAUK started to collect the fund to help. We are also very grateful to BAPIO (British Association of Physicians of Indian Origin), and to Non Residential Nepalese Association (NRNA UK) members who have helped in this.

We have found that the frequent online interactions (Whatsapp group messages and zoom meetings) have helped forge closer relationships between these doctors and members of NDA UK executive committee.

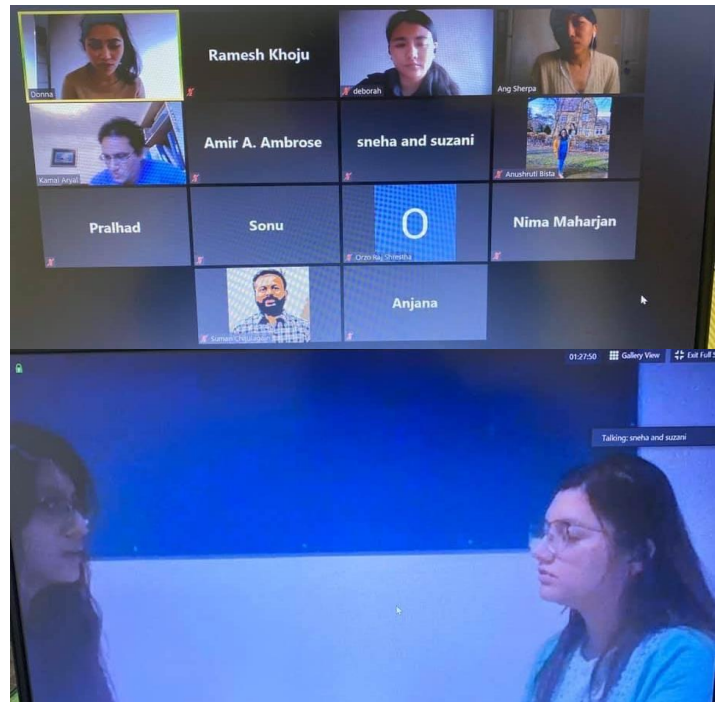
Since 13th of April we have conducted interactive sessions on zoom every Sunday to help out PLAB 2 candidates in their exam preparation. Mr Roshan Lal, Dr Sachin Gurung and Dr Anil Tuladhar and the above mentioned NDA UK doctors have all helped with the sessions.

NDA UK members Dr Mohan Thapa, Dr Prakash subedi, Dr Satyan Rajbhandari and Dr Santosh Pradhan were helping to organise clinical attachments in hospitals for these doctors but unfortunately due to COVID 19, these have all been cancelled by the respective hospitals.

On 6th of June 2020, the group received further challenging news as GMC cancelled the forthcoming July PLAB 2 exams for the second time. The BAPIO have been very helpful to PLAB 2 candidates from different countries in all this and have helped with providing accommodation in Salford University, groceries, online classes etc. This crisis has given us in NDAUK opportunities to work with other sister organisations like the BAPIO and BIDA (British International Doctors Association). BAPIO president Dr JS Bamrah has liaised closely with GMC in this crisis and has been in touch with us also regularly. There are around 200 young doctors from 20 countries stranded in the UK, waiting for PLAB 2 exams and 28 of these are from Nepal. Recently Following a recent GMC survey (sent to candidates) the PLAB 2 exam has been rescheduled in August and September, taking all precautions of social distancing.

Nepal Embassy London and NRNAUK helped organising chartered flights to Nepal on 24th and 26th of June some of the young doctors have taken this opportunity to go back to Nepal. Due to the PLAB 2 exam being postponed twice, many candidates have their UK visas expiring in the coming weeks. So, on 22nd June we organized a zoom meeting with solicitor Mr Raju Thapa to get advice on immigration and VISA extension. We are very grateful for his expertise and reassurance. NDA will be able to help with sponsorship letters for the candidates where necessary. On 23rd June, the BAPIO, the BMA and other organisations including NDAUK together have sent a letter to the Home Minister Ms Priti Patel requesting visa extensions, without a fee, if possible, for stranded doctors till December 2020.

We have found these young doctors to be very resilient and resourceful in this challenging situation and we are delighted to welcome all of them to the NDAUK family.



Practicing PLAB2 Scenarios on Zoom with Feedback

NDA UK Annual General Meeting News.

For the first time since NDA UK was established in 1985, our annual residential AGM has had to be cancelled due to Covid-19 pandemic. The AGM has now been rescheduled for the last weekend in July 2021 and its sure to be extra special to make up for the lost AGM this year. Please save the date and try not to plan holidays etc then.

Our AGM however will take place on Saturday 25th July at 10:30 am as a Zoom meeting and all NDA members and family will be invited. I will be emailing you all soon with login details and hope to see as many of you as possible at the AGM.

NDA Website & Social Media

The past year gone has seen great strides made by NDA UK with IT. Behind the scenes, our unsung hardworking members of the executive team IT experts Dr. Donna Shrestha, Mr. Shekhar Shrestha and Dr Prajwal Ghimire have made huge progress in presenting NDA UK to the big wide world. More to follow in the journal, but the key achievements are:

- Creation of a brand new website which we now maintain and are in total control of.
- Regular and interactive NDA facebook page.
- Our Instagram account which is becoming more popular with our millennials.
- Twitter account.

We do hope you all find these resources useful and look forward to interacting with as many of you as possible through them.

Finally, have a great year everybody and stay safe. I look forward to welcoming you all at the NDAUK AGM next year in Durham . Save the date July 30th – August 1st 2021..



NDA UK ZOOM WEBINARS DURING COVID-19 PANDEMIC

MR KAMAL RAJ ARYAL Consultant Colorectal and General Surgeon
James Paget University Hospitals
Vice Chairman NDAUK

START OF THE PANDEMIC

On returning from Nepal in mid-December after conducting a number of courses, I first heard about respiratory infections in Wuhan. Similar to previous SARS viruses, I did hope, this new disease called COVID -19 would soon settle. On the contrary, the number started going up with hundreds of deaths in China and spreading to other parts of the world.

At the end of February, I had the wonderful opportunity to undertake a trans anal total mesorectal excision (TaTME) mini fellowship in Switzerland. The number of cases infected with COVID-19 and deaths were rising exponentially in Italy. As the virus hit the UK, I was still able to complete 'NOTTS for trainees' course at the deanery office at Fulbourn, Cambridge on the 13th of March. The same day Royal Colleges and Specialty Associations in UK had announced cancellation of all conferences, examinations and trainees would not rotate Hospitals scheduled on 1st April. With regards to our NDA UK, activities, Health Awareness and Education Programme (HAEP) for Nepalese Communities in Cwmbran in early March and a big charity dinner event in April to raise money to set up a science Lab and school library in Gorkha were cancelled.

UK PERSPECTIVE

On 17th March, as I finished my operating list, on the way back home the supermarket shelves looked empty. The patient, I had performed a laparoscopic right hemicolectomy contracted coronavirus in the hospital which became apparent on his readmission to hospital. Fortunately, he is well. The reported mortality for COVID positive patients is frighteningly high - 25% for emergencies and 20% for elective operations(4,5). On the 23rd of March, the UK government announced lockdown. The streets looked deserted. There was worry, anxiety and fear all around. We did not know what was going to happen. I had read in Hindu mythology about pralaya (dissolution). Someone on social media had written it may be "Pralaya or perhaps selective 'Pralaya' (dissolution) of 'Kaliyuga' (last of the ages in Hindu mythology)" or is it Darwin's theory of 'survival of the fittest'. I had to self-isolate myself for 2 weeks as my son had a fever and cough. Many of our friends were suffering from disease; the first 10 doctors who died contracting the disease were from black, Asian and minority ethnic (BAME) backgrounds.. Many Nepalese were dying in the UK. As a front line health care worker, there was a feeling - I am going to get the virus either sooner or later..

As colonoscopy and laparoscopic surgery were considered to be aerosol generating, there was massive fear about these techniques. At one stage I thought the laparoscopic surgery was dead! Patients referred with suspected bowel cancer had to be diverted towards CT scan rather than colonoscopy for investigations.

NDA UK needed to do something as an organization to support our families and friends at this difficult time. Thanks to Dr Ramesh Khoju who had the idea of zoom meetings to have a chat amongst the NDA UK families to support each other. I

thought we could make it even better by involving those as speakers who have had experience as front line staff as doctors, leaders and specialists in their practice

ZOOM WEBINARS

The first time we met up with each other over zoom nearly 50 people attended. It was a great experience to say hello with whom we had not met for a long time. It also uplifted our mood to be able to see our friends and families at lockdown. Dr Sarju Shrestha and Dr Paras Singh who had suffered from the disease shared with us how it felt like to go through this disease. It was very touching to hear Dr Shrestha, 'I had never felt so poorly before and I take my life very differently now to having gone through the disease'. First few sessions, we focused on how to prevent and protect ourselves and patients. There was not enough personal protective equipment (PPE) supply in many places, nor was there proper guideline from the public health for a considerable amount of time. It was very useful to hear what everyone was doing to protect themselves. Some had ordered face shields/visors themselves from Amazon while others had got it from nearby B&Q. There were good tips on how to maintain our well-being including exercise, meditation, yoga, and zoom meeting and telephone calls with friends and families like this one.

Then we made these sessions educational sharing their experiences as frontline staff. We started with consultants in accident and emergency, respiratory medicine and intensive care as they are the ones who had seen and managed most of these cases. It was humbling to hear how they had organized their services as managers and leaders, how they managed their patients as doctors and specialists and how they maintained their wellbeing at home as family members.

As we progressed, we thought we could involve our friends in Nepal also. Nepal did have only one diagnosed COVID 19 case who had recovered and gone home. This remained like this for a while. COVID was seen only in those coming from abroad which was well contained with air travel restriction and quarantine of passengers following air travel. We discussed how it was possible that Nepal had been low in virus numbers. We thought lockdown was done on time. Many thought Nepalese had better resistance perhaps due to BCG vaccine or due to lower virulent strain SARS virus there than in Europe. At that time, Nepalese deaths in the UK had exceeded 50 but in Nepal it was zero. At one stage, as the cases plateaued and started declining in the UK and Europe - we thought we had almost beat the virus, so I put a theme present and future – when we expected life was going to go back towards normal.

Unfortunately, that did not last long - cases started slowly building up, as Nepalese travelling from India back home increased, numbers have been increasing rapidly. At the time of writing this article (13 June), more than 15 people have already died, and each day Nepal has more than 400 new patients. These reported numbers are likely to be the tip of the iceberg and much less than what exactly is reality on the ground.

LESSONS LEARNED FROM ZOOM WEBINARS AND COVID-19 PANDEMIC:

At the time of writing I have moderated 8 sessions. I have learned and reflected on several important aspects some of which include the following:

- We should respect mother nature and live in harmony.
- Nothing is certain in life and anything can happen.
- We should work with honesty, integrity and respecting each other.
- Natural calamity may make anything upside down.
- Pandemic may be a way of population control by an unknown super force.
- Science has made tremendous discoveries which we should use rightly and properly.
- The world leaders should have cooperation with each other rather than personal gain.
- All nations should think ahead and prepare for the unexpected pandemic.

- We should think ahead and anticipate what may happen next.
- We should live a healthy life for the wellbeing of ourselves.
- Zoom should be used as an educational resource more often

PREVENTION, PROTECTION AND FUTURE

As there is no treatment for COVID 19 pandemic, prevention and protection are key to stay away from this virus. Either this be a clinical setting at Hospital or outside at public places, social distancing, avoiding unnecessary travel, washing hands, using PPE properly, changing to suitable attire are some of the important measures to achieve this. There is emphasis on test, trace, track and isolate which I do hope will help to reduce the number of cases. My Hospital used to have 80 cases at the height of pandemic which has now reduced to 8. I am optimistic we will beat this pandemic may be with the invention of a vaccine. Let's hope it's not too far away....

DATE	THEME	SPEAKERS
4/04/20	Support each other – prevent, protect from COVID 19	Dr KP Karn, Consultant Anaesthetist, Royal Victoria Hospital, Newcastle Dr Mohan Thapa, Consultant Acute Medicine, Watford Hospital Dr P Basnyat, Consultant Surgeon, William Harvey Hospital Kent
11/04/20	Lessons from the front line and tips on prevention and protection from COVID-19	Dr Santosh Pradhan, Consultant Emergency Medicine, Ashford and St Peters Dr Ramesh Khoju, Consultant Anaesthetist and Intensivist Dr Sarju Shrestha – Consultant Physician and Nephrologist, Freeman Hospital, Dr Sunil Sah- Consultant maxillofacial surgeon, Wakefield
18/04/20	Lessons from the front line Emergency room, respiratory/ medical ward and intensive care	Prof Satyan Rajbhandari, Consultant Physician and diabetologist, Chorley Dr Sudhir Lohani, Consultant Respiratory Physician, Derriford Hospital Prof Prakash Subedi, Consultant Emergency Medicine, Doncaster Dr Shiv Gurung, Consultant anaesthetist and intensivist, South Shields
25/04/20	Lessons from the front line surgical/anaesthetic perspective – protecting ourselves and patients	Prof Ram Kewal Shah, Prof of orthopaedics and chief adviser to the chief minister of province 2 Dr Pradeep Basnyat, Consultant Surgeon Dr Shambhu Acharya, Consultant Anesthetist, University Hospitals Liverpool
09/05/20	COVID 19 where are we heading next ? From present to future...	Prof Rajendra Koju, Dean Kathmandu University School of Medical Sciences Prof Padam Simkhada, Global Health and Epidemiologist, Huddersfield University Dr Lakshman Paudyal, Consultant Physician, Isle of Man
23/05/20	Lessons from the frontline the UK and US experience in COVID 19 pandemic	Dr Sankalpa Neupane, Consultant Physcian and diabetologist, Norfolk and Norwich University Hospitals, Norwich Dr Saroj Kandel, Pulmonologist Wellspan Health, Pennsylvania Dr Kishore Lekhak, Speciality Trainee in respiratory Medicine, Newcastle
06/06/20	Lessons learnt from the UK front line in COVID -19 pandemic (personal experience from infectious disease, Intensive care unit and VTE)	Dr Jennifer Short, Consultant Physician in Infectious diseases, Queen Elizabeth Hospital Birmingham Dr Nandan Gautam Consultant physician and intensivist, University Hospitals Birmingham Dr Sudarshan Gurung, ST6, Haematology, Oncology, Kings College Hospital
20/06/20	Lessons learnt from the front line in COVID -19 pandemic focussing public health and radiology	Dr Surya Parajuli, Department of Community Medicine & Member, Medical Expert Team of Chief Minister, Province 1, Birat Medical College, Nepal Dr Anup Karki- Consultant in Dental Public Health, Currently deployed to COVID 19 in Public Health Wales Dr Nawa Raj Subedi; Consultant Radiologist, Lancashire Teaching Hospitals
04/07/20	Lessons learnt from the front line in COVID -19 pandemic focusing on dental, nasopharynx and brain	Dr Rekha Shrestha, Senior Dental Surgeon, Norwich, UK Dr Sunil Sah, Consultant Oral and Maxillofacial Surgeon, Mid Yorkshire Hospitals, Dr Prajwal Ghimire, Senior Clinical Fellow and Speciality Registrar in Neurosurgery, King's College Hospital, London
18/07/20	Lessons learnt from the front line in COVID -19 pandemic well being and paediatrics	Dr Chuda Karki, Past Chair NDA UK and Consultant Psychiatrist, CheLmsford, Dr Anil Tuladhar, Consultant Paediatrician, North Tees and Hartlepool NHS Foundation Trust, Middlesbrough, UK Dr Krishna Pd Bista, Consultant Paediatrician, focal contact person Kanti Hospital for COVID 19 and President of the NEPAS, Kathmandu

CELEBRATIONS

Dr Deoman Gurung and his missus have been blessed with a baby girl Symphony Gurung on 23rd June 2020. He also passed his MRCPsych Exam and is due to start ST4 dual training program in general adult psychiatry/ old age psychiatry with Northwest Deanery from August. [A]

- Dr Suchana Dhital will be starting ST3 training in Obstetrics and Gynaecology. [E]
- Dr Reeta Limbu will start ST1 training in Obstetrics and Gynaecology. [E]
- Dr Chandani Roka Magar will start ST1 training in Obstetrics and Gynaecology, North East deanery.

Dr Ang Sherpa and Pasang Sherpa got married. [D]

- Pramesh Khoju, Completed his Masters in Mathematics from Bristol University.
- Sukriti Lohani has completed her BSc in Political economy from King's College London.
- Sandeep Acharya has passed MFDS (Member of Faculty of Dental Surgery).
- Karina Nepali graduated with 1st class BA Honours from Dundee University
- Paurakh Singh Paudyal graduated with BEng. Degree in Electronic and electric engineering from Bristol University.

- Dr Pramestha Khoju, graduated as a Doctor from Palacky University, Czech Republic. [F]
- Dr Smarika Tuladhar graduated as a Doctor with BSc (Hons), MBChB from Manchester University. [C]
- Dr Sandesh Shrestha, Dr Alina Shrestha and Dr Phurba Sherpa graduated as a Doctor from Keele University.

- Dr Sudeep Shrestha will start Specialty Training in Respiratory Medicine, North East deanery.
- Dr Basant Bhattarai will start Specialty Training in Anaesthetics, North East deanery.

-Sujata Shrestha joined Hull York Medical School in Sept 2019.

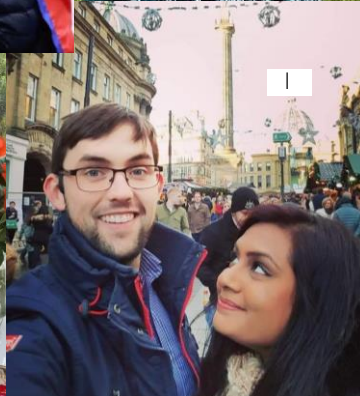
- Mr Kamal Aryal has completed Masters in Medical education from University of Dundee in November 2019.

- Dr Dhiraj Tripathi has been appointed Deputy Clinical Director of Research and Development at University Hospitals Birmingham.

Ankita Karn Lawson was promoted to Head of the year in Whitley Bay high school. Robert Karn Lawson will start working as a Crown Prosecutor. [I]

Annie Karn has become President for Leeds Medical and Dental Badminton society and secretary for Dental Aesthetic society.

- Gaurika Singh represented Nepal in 13th SAG 2019 and won 4 Golds, 2 Silvers and a bronze medal. [G]
- Pearlin Paudyal represented the Great Britain team in International Target Rifle shooting for under 17 and won a Gold Medal in August 2019. [B]



CONGRATULATIONS

My wife and I celebrated Buda Janku (BHIMRATHAROHAN) on Tuesday, 9th June 2020. Because of lockdown only a few attended wearing masks, observing safe distancing guidelines and others attended via video link.

Buda Janku is a milestone in life, and it is a privilege to join ranks of other NDA UK Thakalis. When you become a Thakali you realise how quickly time passes away, leaving just memories, both pleasant and also not so pleasant. It also brings the sense of urgency to practice Dharma, making every effort to maintain the good habits and to avoid the bad habits at all cost.

As a Thakali, I have now reached the final and fourth stage of Sanyasa according to Hindu Dharma. Hence the best thing I feel I should do now is to follow His Holiness Dalai Lama's advice, "Try to help others if you can within your capacity using wisdom; if not at least do not do anything physically, verbally and mentally that will cause harm to others."

- Dharma Bhakta Shakya [H]



PRESENTING A NEW NDAUK WEBSITE

Written by Mrs Donna Shrestha

WEBMASTERS:

MRS DONNA SHRESTHA, MR SHEKHAR SHRESTHA

MR PRAJWAL GHIMIRE

The need for sharing information and updates with our members and interested individuals has been a longstanding item on our organisation's agenda. COVID-19 has instigated and catalysed change within the NDAUK and we have very much embraced the challenge that remote communication presents. Part of our response this year was to update our website, our main online platform.

Since its launch in March, we have had over 1,650 Unique visitors and 4,150 page views from more than 36 countries.

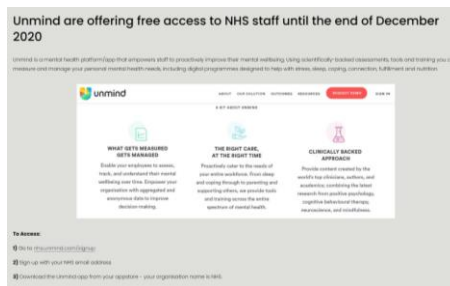
The aims and objectives of the website are:

- 1) To be an accessible and user friendly portal
- 2) To be a portal for NDAUK updates and events
- 3) Inform and attract relevant stakeholders and future partner organisations, in the UK and globally, of the work we carry out.
- 4) Encourage new members to join our organisation,
- 5) Documenting our unique organisation's history

Website Highlights



COVID-19 guidance and resources, including essential information for health professionals – Donning and Doffing PPE and Updated Resuscitation Guidelines



The pandemic has once again brought mental health and wellbeing to the forefront. The website has a section dedicated to strategies to improve our wellbeing.

Looking to the future..

I hope the website will engage the younger generation who are able to see the potential and value of a forum such as this and I would welcome anyone to bring fresh ideas to the table.

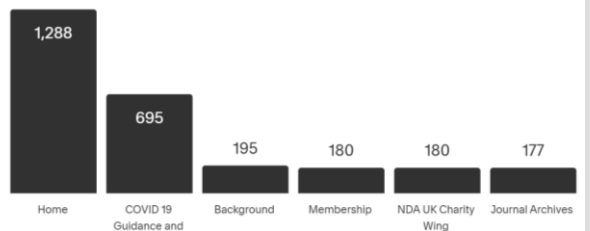
There is potential for members to join as webmasters and learn valuable IT skills in website design, along with the leadership and management challenges that working in a team to deliver a website collaboratively entails.

Sharing experiences is an important way of learning and the digital era has enabled us to do this in more dynamic and varied ways. Our existing COVID-19 podcast hub could be expanded to include educational podcasts from medical student to consultant level. Using blog style posts or interviews, we could present experiences in different settings.

We could create a hub for information and access to medical electives in Nepal, linking with other organisations.

Popular Content

Sun, Mar 15 – Thu, Jul 16, 2020



Works in Progress...

- 1) The ability to book and pay for places for the AGM and other events.
- 2) Create a portal for information around career pathways in medicine and dentistry, covering the IMG and UK graduate pathways, including specialty specific information.
- 3) Members only access to educational content from courses/webinars.



In its early stages of development, our educational section contains career related information and important links to key websites.



COVID-19 Pandemic: Through the eyes of a Paediatrician

Dr Anil Tuladhar, FRCPCH, FRCP (Edin)

Consultant Paediatrician, University Hospital of North Tees

The Coronavirus Disease 2019 (COVID-19) pandemic which has been sweeping the globe has taken the greatest toll on the elderly, with children (0-19 years) being largely spared. As of 29th June 2020, the deaths of only 5 children in the above age group have been reported due to this pandemic in the UK, compared with over 43,000 adults. Amongst the devastating number of infections reported, children account for 0.9% and 1.7% of infections in China and the USA, from where the strongest epidemiological data have been published.^{1,2}

Clinical Presentation

As the pandemic continues, we are now observing numerous reports describing the clinical presentation and hospital course of children with confirmed COVID-19.³ What is currently known is that children have milder symptoms and are less likely to be hospitalised compared to adults.⁴ However, as with adults, infected children may not present with typical viral upper respiratory tract symptoms and can easily spread infection whilst remaining asymptomatic themselves.⁵

As of mid-May, 2020, 131 published studies across 26 countries have described clinical features in 7780 paediatric cases.⁶ Of the 81% of symptomatic children in these studies, they presented with:

Fever (59%), Cough (56%), Rhinorrhoea (20%), Sore throat (19%), Myalgia/Fatigue (18%), Shortness of breath (12%), Diarrhoea (7%), Vomiting (5%), Rash (0.25%).

It should be noted that the incidence of asymptomatic children may be significantly higher considering all the studies are based solely on symptomatic children. Data from China showed that 13% of confirmed cases in children were in fact asymptomatic (cases detected by contact tracing).⁷ When suspected cases are also considered, 32% of children aged 6-10 years were also asymptomatic. Similarly, data from the Italian Emergency Departments found 21% of confirmed cases were asymptomatic.⁸

With regards to specific symptoms, several cases of rashes often occurring on feet/toes have been reported from Europe, contemporaneously associated with the outbreak but with only a few simultaneously confirmed infected cases.⁹ Unlike in adults, lymphocytopenia is relatively rare amongst infected children.^{6,8} Inflammatory markers such as C-reactive protein and procalcitonin have been found to often be raised, albeit mildly.⁶ In confirmed paediatric cases with respiratory symptoms, chest X-rays and the majority of CT scans have been shown to be normal. Abnormalities are often less severe when they are present.⁶

Paediatric Inflammatory Multisystem Syndrome-Temporarily associated with SARS-CoV-2 (PIMS-TS) in Europe/ Multisystem Inflammatory Syndrome in Children (MIS-C) in the USA

On 27th April 2020, NHS England reported a number of unwell children presenting with signs of circulatory shock and hyperinflammatory state, with features consistent with toxic shock and Kawasaki disease (KD).¹⁰ Some of these

cases were confirmed COVID-19 cases. The first COVID-19 confirmed case with classic KD features was reported in the USA on 7th April 2020.¹¹ Subsequently, a number of COVID-19 cases with PIMS-TS have been reported from Italy, France and USA, mainly from New York State.^{12,13,14} Approximately, 15% of them were confirmed COVID-19 cases. These children presented with early symptoms of abdominal pain, vomiting and diarrhoea, with persistent high grade fever and progression to cardiogenic shock.¹⁰ Raised inflammatory markers, maculopapular rash and non-suppurative conjunctivitis are common. Notably, respiratory involvement is absent. Though most children recovered, five patients unfortunately died.¹²

In keeping with adult COVID-19 literature, children from Black, Asian and Minority Ethnic (BAME) backgrounds seem to be more susceptible to severe disease and overrepresented in the case reports of PIMS-TS/MIS-C.¹⁰

Newborns

A large number of infants born to COVID-19 positive mothers have been reported. Mother and their babies generally recover well. However, there is a small but notable rise in preterm delivery.¹⁵ There have been a few cases of newborns with elevated IgM antibody to SARS-CoV-2 born to COVID-19 positive mothers indicating intrauterine transmission.^{16,17} However, they have not suffered many complications and required minimal ventilator support.¹⁸

Children with co-morbidities

There was growing anxiety that this group of children are more likely to be hospitalised and/or need intensive care from COVID-19. Most of the Paediatric Intensive Care Unit (PICU) admissions in the USA and Italy are these children who, otherwise, would have an underlying increased risk of complication from all respiratory viruses.⁸ Hence, there does not seem to be a disproportionate rise in PICU admissions compared to any other respiratory virus infection.

Why are Children responding to SARS-CoV-2 infection differently?

SARS-CoV-2, MERS and SARS viruses generally cause milder infections in children. In SARS-CoV-2 infection, CD8+ T cells and IL-6 (a cytokine contributing to host defence stimulating acute phase reactions and immune response) play a vital role in virus clearance. In paediatric cases, the average IL-6 response level is low whilst children show higher total T cell levels, which may be responsible for

less severe symptoms.¹⁹

One possible mechanism of PIMS-TS in children could be related to antibody-dependent enhancement (ADE). The presence of antibodies may be harmful when the level is too low to protect, but high enough that it helps in spreading the virus. In SARS-CoV-2, ADE has been demonstrated to improve the ability of the virus to enter cells.²⁰

Are children asymptomatic spreaders?

There have been lots of concerns whether children play a major role in spreading COVID-19 as most of them are asymptomatic and even if they are infected, they have mild symptoms.²¹

South Korea and Iceland have implemented widespread community testing in their response to COVID-19. In Iceland, on population screening, no child under the age of 10 was found to be positive, compared with 0.8% of the general population.²² This observation is replicated in the pre-print data from a town in Vo, Italy²³ and a lower secondary attack rate in children (OR 0.23 compared with adults >60 years) from Guangzhou, China (pre-print data).²⁴

Based on the evidence so far, the answer appears to be no, children are not COVID-19 'spreaders' and nor are they acquiring the infection significantly.

Conclusion

COVID-19 appears to be mild in children and they can be frequently asymptomatic or have subclinical infection. Even children with co-morbidities do not appear to have a heightened risk of complications compared to any other respiratory virus infection. There have been reports of a Kawasaki Disease like critical illness but it is still rare. Generally, there is consistent evidence that children have a lower likelihood of acquiring infection even in the same household.

We are still learning more and more on a daily basis on COVID-19 and this article is based on the evidence that has been available until 29th June 2020.

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COVID-19 and its future

Dr Sudhir Lohani and Dr Lakshman Paudyal

Currently our world is gripped by the pandemic of COVID-19, which has affected the majority of the world. The confirmed mortality has exceeded half a million. We aim to present an overview of COVID-19 diseases and speculate its future.

In December 31 2019, an unusual cluster of cases of pneumonia was reported in hospitals in Wuhan, Hubei, China.¹ The Huanan Seafood Wholesale Market was identified as the origin of the infection. Researchers subsequently identified the cause being a novel coronavirus labeled as Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), the affliction is called coronavirus disease 2019 (COVID-19).^{2,3}

Transmission and infectivity

COVID-19 is a rapidly transmissible disease.⁴ Transmission is from close contact and droplets. There is insufficient evidence to suggest airborne transfer.⁵

The mean incubation period is around 3–9 days^{6, 7, 8, 9, 10}, with a range between 0–24 days.¹¹ One can become contagious before the symptoms are present (around 2.5 days before the start of symptoms)⁹.

Around 18% of cases remain asymptomatic.^{13, 14, 15} The potential of asymptomatic patients infecting others is proven by multiple studies concerning clusters.^{16, 17} Younger patients tend to remain asymptomatic whilst the elderly tend to show symptoms.^{7, 15} It is calculated that around 86% of infections have remained undocumented, and around 55 % of those cases were contagious.¹⁸ Symptoms usually tend to resolve after 10 days.²¹

Clinical features

Most cases are seen in those aged between 30–79 years.²² The symptoms are summarised in the following:

Fever (82.2%), Cough (61.7%), Fatigue (44%), Dyspnoea (41%), Anorexia (40%), Productive Sputum (27.7%), Sore Throat (15.1%), Nausea (9.4%), Dizziness (9.4%), Diarrhoea (8.4%), Headache (6.7%), Vomiting (3.6%), Abdominal Pain (2.2%).

There are suggestions that there may be long term sequelae of this infection. Some reports suggest prolonged fatigue, paresthesia and breathlessness persist even after the resolution of early inflammatory symptoms.

Laboratory findings

Common laboratory diagnostic tests

Laboratory values that suggest COVID-19 infection include lymphopenia, prolonged prothrombin time (PT), elevated lactate dehydrogenase (LDH), elevated alanine aminotransferase (ALT), elevated aspartate aminotransferase (AST), elevated D-dimer, elevated neutrophils, eosinopenia, elevated C-reactive protein (CRP), and elevated troponin (including high-sensitivity troponin).^{11,23,24,25,27, 28, 29}

Reverse transcriptase – polymerase chain reaction

RT-PCR remains the gold standard for diagnosing COVID-19. While its specificity is nearly 100 %³¹, the sensitivity is low at 64 %.^{19, 20, 32}

Some studies have employed chest CT scans for screening. CT scans have a sensitivity of 98 %, despite a lower specificity.²⁰

Image findings

Imaging modalities may serve as a surrogate to diagnose COVID-19. Chest x-ray abnormalities are seen in 33 %–60 % of patients and CT scans are even more likely to be abnormal.^{33, 34} Chest CT scans of COVID-19 cases present with bilateral ground-glass opacification or consolidation.

Complications

Acute respiratory distress syndrome

About 41.8 % of patients develop acute respiratory distress syndrome (ARDS).³⁶ Diabetes mellitus is a factor associated with the development of ARDS.³⁶ Other associated comorbidities include hypertension, cardiovascular disease, and chronic kidney disease.^{36, 37}

Patients greater than 65 years of age present with worse degrees of ARDS and have a higher mortality likelihood.³⁷ Laboratory markers predicting mortality of COVID-19 ARDS patients include low albumin, elevated blood urea nitrogen, and elevated LDH.^{36, 37}

Myocardial injury

The most common COVID-19-related deaths are associated with the lungs and heart diseases.²⁵ Myocardial injury includes acute coronary syndrome, heart failure, myocarditis, hypotension, shock, and sepsis.^{38, 39}

Cardiac arrhythmias occur in severe COVID-19 cases.^{30, 38, 40} Malignant arrhythmias, including ventricular tachycardia and fibrillation, occur at a rate of 5.9 %, and arise more frequently in patients with elevated troponin levels (17.3 % of patients with elevated troponin).⁴⁰

Heart failure is most commonly seen in severe cases of COVID-19, regardless of previous cardiac history.^{38, 40} This presents with elevated levels of N-terminal pro-B-type natriuretic peptide (NT pro-BNP) and troponin levels.⁴¹

Acute kidney injury

Acute kidney injury presents with elevated urea and cystatin-C levels in severe COVID-19 infection.^{36, 37, 42, 43}

Prognosis

The case-fatality rate (CFR) continues to change as the pandemic continues. Being older than 60 is considered a mortality risk factor.^{12, 25, 44}

Prognosis predictors

Comorbidities associated with severe COVID-19 cases include elderly age, hypertension, cardiovascular disease, cerebrovascular disease, and chronic kidney disease.^{12, 23, 26, 27} Cardiovascular disease presents with a 10.5 % CFR (case fatality rate). Other diseases that present with a high CFR include diabetes (7.3 %), chronic lung diseases (6.3 %), hypertension (6.0 %), and cancer (5.6 %).¹²

Laboratory values contribute to survival predictions. These include elevated LDH, elevated high sensitivity-CRP, and lymphopenia.^{46, 47} Other laboratory values that suggest a high mortality risk if elevated include aspartate aminotransferase (AST), alanine aminotransferase (ALT), D-dimer, neutrophil count, prothrombin time, procalcitonin, and high-sensitivity and regular cardiac troponin.^{12, 23, 24,25,26,27, 28, 45, 46, 47.} Low monocytes, platelets, and albumin also suggest high mortality risk.^{12, 24, 25, 27, 48}

Architectural distortion, traction bronchiectasis, intra-thoracic lymph node enlargement, and pleural effusions suggest high risk for mortality in COVID-19 although they are rare.³⁵

Management

There is no specific antiviral treatment effective in COVID 19 infection. Treatment is mainly supportive. The preliminary data from RECOVERY trial suggested survival benefit with low dose Dexamethasone.

Most patients develop bronchopneumonia and suffer hypoxia. Incremental oxygen supplementation to maintain target oxygen saturation would be the mainstay of management. Some patients would need ventilatory support.

Many severely ill patients are dehydrated and need intravenous fluid supplement. Thromboembolic complications are well recognised in COVID 19 infections and all patients should have thromboprophylaxis. Many units are using high dose thromboprophylaxis. One may consider giving treatment dose heparin in selected cases.

Many other treatment agents are being trialled and the early results are mostly negative. Remdesivir, initially developed to treat Ebola infection, has had emergency US FDA authorisation as it was shown to decrease length of hospital stay. There was also tendency toward some survival benefits although it did not achieve statistical significance.

Future

The future course of the current pandemic is uncertain.

We think the virus is here to stay with us for the foreseeable future. Several vaccine trials are ongoing. Effective vaccine will reduce mortality associated with COVID-19 but it is likely that the virus will mutate and the vaccine programme will need to catch up on an ongoing basis, as is done with flu vaccines.

It is also possible that the virulence of the virus would alter as people increase their exposure to the virus. There are

anecdotal reports of newer cases having lower mortality and indolent course of illness.

It is also possible that the new mutation or another completely new virus will have higher virulence leading to increased mortality and higher transmissibility. It is therefore advisable that we as a society should prepare for this. We have a few suggestions in this regard, summarised in the following:

1) Infection control: Proper infection control practices are difficult in

communal wards of traditional hospitals. Ideally these patients need to be nursed in a single room with appropriate infection control measures and personal protective equipment.

2) Outpatient consultation: We need to look at how healthcare professional's contact with patients can be minimised to reduce the risk of transmission. Telephone/video consultations have been very successfully used in NHS hospitals and these could prove useful in managing the majority of patients in the future.

3) Inpatient support: One could explore remote ward rounds by using robotics to minimise doctor- patient contact. Robots can also be used to provide personal care to patients/supply food etc.

4) Evidence based learning: It has taken a long time to find an effective management strategy in the current COVID 19 epidemic. Maybe a future collaborative strategy to see how different countries can collaborate and get evidence to find ideal preventive/management strategy at the earliest possible opportunity. We hope the WHO will take a lead on this.

5) Development of Community based care: Community based management strategy with a focus on an individual's wellbeing and infection control for the community would be better qualitatively and more affordable. Each country/setting could develop their own pathway but guidance from WHO would also be helpful.

Conclusion

COVID 19 is a highly transmissible disease caused by the novel corona virus SARS COV2, which is affecting the majority of countries. Mortality figures have exceeded half a million. Whilst most patients have no or minor symptoms, some patients display severe symptoms, thus need hospital admission and support. Treatment is mostly supportive but recently a UK based trial has suggested mortality benefits with low dose Dexamethasone in severe cases needing oxygen supplement.

We need to prepare our society and services to manage such illnesses/pandemics in the future as it is likely that there will be other such infections in the future.

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Impact of COVID-19 on Mental Health

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We are all currently navigating the COVID-19 storm and this pandemic has brought unprecedented challenges for us. Mankind however has already witnessed and suffered from other coronavirus outbreaks, Severe Acute Respiratory Syndrome (SARS) in 2002 and Middle East Respiratory Syndrome (MERS) in 2012. During such crises it is natural that people become extremely concerned about their physical health problems and survival, but we cannot underestimate the serious impact on mental health and well-being. Taking care of our mental health is more important than ever in these difficult and challenging times.

In view of similarities between Corona viruses, it is reasonable to inform ourselves of the effects of SARS and MERS on mental health, and anticipate similar consequences. A systematic review showed 42% suffered from insomnia, 35% from anxiety, 32% were depressed, 34% impaired memory and 28% were confused; subsequently 32% developed PTSD (I. Summer et al, 2020). One study on effect of SARS outbreak on mental health in 2003 showed 30% increase in suicide in those aged 65 and older, and around 50% of recovered patients remained anxious and 29% of healthcare workers experienced emotional distress. Patients who survived severe and life-threatening illness were at risk of post-traumatic stress disorder and depression (E. Holmes et al, 2020)

80% of people with pre-existing mental illness had felt worse due to the current crisis with increased levels of worry and anxiety

Discussion

It is well known and accepted that isolation, loneliness, stress, health anxiety and economic downturn harm mental health and wellbeing. The COVID 19 pandemic has been an unexpected, extremely scary and traumatic experience for mankind across the globe, affecting 215 countries to date with 14 million cases reported. Mankind has appeared vulnerable and overwhelmed especially those with a history of trauma, mental illness, long-standing health conditions and elderly population. The implemented lockdown, quarantine, social distancing have been a traumatic experience for a large proportion of the population. Many of the anticipated consequences of lockdown, quarantine and social distancing measures are themselves strong risk factors for mental health problems like self-harm and suicide, alcohol and substance misuse, domestic abuse, relationship breakdown (E. Holmes et al, 2020)

Mental health foundation, UK has conducted regular online surveys in adults in the UK and found that people are struggling with strain on mental health and well-being, suicidal thoughts, stress, inability to cope and worries about finances and debt; unfortunately people with less economic security are disproportionately affected more. Rethink mental illness survey in April 2020 showed that 80% of people with pre-existing mental illness had felt worse due to the current crisis with increased levels of worry and anxiety. Young minds survey in June 2020 showed that 80% of young people had been affected badly and their mental health had been worse with feeling lonely and isolated, with increased anxiety and loss of motivation and coping mechanism. Recent Office for National statistics(ONS) survey has revealed a high level of anxiety due to the current COVID-19 crisis in the general population particularly among elderly aged over 75 years and people with disabilities.

A longitudinal population study using data from 2017-2019 and April 2020 involving more than 12,000 adults aged between 18 and 92 showed that mental health problem rose by 13.5% during the COVID 19 pandemic (M. Daly et al, 2020)

On a positive note, a more recent study by Mental Health Foundation UK showed a decreasing trend of people being anxious or worried due to easing of lockdown. As of the third week of June, 49% of the population had felt anxious and worried in the past two weeks due to pandemic, down from 62% in mid-March.



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Coping with COVID-19

Take breaks from the news



Take care of your body

Make time to unwind



Connect with others

Set goals and priorities



Focus on the facts

Conclusion

COVID-19 pandemic has induced not only considerable amount of fear and stress but onset or relapse of mental health conditions like anxiety, depression, OCD, PTSD, grief disorders and sleep disorders in the population , particularly among vulnerable groups such as those traumatised or bereaved by COVID-19, the elderly , those with long-standing medical conditions and frontline health workers. We can't deny that we're in this together and it is crucial that the vulnerable groups and the frontline health workers must be a priority for support and research in terms of meeting their mental health needs and well-being.

In the UK recent easing of lockdown has presented people with both the opportunities and challenges. Unfortunately, the economic fallout, uncertainty of the effective vaccine, the possibility of the winter surge, and continued local lockdowns are likely to maintain or increase fear, stress and onset or relapse of mental illness.

It is , however, very important to remind ourselves that it is normal to feel stressed and sad during a crisis, and most of us will find strategies to deal with our difficult feelings. It is also crucially important to seek help when needed. It would be extremely beneficial to stay socially connected with friends and family, take regular physical exercise, stay positive, practice mindfulness, and avoid alcohol, tobacco and illicit drugs. There are excellent resources available online provided by NHS, Every Mind Matters, Rethink Mental illness, Royal college of Psychiatrists, and Public Health England on impact of COVID-19 on mental health.



Kidney Transplantation during the Coronavirus Pandemic

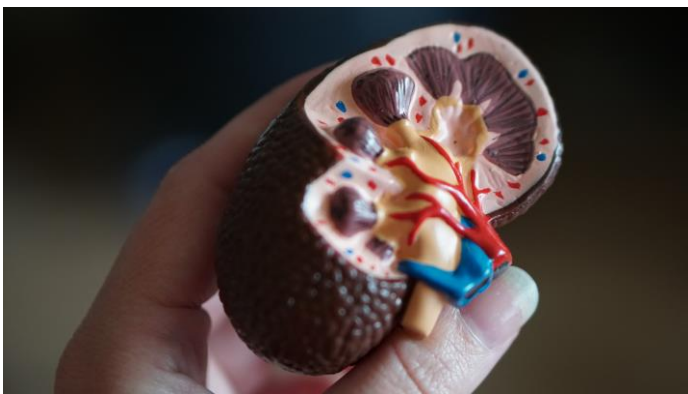
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Although kidney transplantation (KT) confers improved quality of life and survival to the majority of patients with kidney failure, organ shortage has led to an exponential rise in the number of patients on the waiting list and deaths while waiting for an organ. According to the World Health Organisation, 90306 KT, which constitutes 65% of all transplanted organs, was performed in the year 2017 in 81 countries worldwide. Of these, 36% were from living kidney donors.¹ The process of KT, in a nutshell, involves identifying the recipient and the selection of a compatible kidney donor (living or deceased), retrieving the donor kidney, implantation in the recipient, administration of immunosuppressive agents in the recipient to prevent rejection and long-term follow-up of both donor and recipient to ensure their well-being and complication-free survival.

The unprecedented Coronavirus disease-2019 (COVID-19) pandemic has negatively impacted the KT programme globally because of the concern of transmission of the virus from the donor to the recipient and from the community to both donor and recipient, leading to compromised outcomes, including death. The KT recipients are at high risk of critical COVID-19 illness due to chronic immunosuppression and associated co-morbidities. The other concern is that hospitals may not have the staff and equipment resources to care for the recipients after KT, who typically need intensive care and multispecialty management.² This short communication highlights the issues surrounding kidney donation, transplantation and the measures adopted by the transplant community to sustain the KT programme safely during the pandemic.

'The virus is primarily isolated from the respiratory tract, but has been isolated from blood in 15% of cases.'



DONOR ISSUES

Although there are concerns regarding the transmission of COVID-19 from the donor to the recipient, there is no published report of transmission after KT. The virus is primarily isolated from the respiratory tract, but has been isolated from blood in 15% cases, which increases the potential for transmission. Therefore, screening donors from both clinical and laboratory perspectives is an important consideration. Rapid RT-PCR testing of nasopharyngeal swabs is important for the safety of the organ procurement team and the recipient. The high rate of false-negative result leads to underdiagnosis of the virus in asymptomatic donors and recipients with increased risk of COVID-19 after KT. For living donor KT (LDKT), the donors should self-isolate 14 days before the date of transplant RT-PCR should be negative on the first day of isolation and within 48 hours of donation.³

At present, LDKT remains suspended in the UK. For the deceased kidney donors, the nasopharyngeal swab for SARS-CoV-2 must be negative on the day of donation. It is important to check their clinical history and carry out a thorough physical assessment because negative swab results does not definitively rule out infection and must be interpreted in the context of other assessments. The aftercare of living donors is paramount

and every effort should be made to mitigate the risk of exposing them to the virus, which can be achieved by adopting telemedicine and virtual health care pathways.

RECIPIENT ISSUES

Unlike heart and liver transplantation, KT is not a life-saving transplantation as the patients with kidney failure can survive on dialysis. In a report published from New York, a high early mortality rate of 28% at 3 weeks among KT recipients with Covid-19 was observed as compared with 1% to 5% mortality among patients with Covid-19 in the general population and 8 to 15% mortality among patients with Covid-19 who were older than 70 years of age.⁴ Therefore, KT should be offered to patients with problematic vascular access experiencing difficulties in dialysis and highly sensitised patients, where the benefits outweigh the risks.

During the resumption phase, only low-risk transplant recipients (first transplant, body mass index of <30, patients with minimal cardiorespiratory co-morbidities, normal vascular anatomy of the blood vessels) should be activated on the waiting list. A low-risk immunosuppression regimen with avoidance of depleting antibodies (anti-thymocyte globulin, alemtuzumab and rituximab) should be adopted to prevent excessive immunosuppression with increased risk of infection. Face-to-face consultation should be minimised and use of telemedicine should be adopted as much as possible.³

LOGISTICS

Minimisation of the risk of exposure of the transplant recipients to Coronavirus before, during and after KT is essential. Patients should be admitted to a COVID-19 secure area for dialysis if needed and for recovery after surgery. The staff attending the patient should have their nasopharyngeal swabs tested for SARS-CoV-2 on a weekly basis and if there is any suspicion of their exposure to the virus, they should isolate. During surgery, appropriate PPE should be used by staff to prevent cross-infection. Allocation of organs to the recipients with the highest chance of primary function should be an important consideration, which can be achieved by maintaining shortest possible cold ischaemia time, best possib-



“In the UK, during the peak of the pandemic, all KT patients were suspended in the national waiting list and the KT programme was put on hold in the majority of transplant centres from March till end of June 2020”

-le human leucocyte antigen mismatch and a negative cross-match

COVID-19 in KT RECIPIENTS

The course of COVID-19 illness in KT recipients has been reported widely. In a large study involving KT recipients at 12 transplant centres in the USA, Italy and Spain, 144 patients were hospitalised due to COVID-19. Of these, 52% developed acute kidney injury, ventilation was required for respiratory failure in 29% and the mortality was 32%. The 44 patients who died were older, had lower lymphocyte counts and eGFR, higher LDH, prolactin and IL-6 levels. In addition to general support, discontinuation of tacrolimus and mycophenolate mofetil and administration of increased dose of steroids were the mainstay of treatment.⁵

IMPACT of COVID-19 on KT

The risks associated with COVID-19 has led to cessation of KT in the majority of transplant centres globally and a pronounced negative effect on worldwide organ donation and transplantation has been observed. There has been a reduction in utilisation of scarce sources of available organs and expansion of patients with ESRD on the waiting list and mortality. In a recent analysis employing a model by using the UK Renal Registry and NHS Blood and Transplant data, it was reported that there was a missed opportunity of 1670 kidney transplants over a period of six months starting 5 March 2020 due to the COVID-19 pandemic. This would lead to 1324 additional patients on dialysis who would otherwise have been transplanted.⁶ The overall reduction in deceased donor transplantation since the COVID-19 outbreak was 90.6% in France and 51.1% in the USA, respectively.⁷

In a review that included clinical transplantation practice guidelines of 22 international transplant societies, the majority consensus was to temporarily suspend nonurgent transplant procedures and living donation programmes.⁸ In the UK, during the peak of pandemic, all KT patients were suspended in the national waiting list and the KT programme was put on hold in the majority of transplant centres from March till end of June 2020. With the decline in the number of patients with COVID-19 in the hospital and community, KT is being re-introduced gradually in the majority of transplant centres, under close vigilance.

CONCLUSION

The experience of KT during the COVID-19 pandemic is evolving and there is insufficient evidence to consider KT as a safe procedure in COVID-19 pandemic areas. Therefore, decision to transplant should be made on a case-by-case basis after discussion involving the entire transplant team with assessment of the risks and benefits. The recipients for the KT must be involved in the discussion and an informed consent must be obtained. Research should be conducted to evaluate possible solutions to reduce the risk of KT during the COVID-19 pandemic and to address the sensitivity of diagnostic tests for COVID-19.

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An overview of COVID-19 interventional clinical trials in a large NHS Foundation Trust.

Dr Dhiraj Tripathi, Consultant Hepatologist and Liver Transplant Physician
Deputy Clinical Director of Research

Since the emergence of novel coronavirus induced disease (COVID-19) in Wuhan in 2019, which is caused by beta coronavirus SARS-CoV-2, a pandemic has led to over 10 million infections and over 500000 deaths. Although case fatality is low, some areas with high rates of infection have seen a marked increase in hospital admissions with pneumonia and the need for oxygen and ventilatory support. Mortality in intensive care is about 50%. Due to the absence of approved therapies to treat and prevent COVID-19, an urgent need for research was identified in the UK. This led to prioritisation of COVID-19 research with fast track methods for regulatory approvals. Studies approved for national prioritisation are given UPHR (urgent public health research) recognition. There are nearly 50 such studies. This overview focuses on clinical interventional trials in COVID-19 at University Hospitals Birmingham (UHB), the largest NHS trust in England. An overview of the trials is given in Figure 1. The mechanism of action of key investigational medical products is summarised in Figure 2.

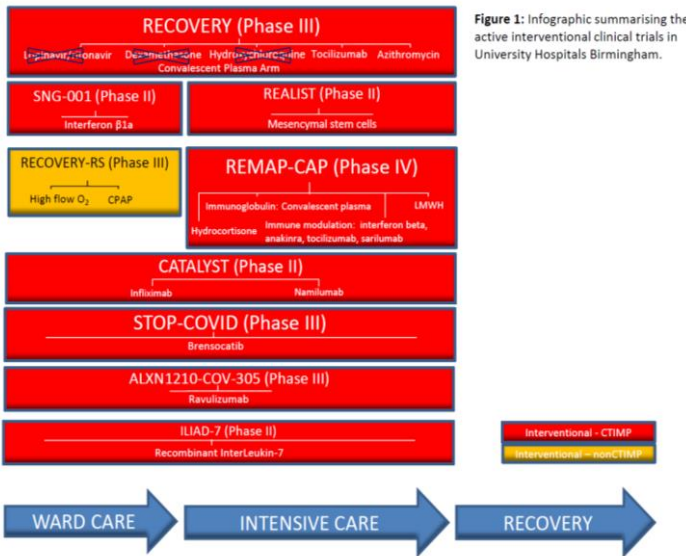


Figure 1: Infographic summarising the active interventional clinical trials in University Hospitals Birmingham.

RECOVERY trial - Randomised Evaluation of COVID-19 Therapy

Chief investigator: Professor Peter Horby, Sponsor: University of Oxford, ClinicalTrials.gov Identifier: NCT04381936

This ground-breaking “platform adaptive” trial has attracted much media attention recently. Participants hospitalised with COVID-19 (suspected or confirmed) are eligible. The primary outcome is mortality, analysed at 28 days and 6 months. To date nearly 12000 participants have been recruited in 176 NHS hospitals.

In a conventional clinical trial participants are randomised to one or two treatments with sample size and length of follow up pre-determined and mostly inflexible. In adaptive clinical trials participants are randomised to different treatments (sometimes in particular domains such as antibiotics, antivirals, or steroids) which are investigated concurrently. Importantly the design allows investigators to drop or add additional treatment arms as results are analysed at regular intervals using complex statistical methods. Thus, rather than wait for a pre-determined time as in a conventional trial, results (positive or negative) can be available at an earlier stage. New research questions and interactions between domains can be analysed.

The main randomisation part A comprised azithromycin, liponavir/ritonavir, hydroxychloroquine or no additional treatment. Both hydroxychloroquine and liponavir/ritonavir were discontinued due to lack of clinical benefit. However, dexamethasone 6mg for 10 days was found to be significantly superior to usual care alone, with a reduction in deaths by a third in ventilated patients ((29.0% vs. 40.7%, RR 0.65 [95% CI 0.51 to 0.82]; p<0.001)) and by one fifth in other patients receiving oxygen only (21.5% vs. 25.0%, RR 0.80 [95% CI 0.70 to 0.92]; p=0.002). There was no benefit seen in the absence of respiratory support. The landmark findings led to incorporation of dexamethasone as standard of care in selected patients, and will clearly impact on clinical trials. The magnitude of effect is challenging to achieve with any investigational medicinal product.

Main randomisation part B compared no additional treatment with convalescent plasma in a factorial design, which means two or more interventions are studied simultaneously. The convalescent plasma is derived from donors who have recovered from COVID-19 and have antibodies against SARS-CoV2.

Second randomisation was offered to patients in the main recovery trial with clinical evidence of progressive COVID-19 and increased inflammatory markers. The treatments arms were no additional treatment or tocilizumab.

RECOVERY-RS - Respiratory Strategies in patients with coronavirus COVID-19 – CPAP, high-flow nasal oxygen, and standard care

Chief Investigator: Professor Gavin Perkins, Sponsor: University of Warwick, ISRCTN registry number: ISRCTN16912075

This is the only non-CTIMP interventional trial presently active in UHB. This Phase III adaptive RCT compares high flow oxygen, continuous positive airways pressure (CPAP), and standard of care, testing the hypothesis that these treatments are more effective than standard of care and may reduce the need for invasive ventilation. Patients have suspected or proven COVID-19, with FiO₂ >0.4 and SpO₂ <94% and eligible for escalation to intubation if necessary.

REALIST - Repair of Acute Respiratory Distress Syndrome by Stromal Cell Administration COVID-19

Chief Investigator: Professor Danny F McAuley, Sponsor: Belfast Health and Social Care Trust, ClinicalTrials.gov Identifier: NCT03042143

This is a phase II blinded placebo controlled clinical trial of human umbilical cord derived CD362 enriched MSC (Mesenchymal Stem Cells (REALIST ORBCEL-C cells)) in patients with COVID 19 ARDS to assess safety and clinical outcomes. Preclinical evidence in animal models of ARDS suggests MSCs reduce inflammation, enhance bacterial clearance and augment lung repair. In animal models of viral induced lung injury MSCs have demonstrated increased survival, reduced lung injury, reduced markers of inflammation and reduced lung viral titres. Human studies show good safety profile.

CATALYST trial - A randomised phase II proof of principle multi-arm multi-stage trial designed to guide the selection of interventions for phase III trials in hospitalised patients with COVID-19 infection

Chief Investigator: Dr. Tonny Venith, Sponsor: University of Birmingham
ISRCTN registry number: ISRCTN40580903

This phase II trial aims to study agents which affect macrophage function and limit injury following COVID-19 infection. These are gemtuzumab (monoclonal antibody binds to CD33 on macrophages, is internalised, and causes targeted apoptosis), namilumab (anti-GM-CSF monoclonal antibody). Infliximab has also been added to the treatments as an anti-TNF agent. At present only namilumab and infliximab are recruiting.

The primary outcome is ratio of the oxygen saturation to fractional inspired oxygen concentration (SpO_2/FiO_2), measured from randomisation to day 14, hospital discharge or death. Patients are eligible if they have COVID-19 (suspected or confirmed) with $SaO_2 \leq 94\%$ at room air or a ratio of the partial pressure of Oxygen (PaO_2) to the fraction of inspired oxygen (FiO_2) ($PaO_2:FiO_2$) ≤ 300 mg Hg (≤ 40 kPa). Patients can be recruited from the wards and intensive care.

It is hoped that agents which show good results can be considered for large platform adaptive trials during the pandemic.

ILIAD-7 - Recombinant InterLeukin-7 (CYT107) to improve clinical outcomes in lymphopaenic patients with Covid-19 infection

Sponsor: Revimmune, Amarex Clinical Research, Chief Investigator: Manu Shankar-Hari, ClinicalTrials.gov Identifier: NCT04379076

This is a phase II clinical trial comparing CYT107 with placebo. The rationale is that IL-7 by increasing lymphocyte counts in COVID-19 patients can mitigate the immune suppression (severe lymphopaenia and T-cell suppression) that can be seen as a result of the initial intense inflammatory response. Patients hospitalised with COVID-19 and absolute lymphocyte count (ALC) $\leq 1000/mm^3$ are potentially eligible. The primary end point is change in ALC from Day 0 to day 30.

REALIST - Repair of Acute Respiratory Distress Syndrome by Stromal Cell Administration COVID-19

Chief Investigator: Professor Danny F McAuley, Sponsor: Belfast Health and Social Care Trust, ClinicalTrials.gov Identifier: NCT03042143

This is a phase II blinded placebo controlled clinical trial of human umbilical cord derived CD362 enriched MSC (Mesenchymal Stem Cells (REALIST ORBCEL-C cells)) in patients with COVID 19 ARDS to assess safety and clinical outcomes. Preclinical evidence in animal models of ARDS suggests MSCs reduce inflammation, enhance bacterial clearance and augment lung repair. In animal models of viral induced lung injury MSCs have demonstrated increased survival, reduced lung injury, reduced markers of inflammation and reduced lung viral titres. Human studies show good safety profile.

REMAP-CAP - Randomized, Embedded, Multifactorial Adaptive Platform Trial for Community- Acquired Pneumonia

Sponsor: University Medical Centre Utrecht (Europe), Chief Investigator: Professor Marc Bonten (Europe), ClinicalTrials.gov Identifier: NCT02735707

This international platform trial (EU, Australia, New Zealand, Canada, USA) is focuses on patients with severe COVID-19 infection admitted to intensive care. The primary outcome is all cause 90 day mortality. The current treatment arms are detailed in Figure 1. Note this trial uses convalescent plasma like RECOVERY, and low molecular weight heparin.

ALXN1210-COV-305 - Efficacy and Safety Study of IV Ravulizumab in Patients With COVID-19 Severe Pneumonia

Sponsor: Alexion Pharmaceuticals, ClinicalTrials.gov Identifier: NCT04369469

This is a Phase III RCT compares ravulizumab, a terminal complement (C5) inhibitor, with standard of care in patients with severe COVID-19 requiring invasive or non-invasive mechanical ventilation. Treatment with ravulizumab could decrease COVID-19 induced lung injury (i.e. improve clinical outcomes in patients with COVID-19 severe pneumonia, acute lung injury, or acute respiratory distress syndrome). The primary end point is all cause mortality at 29 days.

STOP-COVID-19 - Superiority Trial Of Protease inhibition in COVID-19

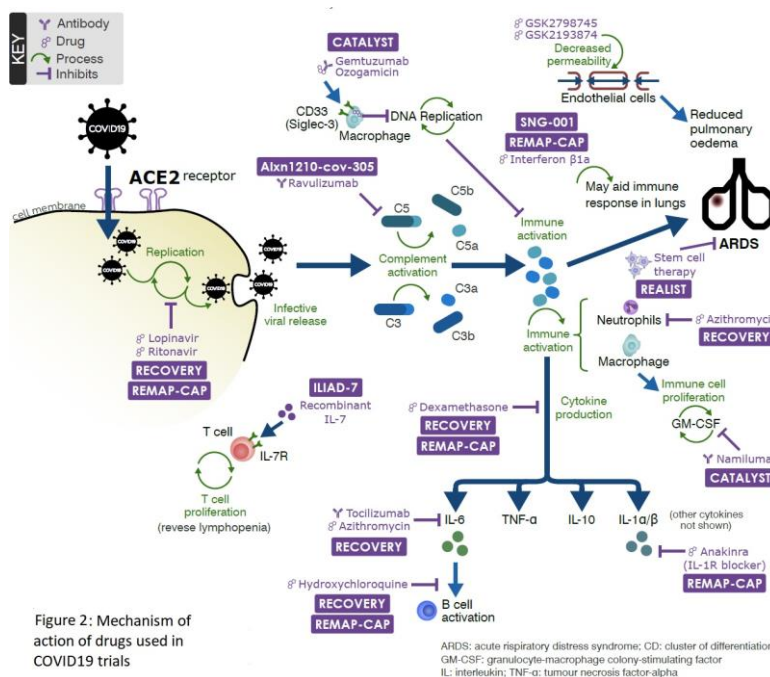
Sponsor: University of Dundee (Insmed Plc), Chief Investigator: Professor James Chalmers, ISRCTN registry number: ISRCTN30564012

This Phase III double blind RCT evaluates the clinical efficacy of Brensocatib compared to placebo and standard care in adult patients hospitalised with COVID-19. The objective is to test whether by reducing neutrophil protease activity in neutrophils one can prevent or reverse the development of ARDS and thereby improve outcomes in individuals with COVID-19 infection. Co-enrolment with RECOVERY-RS is permitted.

SNG-001 - Trial of Inhaled Anti-viral (SNG001) for SARS-CoV-2 (COVID-19) Infection

Chief Investigator: Professor Tom Wilkinson, Sponsor: Synairgen Research Ltd., ClinicalTrials.gov Identifier: NCT04385095

This phase II double blinded placebo controlled RCT of inhaled interferon beta (IFN- β) tests the hypothesis that IFN- β in SARS-COV2 reduces lung injury. It is believed that IFN- β is suppressed making the virus less susceptible to the innate immune system. Patients have confirmed COVID-19, but not those who are ventilated or in intensive care. Thus early IFN- β could reduce admission to ITU.





COVID-19 and Diabetes

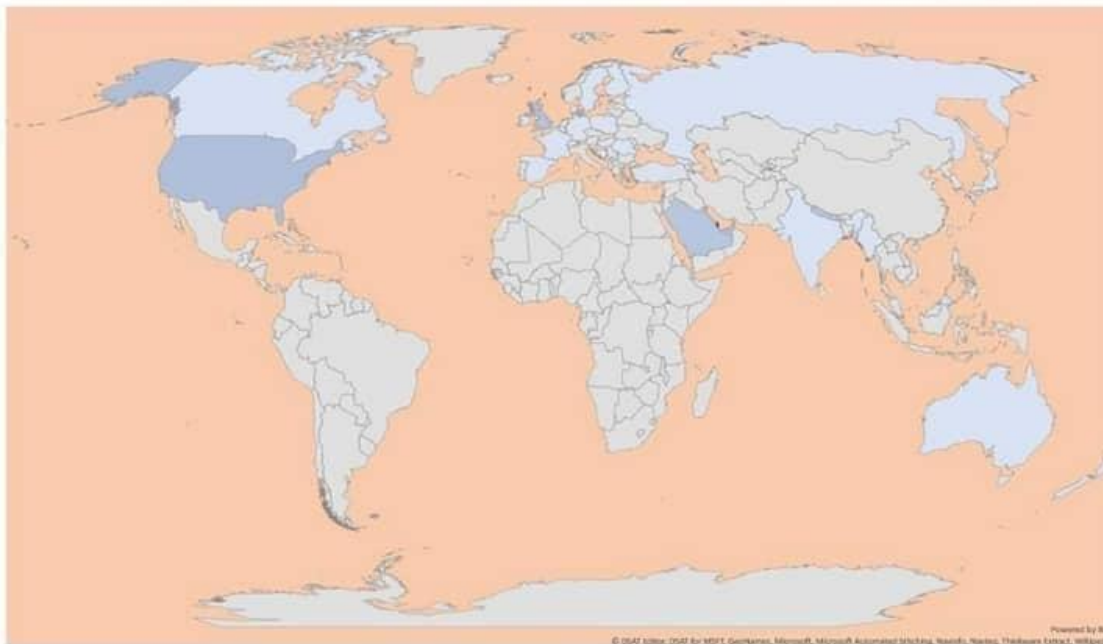
Jake Rajbhandari
University of Birmingham
4th Year Medical Student

Prevalence of diabetes & COVID-19 (In UK & Nepal)

Over the past year, COVID-19 has swept the world. A disease that was unknown this time last year, has since been responsible for over half a million deaths in the world.¹ People with diabetes are at a greater risk of dying due to COVID-19, compared to the general population.

In the UK, the population is 67.9 million.² Of that, there are 4.7 million people with diabetes.³ In Nepal the population is 29.1 million⁴, but the data about diabetes sufferers is not reliable. As of 2000, 436,000 people had diabetes. This number is projected to rise to 1,328,000 in 2030.⁵ There have been 295,372 recorded cases of COVID-19 in the UK and 17,844 cases in Nepal (as of 20/7/2020).¹ The death toll from COVID-19 in the UK & Nepal are 45,312 & 40 respectively (as of 20/7/20).¹ Of the total UK COVID-19 deaths, 66 are people of Nepalese origin (as of 30/5/20 – NRNA UK data – Figure 1), with the majority of them having had diabetes as a co-morbidity.

Number of Nepali Infections and Deaths due to Corona Virus Worldwide, May 30, 2020



Country	Infected	Fatality
Qatar	6911	1
USA	1700	17
United Arab Emirates	1600	19
United Kingdom	1517	66
Nepal	1401	7
Saudi Arabia	1364	8
Kuwait	650	2
Bahrain	311	3
Malaysia	81	
Turkey	57	1
Denmark	55	
Portugal	42	
Canada	24	
Ireland	22	1
Maldives	17	
Spain	13	
Australia	12	
Japan	10	1
Belgium	6	
Switzerland	5	1
Finland	4	
Germany	4	
Cyprus	3	
New Zealand	3	
Hong Kong	2	
India	2	
Malta	2	
Poland	2	
Russia	2	
France	1	
Myanmar	1	
Romania	1	
Sweden	1	
Netherlands		1
Total	15,826	128

Disclaimer: Compiled by Health Committee of NRNA from different sources including Nepali community, Nepali organizations, doctors, nurses and health professionals working in different countries. Number in some countries are suspected only. Death include suicide by person after the infection is confirmed. Data not available in other countries.



Figure 1: Number of Nepalese people infected with and killed by COVID-19 worldwide. This data is correct up to 30/05/20.

COVID-19 Mortality in people with diabetes

Several studies from China, Italy, and the United States suggest that diabetes increases the risks of severe COVID-19 complications and mortality. In one Chinese study, people with diabetes had the second highest fatality rate (7.3%) after cardiovascular disease (CVD; 10.5%) amongst those with comorbid conditions.⁶ Recent data from the UK suggests that out of all of the serious COVID-19 infections and deaths in hospitals, 33.2% of the people suffered from diabetes.⁷

Can COVID-19 cause Diabetes?

There have been a few cases of new-onset diabetes observed in patients with COVID-19.⁸ Severe metabolic complications of pre-existing diabetes have regularly been observed, including diabetic ketoacidosis and hyperosmolarity. These cases require exceptionally high doses of insulin to control their diabetes. Experimental studies have shown that the COVID-19 virus might trigger diabetes by damaging the cells that control blood sugar.⁹ However, it is too early to make any conclusions about this at this stage.

Are Nepalese people at high risk?

Outside of Nepal, approximately 146 Nepalese people have died due to COVID-19 (as of 20/6/20) [10]. As stated earlier, 40 people have died within Nepal (22/7/20).¹ It is already known that people of South Asian descent have an increased risk of diabetes and CVD¹¹; so, it can be assumed that Nepalese people who died from COVID-19 may have been suffering from coexisting comorbidities.

As mentioned previously, 436,000 people suffer from diabetes in Nepal (as of 2000).⁵ In a 2015 study, it was found that the prevalence of diabetes differed within the urban population compared to the rural one. The researchers found that 8.1% of the urban population suffered from diabetes, compared to 1.0% of the rural population.¹² Looking at some national statistics from 2018, 80.26% of Nepal's total population is classed as rural.¹³ This shows that although the majority of the population is rural, there is a higher prevalence of diabetes in the urban population than the rural. However, this data is not reliable; therefore, these conclusions are hesitantly drawn.



What should people with diabetes do during the COVID-19 Pandemic?

The main measure people should adhere to is social distancing, following public guidance as set out by the UK government.

If you are at home with symptoms of Covid, you may have to alter your diabetes personal management. If you routinely check your blood sugar yourself, you will need to do so more often. If you don't check your blood sugar levels at home, be aware of the signs of hyperglycaemia, which include passing more urine than normal (especially at night), increased thirst, headaches, tiredness and lethargy. You should contact your GP practice if you have these symptoms.

Staying hydrated is key – have plenty of unsweetened drinks and eat little and often.

If you have type 1 diabetes, check your blood sugar at least every four hours, including during the night, and check your ketones. If your blood sugar level is high (generally 15mmol/l or more, or 13mmol/l if you use an insulin pump, but your team may have given you different targets) or if ketones are present, contact your diabetes team.

Keep eating or drinking – if you can't eat a large amount of food, snacks and drinks with carbohydrates in can give you the required energy. Try to sip sugary drinks (such as fruit juice or non-diet fizzy drinks) or suck on glucose tablets or sugary sweets like jelly-beans. Letting fizzy drinks go flat may help keep them down. If you're vomiting, or not able to keep fluids down, get medical help as soon as possible.¹⁴

Conclusion

Diabetes, both Type 1 and Type 2, are associated with increased risk of death due to COVID-19; but not an increased risk of actually contracting the virus. People with diabetes can be more vulnerable to becoming seriously ill with COVID-19, which could lead to their death. However, it does not automatically place people with diabetes in the 'extremely vulnerable' or shielding group.

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Hind Vaidya

Awarded the Honorary Literature Award at the Virtual Silver Jubilee celebration of Nepalese Literature Development Council, UK , 12-13 July 2020.

At last year's AMG, Hind gifted donations received for copies of her 'New Life' anthology to a diabetes charity in Nepal.

COVID-19

Where it is originated?

Naturally evolved or man-made?

Do not keep blaming each other

This is the time to be united globally

To be safe from New Coronavirus "COVID-19"

Time to give enough support to

The researchers and scientists

To find the vaccination that eliminates

COVID -19, new coronavirus

That has killed so many humans

In different parts of the world

And this microscopic crowned virus

Is spreading fast

This is the time to do what is best

To overcome from deathly Coronavirus

And

In addition to follow nation's rules and regulations

We all have personal responsibilities

To stay safe

19/03/2020

Each and Every Day

Sad, Coronavirus took you away

Final journey "Rest in Peace" I pray

You have done your best

You will live in each foot step

Of your flesh and blood, each and every day

01/05/2020

(dedicated to Late Padma Tara Shakya)



COVID-19 and the Community Pharmacist

Mr Prabin Joshi

Community Pharmacist, Greater Manchester

I am an experienced community pharmacist working for a large pharmacy multiple and this is an account of my experience of working as a pharmacist during the coronavirus pandemic.

Like most of the country, back in March, the community pharmacy sector was initially caught off guard and were ill prepared to combat the national health emergency that was at our doorstep. Looking back now, one could argue that lockdown was too slow and that there was a lack of preparation, support or leadership for the NHS. Even before the government finally did acknowledge the severity of covid-19 and initiated lockdown, GP surgeries had started closing their doors to protect their teams and the public. This started to increase pressure on pharmacies as we were the only immediately accessible NHS healthcare professionals left on the high street. This was shortly coupled with a surge in requests of items such as hand sanitizers, face masks and thermometers, reduced staffing levels due to members of the pharmacy team going into isolation, more medical queries and increased prescription volumes. Towards the start of the pandemic there were numerous cases where a member of the public would present in a pharmacy with symptoms of coronavirus potentially putting the pharmacy team at risk themselves and forcing temporary closure for a deep clean.

All this created an unprecedented strain on the average community pharmacy. I was initially based in a shopping centre pharmacy where we typically provided an array of pharmacy services such as travel clinics and some childhood vaccination

services but all these close contact services were suspended to minimise risk to both patients and pharmacists. Demand of this particular pharmacy went down and fell due to suspension of most of our clinics and the closure of the vast majority of shops within the centre. In contrast, the demand of most other pharmacies based on the high street, grew exponentially. Therefore, the



“Even several months later, community pharmacies were not included in initial government online PPE ordering systems like GP surgeries”

company made the centralised decision to temporarily close the pharmacy in which I was based and redeploy pharmacists and most pharmacy assistants to other busier pharmacies which were struggling to keep up with demand. Although it was a worrying time for me to be redeployed to other pharmacies, I knew it was the right decision and I wanted to go and make a difference out there in the pharmacies that were struggling. In most of the pharmacies that were open, it was sometimes difficult to

balance all the factors mentioned as well as still provide services such as supervised methadone consumption and emergency hormonal contraception clinics to ensure these patients do not fall through the cracks.

However, the main challenge was to continue to prioritise patients whilst also balancing the protection of ourselves and our pharmacy teams.

I am fortunate enough to work for a large pharmacy multiple whose support, proactive approach and infrastructure has made all the difference. Overall, we were able to respond relatively quickly to the pandemic and were able to source personal protective equipment (PPE) to pharmacy teams and produce protective perspex screens to enhance safety.

Not all pharmacies have been as fortunate and struggled to initially source PPE for their pharmacy teams. Even several months later, community pharmacies were not included in initial government online PPE ordering systems like GP surgeries, when one could argue that pharmacy teams are more at risk. This is particularly worrying with deaths of fellow pharmacists and pharmacy team members during the pandemic. Most community pharmacies must source their own PPE resulting in further financial strain on the sector.

In March, towards the start of the pandemic, I contracted a cough and was in isolation for two weeks. There was no covid-19 testing at the time so I was unable to confirm whether I had the virus or not and therefore had to remain off work. Like for many healthcare professionals, this was an incredibly

“The profession is now slowly getting its rightful recognition and are able to shop during NHS priority hours, receive death in service benefits...”



The Royal Pharmaceutical Society of Great Britain shared the same view and were compelled to write to the health secretary Matt Hancock regarding “the lack of recognition, support and encouragement from the Government for the fantastic work pharmacy is doing”.

The profession is now slowly getting its rightful recognition and are able to shop during NHS priority hours, receive death in service benefits and regular government mention. Most of our patients have always been grateful for the relentless work that pharmacy teams have been undertaking and it is now rewarding to have that national government recognition too. Hopefully this will carry on where pharmacy will be remembered for its tireless fight against this pandemic on the frontline, right from the very start. As a profession, we are not always the best at “shouting about” our achievements but now is the time. Community pharmacy must build on this, keeping our voice heard and seek further opportunities in a safe manner and secure funding after this. The world will never be the same again but I am optimistic that the valuable work we have done during this time will cement our future role within the NHS for many years to come.

an incredibly frustrating time for me as I knew that our teams were becoming depleted and it was becoming increasingly difficult to keep every pharmacy open to serve each community.

Both the NHS and our company gave pharmacists professional autonomy at a local level which means that we could temporarily close our stores if we needed to in order to conduct a deep clean or catch up on dispensing and checking tasks. Also, we limit the number of patients that can enter a store to help maintain social distancing. Most of our pharmacies are now back to opening full contracted NHS hours but it is good to know that we have the backing of the company and the NHS if we deem it necessary to close in times of extreme pressure or public safety.

Towards the start of the pandemic, I did feel there was very little recognition of pharmacists and their teams. Initially, each government speech thanked doctors and nurses but there was no mention of pharmacists or their teams. In the past, pharmacists have gotten fairly used to a lack of recognition for our tireless NHS work. However with the vastly increased workload and added risks to ourselves and our families that comes with remaining open to the public, dispensing NHS prescriptions and delivering crucial NHS services, this time we had to be heard. To add to the frustration, there were several cases where pharmacists were being refused NHS worker priority shopping hours by supermarkets. Enough was enough.

Hope by Anurag Sharma

Those who held frightened hands
those who wiped a father's brow
those who sat as a mother cried
those who wept right there
where we were not allowed.

Those who rushed into battle
those who worked tirelessly
those who found a way
those who struggled through a day
when we could have ours.

Those who suffered sleepless nights
those who will never forget
those who stood with their comrades
those who did what they had to do
how could we ever thank you enough?
Those who kept the light lit
those who lost their lives
those whom they left behind
from their ultimate sacrifice.

To everyone of those people
who kept a roof above us
as the world collapsed
you gave us hope
and reminded us all
that there are such things
as heroes



Work in the time of COVID-19

Dr Reema Joshi

General Practitioner, Greater Manchester

Processes that would normally have taken months to implement, were put into practice within weeks. We were firefighting initially.

We keep being told these are unprecedented times, that everyone's world has changed and that there is a "new normal".

This is an account of my personal experience of life during "lockdown". I know a lot of my locum colleagues are having problems finding work, as their regular practices stopped using them. I also know a lot of my colleges applied for work in 'Covid clinics', OOH and emergency clinics instead. We were aware this virus was in the UK as early as February, but I can honestly say that my work didn't change, and in fact life didn't change for at least another month. We heard the news reports, we worried, but we were reassured that all was in hand. The UK was prepared... until it wasn't. Little did I know Covid19 would affect not just my work, but my health too.

Little did I know Covid19 would affect not just my work, but my health too.

Some of you may know that I developed symptoms and ended up being off work for over three weeks. It started with the bone-weary fatigue, and body ache before developing into a fever two days later. Complying with guidelines I self-isolated. I felt guilty, as at the time, I felt well enough to work; I have definitely been into work previously feeling worse than this! However, this was just the beginning. Within days I had the cough, breathlessness, throbbing headaches, cramps and diarrhoea. I lost my sense of smell and taste. Testing has been hit and miss despite what the government said; access seemed to depend on your postcode and your manager. Testing was arranged despite me not fitting the 5-day time frame and I had to drive myself 20mins to the testing site. It was after this I deteriorated and at one point when my sats dropped to 90% with a tachycardia of 180, I thought it was time to call 111.

I was worried about worrying my family, I was feeling guilty about using NHS resources and feeling guilty about my colleagues having to pick up my workload. I am fortunate that I am relatively young and relatively fit and within 24hr I had picked up, but it would take weeks to recover. I lost weight, my stamina was shot and my taste is still altered today. I did eventually tell my family and friends how unwell I had been, after the event! I can honestly say I have never felt so unwell, especially for such a prolonged time, but I have very little to compare this too. I've never had flu and the closest I probably come to this is an episode of quinsy. This I think has coloured my view of the "lockdown" world.

I started working as a locum in Manchester in February 2020 and had only been at my current practice since the beginning of March. Prior to the government's restrictions on March 23rd, I can honestly say the day-to-day running of the surgery didn't change. So like most GPs prior to lockdown, we had full clinics, mostly face to face, with no triage beforehand and added in extras and calls as needed. We only altered from face to face consultations on the 16th March, (the week before I became ill) but even then, triage only consisted of asking them if they were symptomatic. Then in the space of a week everything changed and we were playing catch up. Processes that would normally have taken months to implement, were put into practice within weeks. We were firefighting initially. Most of the changes happened whilst I was off ill, so I had to play catch up on my return; but I was so grateful to be back at work and able to contribute. GP surgeries have remained open throughout all of this; ok our front doors are locked, but we are still doing the same amounts of consultati-

-ons each day, if not more. I know we struggled as advice from up high was either non-existent, contradictory, unsuitable, or constantly changing! Don't even get me started on PPE supplies! But we struggled through. Hot hubs were introduced, visiting services were put in place, and teams to certify the increasing number of deaths in the community were put together (yes mainly in nursing and residential homes). The way we did things changed overnight. Social distancing has been introduced at work, and changes are still being made every day, although some would say too late. These are proving to be interesting times.

I worry I'm not seeing the serious illnesses I should be seeing daily, and how much we are storing for the future.

Remote working has plenty of technical issues. Access to practice computers is non-existence for us, so we were given readers to attach to our home computers. We didn't have enough of these to start with. Remote access software has its own difficulties and I still only have intermittent access eight weeks later, meaning I cannot remote work safely. Video consultations still has ongoing IT issues and the sheer number of daily phone consultations has overwhelmed the system. We have just introduced e-consultations to add to the ways patients can access us. Yet despite all this I worry about the ongoing health concerns of my patients, both the physical and the emotional needs that were there before the Covid crisis and those brought on by the Covid crisis. I'm dealing with more mental health issues daily, and having to signpost more and more to online services. I worry I'm not seeing the serious illnesses I should be seeing daily, and how much we are storing for the future. I worry I haven't admitted anyone acutely unwell in months. I worry about the number of patients that need routine secondary care referrals that are on hold. And I worry about the long-term effects this will have on my mental, emotional and psychological health. I am changed. We are a work in progress with ongoing daily frustrations, but we have proved we can adapt and that there will be lasting change in the GP landscape and a "new normal".



Working from home during the coronavirus pandemic – Experience of a Consultant Psychiatrist

Dr Keshar Lal Shrestha
Consultant Psychiatrist,
Sunderland

At the grand old age of 76 and for the first time in my life, I find myself working from home due to COVID-19. This article documents my experience: the challenges, the setbacks and occasional small victories. I hope to offer a few insights I have gained as I have navigated a new method of assessing and reviewing patients, along with the behaviours my patients have exhibited as they live through the twin realities of a global pandemic and prolonged lockdown.*

I am a Consultant Psychiatrist working in adult planned mental healthcare in Sunderland. I work with a range of other professionals such as psychiatric nurses, social workers, therapists, occupational therapists as well as support workers. My role is to conduct an assessment of a patient's mental state before making diagnoses and recommending care plans which may include medications as well as other psychological interventions.

From March this year, I started working from home which is a novel concept in Mental Health. Upon finding out about my new working arrangements, my thoughts swung from relief that I would be able to keep working, (I do not cope well with boredom), to trepidation that I would have to rely on video conferencing to keep working, (I do not cope well with new technologies either), to excitement that I would be learning something new at this late stage in my career.

“Perhaps the biggest obstacle I face in this environment is building and maintaining a high level of rapport.”

My new working day starts with joining the Multi Disciplinary Team via video conferencing before moving on to my clinic which is conducted individually or in small groups via telephone or video chat.

Perhaps the biggest obstacle I face in this environment is building and maintaining a high level of rapport. The lack of physical face to face contact means that I am relying much more on verbal communication. During a traditional interaction, I would be paying close



attention to body language and non-verbal cues as they would form a large portion of the information gathering process.. I deal with patients, both old and new and each present their own challenges. New patients can be tricky as I am not in a position to do a full examination, however, I am able to give a provisional diagnosis and formulate a treatment plan.

While most patients seem comfortable undergoing a mental state examination remotely, it is the most vulnerable who are most disadvantaged. I believe this, in some cases, to be caused by a reluctance in engaging in a medium that could be considered impersonal. A small population of patients seem to have difficulty in giving the necessary level of detail due to their underlying mental state. Certain patients with psycho-motor retardation, or thought disorders, experience difficulties in comprehension and expression. In these cases, a thorough assessment must be conducted if remote consultation is to be continued.

One of the most important factors which needs to be considered is confidentiality. Unlike my consultation

room, it is difficult to ascertain how much privacy patients have when they are in their own environment. Intrusions, either accidental or deliberate are at best disruptive and at worst destructive leading to a loss of trust and willingness to engage so must be guarded against.

COVID 19 Related Mental Illness

In my experience, many patients are suffering from a high level of anxiety and excessive fear from the situation brought about by COVID-19. While this has not led to a corresponding increased risk of deliberate self-harm or overdose attempts within my patient group, the number of patients whose severity of symptoms now warrant increased doses of anti-anxiety drugs and sleeping tablets is significant.

“Certain patients with psychomotor retardation, or thought disorders, experience difficulties in comprehension and expression.”

I have noted a collection of symptoms that are particularly prevalent amongst patients who are isolating due to COVID-19. I have dubbed this phenomenon as 'Lockdown Syndrome' and the symptoms include but are not limited to:

- Dull brain and lethargy
- Sleep disturbances and nightmares
- Feelings of anxiety and low mood
- Lack of self-care due to low motivation
- Increased alcohol consumption and maybe psychoactive substances
- Rising tensions leading to domestic violence in the family
- Increased financial worries
- Behavioural changes, either becoming caring, helpful and supporting veering towards selfishness, suspicion and engaging in hoarding. .
- A lack of self confidence, self blame and feeling of helplessness
- Separation anxiety due to lack of physical contact from loved ones

Although patients with 'Lockdown Syndrome' generally react well to reassurance, the trend is that the severity of symptoms within individuals has increased as the lockdown period has been extended. It will be interesting to record how this develops as we start to ease the most restrictive measures and

move towards a more targeted and local lockdown model.

The COVID 19 pandemic and subsequent lockdown has changed the mental health treatment landscape in the UK, particularly for high risk workers such as myself.

Telephone and video conferencing is a surprisingly effective method of communicating and while there are challenges to this new way of working, arguably all but the most vulnerable can benefit from remote assessment and treatment. The fear of COVID-19 infection combined with the stress of lockdown, and all the instability that brings, has highlighted a group of symptoms that can be clustered as 'Lockdown Syndrome'. While those with existing mental health conditions are vulnerable to this, those with no prior poor mental health history are also exhibiting such symptoms. Therefore, healthcare providers should be prepared to increase the availability of mental health services, as I predict an increase in those seeking treatment especially if the UK is required to enforce a second lockdown period. If this were to occur in the winter when the hours of sunlight are shorter and people would normally expect to be surrounded by friends and family during the festive period, then it is likely the current provision of mental health services would be sufficient.

*This article was written at the beginning of COVID-19 lockdown. Over the period of five months there have been further developments as well as improvements in video conferencing. There has been better collaboration between the primary and secondary mental health services.

Experience of working during COVID-19 Pandemic in Psychiatry as a trainee doctor

Dr Sarju Shah
GP ST2



The year 2020 started with lots of uncertainty to people across the world. It changed the life-style, working environment and brought lots of changes in people's life.

I am a trainee doctor posted in community psychiatry when the pandemic hit. It is a mental health service based in Sunderland and is an Adult healthcare service and the community treatment team. It is a team of professionals which include Psychiatry consultants, Psychiatry nurses, psychologist, social workers, therapists, occupational therapists and support workers.

When the COVID 19 pandemic hit the UK and Government announced the new rules for vulnerable people to work from home, the way community psychiatry work started to change. The team started following the Government rules of social distancing and hand washing and the mode of consultation was changed to telephone rather than face to face. The vulnerable staff started to work from home and the staff working from base followed the Government rules of 2 metre distance.

I was still working from the base. I used to do clinic via telephone consultation which was bit strange initially as I was not used to with it. I found it challenging as we not only should look for verbal but non-verbal cues while consulting the patient which was not possible via telephone. However, I noted that the patient sounded more relaxed and involved in consultation when it was done within their comfort zone.

While working in community psychiatry during this pandemic, I learned about the effect of lockdown on the mental and psychological wellbeing of a person. In my experience, I felt that lockdown, on one hand, brought anxiety and increased fear of uncertainty in the patients who were already suffering from mental health problems. On the other hand, there were a handful of patients who felt the lockdown has not made any difference in their life. I also came across a young patient who was actually motivated to serve as a healthcare professional in the future as she understood the value of medicine, which came as positive surprise to me. There were cases with increased alcohol consumption, psychoactive substances, increased domestic violence and separation anxiety of being away from loved ones.

In this period of uncertainty, the team in community tried to uplift and support the colleagues by checking on each other and family wellbeing. There was awareness reminder on computer screen with green, yellow and red symptoms to check on not only physical but mental wellbeing of the staff.

In conclusion, working during the pandemic gave me new experience of managing the patient during uncertainty and looking after ourselves as well as the colleagues.



My experience as a Stroke Registrar during the COVID-19 pandemic

Dr Zahra Jabir, Specialist Registrar in Stroke Medicine, Fairfield General Hospital

Introduction

I have worked as a specialist registrar in Stroke Medicine for the past two years in a District General Hospital (DGH) with a Hyperacute Stroke Unit (HASU). My role involves assessing patients with acute stroke either in accident and emergency (A&E) or those presenting as inpatients across three sites. Coronavirus disease - 2019 (COVID-19), like for all specialties, has posed several challenges, including being faced with a greater complexity of presenting cases, aiming to reduce face-to-face contact for milder cases and dealing with the effects of COVID-19 on staffing as rota master for the department.

This short communication highlights key points in our understanding of cerebrovascular complications associated with COVID-19 thus far, as well as my experiences as a junior doctor in the stroke department.

Stroke in COVID-19 positive patients

The incidence of ischemic stroke in hospitalized COVID-19 patients ranges from 0.4 -2.7%, and that of intracranial haemorrhage from 0.4- 0.9%. Onset of stroke in most cases appears 1-3 weeks after the onset of COVID-19 symptoms. Developing a stroke whilst being COVID-19 positive is likely to confer with poor outcomes. Retrospective studies from several hospitals in Wuhan, China, showed that the 5.9% of COVID-19 patients who developed strokes were elderly patients, with cardiovascular risk factors and had developed severe COVID-19 related pneumonia.^{1,5}

Recent data from the pandemic epicentre in Wuhan, reported neurological complications in 36% of 214 patients with COVID-19. Acute cerebrovascular disease (mainly ischaemic stroke) was more common among 88 patients with severe COVID-19 than those with non-severe disease (5.7% vs 0.8%).¹

Approximately 50% of hospitalized patients with COVID-19 suffer from neurological complications, which include anosmia, dysgeusia, encephalopathy, acute ischemic and haemorrhagic strokes,



cerebral venous sinus thrombosis, subarachnoid haemorrhage, seizures, and Guillain Barre syndrome.²

Pathogenesis

During the course of COVID-19, a significant increase in hypercoagulable states have been documented, which has contributed to the increased incidence of ischaemic cerebral infarctions and venous thromboembolism. The pathogenesis of hypercoagulable state is a result of fulfilment of all three criteria of Virchow's triad:³

- (a) Endothelial injury due to severe acute respiratory distress syndrome, cytokine storm and intravascular catheters
- (b) Stasis due to reduced mobility
- (c) Hypercoagulable state and hyper-viscosity due to increased circulating prothrombotic factors.

Other biochemical changes resulting in hypercoagulability include an increase in D-Dimer, fibrinogen, von Willebrand's factor, and factor VIII. There have been rarer cases noted of increased rate of early re-occlusion following mechanical thrombectomy, which supports the hypercoagulable state as the likely cause of increased rate of thrombosis.^{4,5}

Biochemically the findings are similar to that in disseminated intravascular coagulation (DIC). However, clinically COVID-19 patients with DIC like syndrome develop thrombosis rather than bleeding.⁵

'Time is Brain'

The fundamental ethos of stroke management consists of performing investigations as soon as possible so that timely intervention can be instituted, such

as thrombolysis and thrombectomy in ischemic stroke, early anticoagulation reversal, management of blood pressure and escalation to neurosurgery in acute haemorrhagic stroke, with the aim of reducing the long-term morbidity. In my hospital, like many DGH's across the country, there is only one computerised tomographic (CT) scanner and one MRI scanner. Understandably, in suspected or confirmed cases of COVID-19, there are strict infection control measures leading to long delays in imaging, with thorough cleaning required between patients. Furthermore, procuring and donning appropriate personal protective equipment (PPE) prior to assessment of the patient, add to the door-to-needle time.

Not having a designated stroke ward for COVID-19 positive patients meant that we were unable to accept patients who were positive from the other two sites in the trust. Similarly, when stroke patients in our hospital were positive, they were outlying on other wards. Overall, this has meant that there were delays in receiving specialist stroke care from the multidisciplinary team.

Delays to presentation

Throughout the world there has been a significant paradoxical reduction in use of inpatient stroke services in the wake of the pandemic, with a reduction in thrombolysis and thrombectomy procedures. This is likely to be a result of a combination of fear of attending hospital for diagnosis, resulting in delayed presentations.

In patients with mild symptoms of stroke, my experience was that they were less likely to present to hospital with fear of contracting the virus. However, many contacted their general practitioners (GP) via telephone consultation and were referred to our outpatient Transient Ischaemic Attack (TIA) clinic. This in combination with cancelled clinic lists due to staff illness, resulted in increased burden on this outpatient facility. Further confounding this was the fact there were significant delays and cancellations in outpatient investigations such as CT scan, magnetic resonance imaging, carotid dopplers, cardiac investigations and associated specialist reviews by Speech and Language Therapists, Orthoptists, Physiotherapists and Occupational therapists.

Whilst the majority of GP consultations were reliant on telephone consultations, the level of assessment in the community

was limited, which resulted in a larger number of calls than usual from primary care to the on-call registrar and a greater number of referrals seen and discharged from A&E. Common cases where this occurred was with Bell's Palsy, functional neurological disease and patients with non-specific neurology. This, however, could be improved significantly with improvement and implementation of video consultations at primary care level and as face-to-face consultations are re-introduced.

Challenges as a rota master

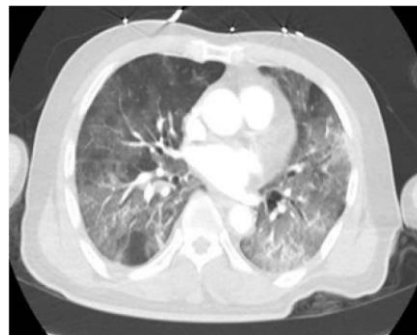
The role of rota master can be challenging at the best of times, but a role that a junior doctor often finds themselves in at least one point in their career. Undoubtedly, I have improved my organisational skills, people and service management skills and learnt to troubleshoot on a day-to-day basis, however my skills were well and truly tested during the pandemic. In the early period, as staff developed symptoms and self-isolated, we were quite often functioning with skeleton staffing levels. My priority was to ensure there was cover for the on-call stroke take, followed by senior cover for the hyperacute stroke unit and ensuring that juniors on the less acute rehabilitation wards had available senior support. Prioritising inpatient over

outpatient stroke services during critical staffing levels was vital in maintaining patient safety. This involved ensuring daily consultant review of patients and cancelling or reducing outpatient activities. Maintaining team morale whilst staffing was stretched was fundamental to ensuring the department continued to function.

Discussion

In the event of a second wave of COVID-19, in order to delay time-sensitive investigations, a solution may be for stroke units to have a dedicated CT scanner for COVID-19 positive patients, with a dedicated hyperacute stroke unit for both COVID-19 positive and low risk patients, resource allowing.

It is important to reiterate the importance of patient education amongst the general public, on the importance of urgent presentation even during a pandemic, if they develop 'FAST' positive signs.



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Case Study

73 year old male with a background of hypertension, hyperlipidemia and carotid stenosis presented with respiratory distress and altered mental status. Due to severe respiratory failure at presentation he was intubated. CT Brain demonstrated loss of gray-white differentiation at the left occipital and parietal lobes, consistent with acute infarct. CT chest demonstrated bilateral peripheral dominant patchy airspace opacification and ground glass appearances consistent with COVID-19 associated pneumonia..

The outbreak of SARS-COVID19 meant most final year medical students across England graduated earlier as doctors. Despite the outbreak overshadowing the celebrations and shortening the time for preparation for our foundation training, I was eager to put my hard-earned clinical skills and acumen into practice. I opted for the voluntary Foundation Interim Year (FiY) programme in Trauma and Orthopaedics (T&O) surgery at the hospital where I had trained during my final year of medical school. I had three weeks to prepare myself for the logistical and clinical challenges ahead.

My typical day starts at 10am and ends at 6pm on weekdays including 1 in every 3 weekends. The T&O ward was converted to facilitate COVID19 patients' care and all elective operations were cancelled. As a result, we have reduced patients to provide ongoing ward care for and less administrative responsibilities in comparison with the typical Foundation Year (FY) surgical rotations. There were also fewer opportunities to assist our seniors in theatre. However, my day predominantly involves clerking in patients, discussing management plans with my senior, prescribing appropriate analgesia and making referrals to a nearby specialist orthopaedic hospital. I also receive regular departmental teaching. These are activities similar to the traditional FY programme, which I have enjoyed as my surgical knowledge and patient management skills have improved

Interestingly, the benefit of working at a district general hospital has meant that I am relied upon by my colleagues to complete practical skills. I regularly conduct core FY skills such as cannulation and venepuncture, therefore have been already able to complete most of my core skills as part of my portfolio responsibilities. This is in contrast to my experience as a student who trained at a larger tertiary centre, where I would have been relied upon less to complete the aforementioned skills. Furthermore, my registrars often allow me to conduct joint aspirations, reduce dislocated joints and suture small laceration injuries under supervision. Such advanced skills are a further contrast to the traditional FY roles as often other clinical priorities take precedence for juniors. The lower administrative and higher clinical responsibilities allowed me to work similarly to a Senior House Officer - a daunting thought, yet an important crucible for any doctors seeking to excel in their medical career. Further examples include, discussing cases with medical registrars and assisting general practitioners with T&O referrals.

I was entrusted more over time by my seniors to independently handle challenging and litigious cases such as potential cauda equina diagnoses. I was always supported by my seniors and was enthusiastic to learn and practice safely. Having experienced such skills and responsibilities at a junior level means I am satisfied with my interim experience, perhaps, I am even at an advantage compared to my other surgically minded colleagues.

The Interim Foundation Programme: My Experience in Trauma and Orthopaedics



DR SANDESH SHRESTHA



Moreover, I feel privileged to be mentored by T&O specialists from the nearby renowned specialist orthopaedics hospital. They are academically minded and very passionate about the specialty, therefore I have had the opportunity to participate in academic research projects and further my research skills under their guidance. I was able to publish an academic journal as a co-author and hope to present the research work at conferences. I hope my learning puts me at a significant advantage when I begin my FY1 rotation in August.

Despite the lack of theatre time, I have immensely benefited from having more time to see patients with a variety of T&O presentations, including emergencies such as septic arthritis and cauda

equina syndrome, and bettering my understanding of more common presentations such as a fractured neck of femur. I have occasionally attended A&E to clerk T&O cases and attend trauma calls. I have always felt safe as we have received adequate training on utilising protective equipment. I am rarely in contact with COVID19 positive patients

On reflection, the FiY post was a unique product of the COVID19 pandemic. It helped my clinical acumen further as I personally wanted to assist our healthcare service – certainly more positive than mourning the loss of our medical elective abroad. Overall, the programme protected us well with a flexible contract. I received a 2-day trust induction and medical scrubs to adhere with the current trust practice adapting to the pandemic. I was also given an amended FiY contract specifying a 48-hour weekly work schedule with an option to terminate my role at any point during the course of the job. The role was salaried as per standard foundation year (FY) 1 contract. We were also encouraged to make exceptions reports if one were to work beyond the contracted hours.

Nevertheless, it could be improved by having a stronger mentorship system; perhaps a longer shadowing period and avoidance of FiY being the only supporting doctor to their registrars. The combination of an ever busy registrar and a newly qualified doctor who lacks clinical experience can further increase the registrar's workload with supervision duties. It is vital that adequate staff cover is ensured.

Despite the unprecedented changes and uncertainties bought on by the COVID19 outbreak, I feel privileged to have had the opportunity to work as a FiY doctor. The differences to the traditional FY role and the more challenging responsibilities have surprisingly benefitted my learning in preparation for my eventual FY training.



From Nepal to the UK: My journey as an International Medical Graduate

Dr Deborah Gurung

"What's next?" - A question that always arises in everyone's mind during career development. Whilst ups and downs are a part of everyday life, decision making is often difficult, and more so to make the right decision at the right time. For an International Medical Graduate (IMGs) who has completed a Bachelor of Medicine and Bachelor of Surgery (MBBS) degree, this is the crucial time to make the right decision for one's future career. It often results in a graduate from developing countries like Nepal, India, Pakistan and others, to follow their dream job as a doctor towards the United States, Australia, United Kingdom and other developed countries.

My journey

Looking back at my journey from an undergraduate student to a registered doctor in the UK, the different procedures one is required to follow, the various requirements to fulfil and the limited duration in which to make oneself compatible, still gives me chills down my spine.

As I was thinking about my future career while studying a bachelor's degree back in Nepal, I researched and came to decide to pursue my career as a doctor in the United Kingdom. I stumbled upon the massive pile of information to take on board to make my pathway to the UK. There was also once a time when I felt hopeless and nearly gave up pursuing my dream of becoming a doctor, but with the support given by my family and friends, I remained motivated. I cleared those obstacles one by one and made a better version of myself of which they are very proud.

While having this clear vision to chase my career abroad for international exposure and after clearing my Primary Medical Qualification after five and a half long years, the first step was to complete Occupational English Test (OET), i.e. English proficiency test.



London calling

I finally arrived at Heathrow airport to open the first door of my career. The time was uncertain and nerve-racking. From meeting new people to living on my own, cultural diversity was a unique experience that I had to deal with in the first place. Having distant relatives and seniors from university already living in the UK, with their guidance, I managed to overcome this new problem with ease. Being seated for the test in an enormous exam hall filled with hundreds of IMGs from all around the world, three hours' duration felt short, and the exam concluded without recalling anything that happened. At last, as agitated as I was before and after giving the test, the thrill of achieving the milestone of passing the test followed.

Manchester calling

With the completion of the Professional and Linguistic Assessments Board (PLAB) part 1 test, then follows the preparation of part 2, for which I joined the academy.

Having only six weeks duration after finishing my course, myself and colleagues from the academy practiced and motivated each other for PLAB 2.

Apart from being an IMG, we had many differences, but one fixed goal "to clear PLAB part 2".

To all IMGs planning to come to the UK

Feeling anxious and bold, I managed to enter each cubicle, believing it was my regular day in my practise. Finally, the day arrived; getting a fully registered license to practise medicine in the UK was a moment of bliss.

For all the current students and IMG's looking forward to pursuing their career abroad, a word of advice; "PRACTICE, PRACTICE and PRACTICE". While the journey can seem simple and easy with a step-wise approach, preparation and dedication should not fall short. Please do your research for different opportunities and brainstorm your weaknesses and strengths, and use it to leverage yourself to overcome problems.

Like every IMG, hearing about a lot of academies and study materials, I was very disappointed seeing the lack of guidance and proper study materials available, even after paying a massive amount of money for a PLAB 2 course. Keeping this in mind, I came up with 'Dr Deb Says' (www.drdebsays.com) for online classes and for sharing my tips to help IMGs pursue their dreams in the comfort of their study rooms and at an affordable price.

There may be days when you spend most of your time piled up with information, or receive mail about not being selected for interviews, or are unsuccessful after them. However, it is important to remain positive - each interview is a learning opportunity. I would advise preparing your curriculum vitae in advance and seeking as much feedback on its layout and structure as possible. I managed to secure my post in General Surgery in the NHS, which is due to start this August. I am certain that if I was able to make it happen, so can you.

No storms can take the aura of the sun. We have to accept the winds and rain. Learn to walk through it. At the end of the storms, we will rise again with our warmest sunshine.

GOOD LUCK!!



The digital age – how to supplement learning during COVID-19

ANKITA KARN

TEACHER AND HEAD OF YEAR
Whitley Bay high school

The coronavirus pandemic has led to changes in the education of students around the world. As I am writing this, there are 150 countries that have fully or partially shut down schools, impacting millions of students around the globe. Although teachers worldwide have come up with innovative new ways to cope with the current situation, parents may still be concerned with how to bridge the gap in knowledge caused by Covid-19. Although there is no doubt that students are working hard and many have even thrived on the work they have completed at home, there will still be some anxiety about how their progress will be checked, and how this learning can be supplemented and consolidated.

In my roles as a teacher and Assistant Head of Year I have conducted research on different teaching techniques and really believe in Rosenshine's principles, which focus on presenting information in small, easy to digest chunks and reviewing and checking knowledge and understanding regularly. This is important for all learners now more than ever. Based on these principles, I hope to share with you some quick, easy, fun and free ways your child can consolidate their knowledge and look at the pros and cons of each. These are not only for school children but transferrable and can support learning for university students or can help you to plan training of any sort, for any particular age range, making content fun, engaging and easy to process.

Kahoot (www.kahoot.com)

Kahoot is an online platform which allows users to create, share and play learning games or quizzes. There are thousands of online quizzes stored already to test knowledge – all you need to do is visit the website, make a log-in and search for the topic. Over the last year, 218 million games of Kahoot have been played worldwide and it is a really quick, enjoyable way to consolidate your knowledge. It allows the user to learn new skills through curiosity and play and also adds a fun element to any meeting as well, with it having over 20 million corporate members. If you cannot find a topic on it, it takes less than 10 minutes to create a resource from scratch. It's a quick way to test knowledge and progress and it stores all resources you make/use in your account information so your knowledge can be tested in the future as well. Immediate feedback is also provided so it is a beneficial guide to progress made by its users.



Quizlet (<https://quizlet.com/en-gb>)

Quizlet is a free website providing learning tools for students, including flashcards, study and game modes. It can really speed up the process of making flashcards to break down content heavy topics by allowing you to create a quick online set of flash cards, add images to them and then review your material. It helps you revise by shuffling the cards, allowing you to listen with audio and also tests you on your personalised cards, allowing you to track the ones you have got right and wrong. There are already over 40 million user generated flashcard sets on the website so you can search for premade ones. A big positive of this is that you can study your material anywhere as there are apps available for iPhone and Android.

GCSE Pod (<https://www.gcsepod.com/free-resources/student-resources/>)

This website has great information posters on how to deal with exam stress and prevent last minute panic. It also has key information on maths and English prep and summarises some key pedagogical research methods. As there are so many approaches to revising for larger topics, it provides invaluable summarised resources on key educational ideas for different methods to remember information. These include interleaving, spaced practice and dual coding. Sometimes, in order to revise effectively, you need to use the method that works best for you. This website allows you to discover your preferred method, therefore improving your actual revision technique.

Seneca (<https://senecalearning.com/en-GB/>)

Seneca is a free online platform that students can use for revision and can learn the information before they are tested. It breaks large pieces of information into small, manageable chunks and is an adaptive platform, meaning the question level of challenge increases or decreases depending on whether a student has got the question right or wrong. It has 1000+ KS2, KS3, GCSE & A Level courses based on exam board specifications. Before signing up, I would advise clicking on the "try as a student" button to look at the resources available already.



HOW ART CAN IMPROVE YOUR MENTAL WELLBEING

ANUPAMA KARN, FINAL YEAR DENTAL STUDENT,
LEEDS DENTAL INSTITUTE

INTRODUCTION

As the days continue to go by during this phase of COVID-19, each of us are facing our own daily stresses. Whether you're a key worker on the front line or someone who has been unable to leave the house since the outbreak began, we will all have had our own experiences of anxiety during this uncertain time. Suddenly, some of us have had more time to spend worrying about things which are out of our control. Naturally, we seek guidance from the news, for both daily updates on the virus and for the crucial role we all have to play in controlling it. While this can be very informative, the regular news of victims to the virus mixed with, at times, contradicting information can lead to an increase in public anxiety (Sell et al., 2017). Social media can heighten this anxiety as we see countless people ignoring government guidelines and countless others flaunting their personal achievements over this lockdown period. Repeatedly hearing about the virus can become mentally draining, worsening how we function whilst impairing our responses to stress (Thompson, et al. 2017). As the indirect effects of the virus increase, we can slip into a vicious cycle of contemplations and rumination, causing further use of social media and hence more distress (Thompson, et al. 2019). This article focuses on how creating art can help break this cycle and how I personally have experienced a positive influence on my mental health.

THE SIGNIFICANCE OF ART DURING COVID-19

Engaging in artistic activities can be very therapeutic and can allow you to take a step back from the world and spend some time focusing on your own wellbeing. Art is an act of mindfulness that can allow you to find a sense of inner peace whilst letting go of negative emotions and energy (Eaton & Tieber, 2017). Escaping from social media and all of the pressures that come with it can give you a sense of freedom and control that you may be craving at this current time. If you're finding yourself feeling overwhelmed, utilising your time to engage in activities that allow you to slow down and reflect whilst also building creative skills will be an invaluable step towards ultimate relaxation. Whether you prefer to observe and appreciate art or decide to create your own masterpiece, art could be the perfect pastime to get you through this pandemic.

HOW CREATIVITY CAN IMPROVE PSYCHOLOGICAL WELLBEING

The prevalence of mental health conditions is increasing, with depression being one of the most commonly diagnosed global disabilities (WHO, 2008). Abbing et al. (2018) suggests art therapy reduces symptoms in patients with anxiety and can improve quality of life. It is a non-pharmacological intervention which can help escape negative thought processes associated with depression. This systematic review studied the effectiveness of art therapy for anxiety and proposed that acquiring creative skills for expression of anxiety may help the development of new neural connections. Stress levels are further regulated due to a reduction in levels of cortisol (Sandmire et al., 2012). Abbing et al. (2018) also suggests creating art is enjoyable and stimulates the release of the neurotransmitter dopamine resulting in a positive feeling, which can be of great value if you are fighting against mental illness.

Grasping this opportunity to express your individuality can help nurture a positive self-image and may lead to a journey of self-discovery. Creating art can improve your self-esteem and confidence, giving you a feeling of accomplishment and belief in your abilities. During this pandemic, fighting against psychological distress can be very traumatic both physically and mentally but art can provide a safe environment in which we can normalise our emotions. For those of us who struggle to express certain emotions verbally, this activity can provide an emotional release for feelings such as sadness or anger.





TOP TIPS TO START YOUR ART JOURNEY

Anybody can create art and I would like to encourage you to embrace your inner creativity. There are many simple activities you can try from the comfort of your own home. You can choose any material to experiment with, all that matters is that you feel comfortable using it. Find a creative space, have your pencil and paper out ready and play some relaxing music to help you get in the mood. Once you start to find your creative side your inner artist will make an appearance.

ACTIVITIES TO TRY AT HOME

Sketching All you need is a pencil and paper. Pick an object, person or photograph that you like and simply try drawing it.

Painting Use different mediums such as watercolour, acrylics, pastels or oil paints.

Collaging Try cutting out inspiring images from magazines and glue them to some pieces of card.

Sculpting Make your own pots with clay or even experiment with creating figures with paper origami.

Mindfulness Colouring Books Meditate by focusing your mind on colouring within the lines. There's no worry of deciding what to draw. Colouring can be for adults too!

Paint by numbers For those with no knowledge of painting, purchase a painting kit to create your own masterpiece. These unique kits include a picture printed on canvas which is divided into smaller sections. Each section is marked with a number that corresponds to a specific colour. Pre-mixed paints are provided as part of the kit.

Youtube tutorials Explore the wide range of art tutorials that are available for free! There are many step-by-step classes to watch



MY EXPERIENCE

Art has helped me cope with difficult emotions during this period of isolation. It has added structure and focus to my days that I originally lacked. Whilst I do produce artwork specifically for commissions and currently have several projects on the go, I also enjoy experimenting with different techniques in my downtime. I have felt a sense of accomplishment after selling my work and the kind reactions of my customers has had a huge impact on my self-esteem. Furthermore, I find that creating art helps maintain the clinical skills that I am currently unable to practice as a dental student. Not only does it involve manual dexterity but also it helps with understanding shapes and colours which is vital for aesthetic dentistry. My advice to those struggling during these uncertain times is to be adventurous and throw yourself into the creative world of art without worrying about making mistakes. This could spark an artistic side you never knew you had and could be a positive tool to help you maintain a healthy mind-set for years to come.



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A-Z of Infectious Diseases

Multiauthor, compiled by Dr Chandani Roka Magar, Illustrations by author, or Dr Chandani Roka Magar, Dr Zahra Jabir. References on request.



ANTHRAX – Dr Jeevan Khadka

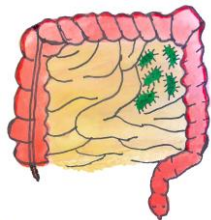
Quiet a rare but serious illness caused by a spore forming bacterium called *Bacillus anthracis*. This bacteria has been previously used in bioterrorism attack. Its transmission is either direct or indirect contact with infected animals, anthrax skin lesions or contaminated fomite. The symptoms varies and is mainly dependent on the route of transmission as follows: Cutaneous anthrax (raised, itchy

bump), Gastrointestinal anthrax (nausea, vomiting, abdominal pain), Inhalational anthrax (flu like symptoms), Injection anthrax (illegal drugs-redness at the site)

Anthrax can be diagnosed by skin test, blood test, stool test, spinal tap, X-ray and CT scan of chest. It is treated with combination of antibiotics (ciprofloxacin + doxycycline + levofloxacin) for 60 days. Occasionally, this is complicated by massive bleeding (hemorrhagic meningitis), multi organ failure (sepsis), and death.

BOTULISM – Dr Aashish Khanal

Botulism is caused by botulinum toxin produced by the obligate anaerobic bacteria; *Clostridium botulinum*, *Clostridium baratii* and *Clostridium butyricum*. It is not commonly encountered in the UK. The mechanism by which it causes the disease is by production of heat-labile toxin which prevents the release of Acetylcholine at the neuromuscular junction which eventually leads to flaccid paralysis. In adults the disease is caused by pre-formed toxin whereas in babies it is caused when the spores are ingested and toxin is produced in the body leading to the name floppy baby syndrome. The features of this disease can be remembered by 5D's – Dysphagia, Dysarthria, Diplopia and Dyspnea and Descending Flaccid paralysis.¹ Diagnosis is made by detection of toxin in urine, stool or serum. Treatment involves use of human botulism immunoglobulin and antitoxin as soon as possible.²

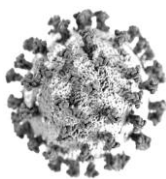


CLOSTRIDIUM DIFFICILE- Angela Limbu (Medical Student)

Clostridioides difficile infection is a gastrointestinal bacterial disease, causing many outbreaks in the hospitals. It affects people who have had a long course of antibiotics including penicillins, cephalosporins and fluoroquinolones which can

cause the normal microbiota of the bowel to be altered. Other risk factors include being over 65, or having a weakened immune system. C-diff is transmitted through fecal-oral route. Symptoms range from multiple diarrhea a day to severe inflamed colon, colon perforation and sepsis. Diagnosis is mainly through stool test and colonoscopy.

Preventive measures include proper hand sanitization, prescribing proper antibiotics. Metronidazole and Vancomycin is used for treatment. Alcohol based gels is ineffective.



COVID-19 – Dr Sandesh Shrestha

A viral infection caused by the SARS-CoV-2 virus. Transmitted via droplet exposure, it attains cellular entry into organs utilising the ACE2 system, most commonly the lungs ⁽¹⁾. The incubation period is up to 14 days ⁽²⁾.

Most common symptoms include fever, cough and, gustatory and olfactory disturbances. Most severe sequelae for the disease are ARDS, coagulopathy, renal failure and complications in organs utilising ACE2. Most common cause of death is respiratory failure due to diffuse alveolar injury. An initial viral PCR for the presence of COVID-19 and a novel antibody test investigating immunity against the virus are being practiced ⁽³⁾. CT and XR imaging show changes similar to pneumonia. Treatment is supportive with ventilation ⁽³⁾. Vaccine and drug therapies are currently being researched.



DENGUE – Dr Aeolj Shrestha

Dengue (a.k.a breakbone fever) is a viral infection caused by dengue virus. There are four serotypes of dengue virus. A person gets the virus with the bite of an infected *Aedes* mosquito. Symptoms usually develops 2-7 days following the bite. These symptoms begin with few days of headache/body ache followed by fever, sweating, pain behind the eye, joint pain, nausea, vomiting, loss of appetite and a

widespread red rash. Although the infection is usually mild and goes away within a week, it can sometimes become severe and lead to life threatening conditions called Dengue hemorrhagic fever (DHF) and Dengue shock syndrome (DSS) which occurs when previously recovered person gets re-infected with different type of dengue virus. Treatment is usually supportive aimed towards controlling fever with paracetamol and adequate hydration. The mainstay of prevention is avoiding mosquito bites.



DIPHTHERIA – Dr Sonu Basnet

Diphtheria is an acute respiratory infection caused by bacteria, *Corynebacterium diphtheriae*. It is transmitted by droplets and rarely by skin lesions or articles soiled by infected person. Incubation period is 2-5 days. One can be infectious for upto 4 weeks but in some instances carriers might shed bacteria for longer

.It manifests as either an upper respiratory tract or cutaneous infection. Symptoms include sore throat, malaise, anorexia, low grade fever and within 2-3 days a grayish membrane forms in the respiratory tract that may result in respiratory obstruction.

Cutaneous diphtheria is predominant in countries with poor hygiene. *C. diphtheria* secretes a toxin which affects tissues of heart, brain and adrenal gland. Diagnosis is made on the basis of clinical presentation and confirmed with culture of the lesion. Management is done with antitoxins and oral or injection of antibiotics.

Vaccination is given routinely in childhood for it's prevention. Booster dose is available to those who comes in contact with the infected person or carrier and to those travelling to epidemic or endemic areas.

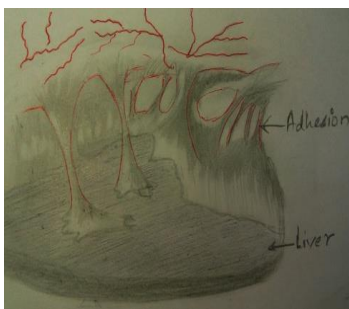


EBOLA – Dr Amir Awal

Formerly called as Ebola hemorrhagic fever is caused by ebola virus. This was first identified in 1976, near Ebola River in Congo, Africa. It is documented to have an incubation period between 2 to 21 days with an average fatality rate of around 50 % . Its transmission is . mainly via blood or body fluids of infected person or animal. After contracting the virus one can present with following symptoms such as; fever, rashes, headache

joint/ muscle pain, sore throat, bleeding, loss of appetite and muscle weakness etc.

In combination with clinical symptoms, ebola virus disease is diagnosed by ELISA test, antigen-capture detection tests, serum neutralization test, reverse transcriptase polymerase chain reaction (RT-PCR) assay, virus isolation by cell culture etc . Treatment is mainly symptomatic with fluids and electrolyte replacements including management of secondary infections. Avoiding close contact with those who are infected with the virus, regular hand washing and following strict sanitation are the keys for preventing its further spread.



FITZ HUGH CURTIS –

Dr Benisha Subba

Also known as Acute Perihepatitis, is a rare complication of Pelvic Inflammatory Disease. It is an inflammation of liver capsule with adhesion formation, without the involvement of liver parenchyma.¹ Classically presents as right upper quadrant pleuritic pain.^{3,4}

However, fever, nausea, vomiting, vaginal discharge, pain during menstruation or sex and cervical tenderness may be seen. It typically occurs in sexually active females and is thought to spread via spontaneous ascending infection through cervix or vagina, lymphatic (eg Intra uterine device infection) or bloodstream route (eg TB).¹The common organisms involved are Chlamydia trachomatis and Nesseria gonorrhoea.

Open surgery is the gold standard for diagnosis. Treatment consists of conservative care, appropriate antibiotic therapy and minimizing the risk of complication like infertility. Treating the partner and educating patient on safe sex is also important.¹



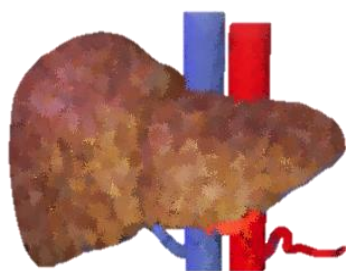
GIARDIASIS – Dr Tabassum Shrestha

Giardiasis, sometimes also known as beaver fever, is a diarrhoeal disease caused by a microscopic bug called Giardia lamblia.¹This bug lives in the gut of an infected person or animal

and is passed in feces. The person suffering from Giardiasis may be asymptomatic but commonly presents with loose stool (foul smelling), tummy pains, bloating, smelly burps (like eggs), flatulence, weight loss etc. Symptoms may be continual or episodic and may persist for years.² It is usually diagnosed by microscopic examination of stool samples.

Metronidazole as the drug of choice. One must only go to work or school 48 hours after the symptoms have subsided and drink plenty fluid to prevent dehydration.³

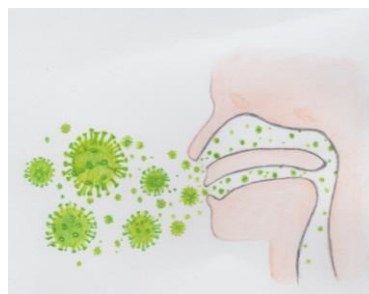
Giardiasis can be prevented by maintaining proper hygiene and sanitation, avoiding contaminated food and water and practicing safe sex.



HEPATITIS B – Dr Sandesh Shrestha

A double-stranded DNA virus, spreads via exposure to blood, bodily fluids and via vertical transmission from mother to child. Incubation period is 6-20 weeks. Patients typically present with pyrexia, jaundice and deranged LFT enzymes
(¹). Children and high risk individuals are routinely immunised, with

routine screening offered to all pregnant women. Serology shows HBsAg (surface antigen) implying acute infection, but chronic infection if present for more than 6 months. Anti-HBs suggests immunity, therefore is absent in chronic infection. Management with symptomatic relief, antiviral drugs and regular specialist monitoring for complications are recommended (¹). Complications include chronic hepatitis, fulminant liver failure and hepatocellular carcinoma (¹).



INFLUENZA (FLU) – Dr Deborah Gurung

Influenza is caused by RNA viruses which fall under family Orthomyxoviridae. There are 3 types; Influenza A, B & C. Transmission occurs through droplets from coughing or sneezing from an infected person. Its symptoms includes; fever, myalgia (body ache),

exhaustion, headache, loss of appetite, nausea, diarrhoea, abdominal pain etc. Whereas children may also complain of earache and become less active. Diagnosis is usually clinical and treatment is symptomatic. Taking enough rest, paracetamol for fever, drinking plenty of fluids, washing hands often with soap/water and covering nose and mouth while coughing or sneezing are few of the measures we can take to prevent its spread.

Its complication includes; Acute bronchitis, exacerbation of asthma and COPD, Otitis media, pneumonia or sinusitis.

JAPANESE ENCEPHALITIS – Dr Sanjay Thapa

It is an infectious disease of brain caused by Japanese encephalitis (Flavi Virus) virus which spreads to human via mosquito bite. However, there is no human to human transmission.² Pigs and wild birds are reservoir of virus.^{1,2} It is common in Southeast Asia and Western Pacific.^{1,2}



Mostly these infections are mild or without symptoms; only few results into severe illness.² Its incubation period ranges from 5 to 15 days & clinical feature includes headache, vomiting, fever, confusion, abnormal body movements and neck stiffness.³ Almost half of the population who recover from this disease are known to suffer from permanent problems like deafness, emotional instability, paralysis and mental retardation.⁴

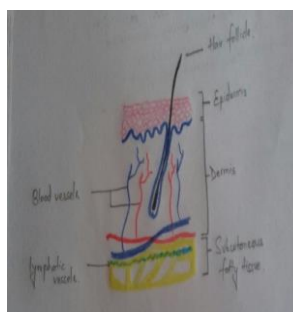
Diagnosis is made on the basis of serum and CSF testing i.e. antibody test.⁴ JE can be prevented by vaccination against it and by avoiding mosquito bites by using net, long-sleeved clothes and insect repellent.^{3,4,5} Treatment is mainly symptomatic.

KALA AZAR- Dr Anjana Thapa Magar

Kala-azar (Visceral leishmaniasis), or Black fever is a parasitic disease caused by bites of female sandfly infected with Leishmania parasites. It is endemic in India, Nepal and Bangladesh, and is the second largest parasitic killer in the world after Malaria.



It gets the name from the characteristic dark skin seen in patients. The symptoms includes prolonged fever, weakness, weight loss, hepatosplenomegaly, anaemia and death if untreated. Diagnosis is through demonstration of the parasites in splenic or bone marrow aspirates; serological tests: direct agglutination test (DAT), rK39 Rapid diagnostic tests or latex agglutination tests. The first-line treatment includes i) combination of Sodium stibogluconate (SSG) + Paromomycin ii) SSG or iii) Meglumine antimoniate. For unresponsive cases and relapses, Liposomal amphotericin B is given. Continuous collaboration between WHO and the government of affected countries through vector control, drug availability and monitoring drug resistance is key to sustain the elimination of kala-azar.



KAPOSI SARCOMA – Dr Sagar Dhamala

Kaposi Sarcoma is a tumor of proliferating capillaries and lymphatics, caused by Human Herpes Virus 8. It has been most commonly linked with HIV; however, it can also be seen in Elderly Jews (as classical KS), Africans (as endemic KS) and in immunocompromised patients. It presents as non-pruritic, single/multiple cutaneous purple lesions, which can be macules, papules and plaques. It can be seen anywhere in the body; common sites are nose, legs and genitals. Sometimes, visceral organs like GI tract, lungs, kidneys can also be involved.

Apart from physical examination, skin biopsy can be done for the diagnosis. Highly Active Antiretroviral Therapy (HAART), which is a HIV medication, is considered as the first line treatment.

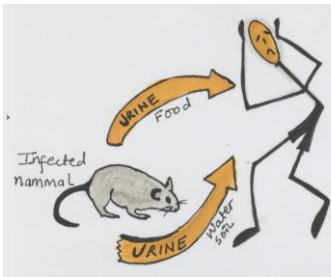


LEPROSY (HANSEN'S DISEASE) – Dr Manisha Shahi

Leprosy is a chronic granulomatous disease affecting skin and peripheral nerves caused by Mycobacterium leprae.¹ It is mainly transmitted via nasal secretion of untreated cases with haematogenous spread to skin and nerve.¹ Eyes, bones, testes and nasopharynx can also get affected.² Its clinical features and prognosis presents as a spectrum from strong to poor

host immune response to the mycobacterium and low to high bacterial load [tuberculoid (TbD), borderline tuberculoid (BT), borderline borderline (BB), borderline lepromatous/lepromatous (LL)].^{1,2} The three cardinal signs

of leprosy are typical skin lesions with hypoesthesia, peripheral neuropathy and acid-fast bacilli in slit skin smear.² Management includes multi drug therapy (Rifampicin, Dapsone, Clofazimine)³, prevention of disability and management of complications.²



LEPTOSPIROSIS – Dr Alisha Gurung

Leptospirosis, also known as Weil's disease after Adolf Weil is a zoonotic disease caused by the spirochete *Leptospira*. It spreads to humans through the urine of infected animals including dogs and mice. In humans, leptospirosis causes varying signs and symptoms ranging from headache, fever, chills, dry

cough, arthralgia and rashes to meningitis, ARDS, acute liver or renal failure. As the clinical and laboratory findings are nonspecific, a suspicious history of exposure and clinical manifestation including conjunctival suffusion and myalgia in the calf and lumbar areas should raise alarms. The serological or culture results of the bacteria may take weeks to become positive. Hence, treatment with antibiotics including doxycycline or azithromycin should be initiated as soon as the diagnosis is suspected. Aggressive supportive care and dialysis may be needed in severe cases.



LYME DISEASE – Dr Anushruti Bista

Giardiasis, sometimes also known as beaver fever, is a diarrhoeal disease caused by a microscopic bug called *Giardia lamblia*.¹ This bug lives in the gut of an infected person or animal and is passed in faeces. The person suffering from Giardiasis may be

commonly presents with loose stool (foul smelling), tummy pains, bloating, smelly burps (like eggs), flatulence, weight loss etc. Symptoms may be continual or episodic and may persist for years.² It is usually diagnosed by microscopic examination of stool samples.

Metronidazole as the drug of choice. One must only go to work or school 48 hours after the symptoms have subsided and drink plenty fluid to prevent dehydration.³

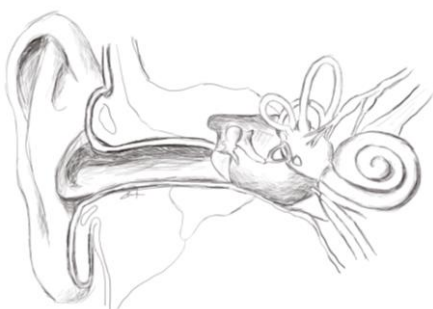
Giardiasis can be prevented by maintaining proper hygiene and sanitation, avoiding contaminated food and water and practicing safe sex.



NOROVIRUS – Dr Kanchan Ghimire

Also known as winter vomiting bug is one of the common causes of stomach upset (gastroenteritis). This stomach bug can cause severe nausea, vomiting and diarrhoea which usually goes away within 1-3 days. The bug may also cause fever, headache and pain in the limbs [1].

Noroviruses can spread very easily through faeces of infected person or by eating contaminated food or drinking contaminated water or touching your mouth with your hand after your hand has been in contact with a contaminated object or close contact with a person who has a norovirus infection [2]. Till now there is no specific treatment for norovirus [3]. It is important to stay well hydrated with fluids containing sugar and electrolytes. Intravenous fluids may be needed if one cannot tolerate oral intake due to extreme vomiting or weakness. [4] Alcohol hand gels do not kill Norovirus therefore the best way to stop the spreading of Norovirus is by washing hands frequently with soap and water [5].



OTITIS MEDIA - Dr Orjo Raj Shrestha

Otitis media (OM) is the infection of middle ear. It is of a viral or a bacterial origin and most commonly affects children from birth to 4 years of age.¹ Non-breastfed babies, daycare and passive smoking are

the risk factors. There are various types of OM such as 1) acute OM 2) OM with effusion and 3) chronic suppurative OM. OM usually presents with earache and younger children tend to hold or rub their ear, or may have general symptoms such as fever, irritability/crying, poor feeding, restlessness, cough, or runny nose.¹ It is a clinical diagnosis. On examination, the tympanic membrane (TM) looks red, congested, bulged out.

OM is a self-limiting illness. Pain and fever are managed with paracetamol. If symptoms persist then antibiotics are required. Untreated infection may lead to serious complications like hearing loss, Tympanic membrane perforation and meningitis.²

PERTUSSIS (Whooping Cough) – Dr Mandeep Bhattarai

It is a highly contagious respiratory tract infection caused by a type of bacteria called *Bordetella pertussis* [1]. It is transmitted from person to person via respiratory droplets mainly through coughing or sneezing [2]. Pertussis can cause serious illness in all age groups [3]. Symptoms usually appear after 7-10 days of infection. The first symptoms usually appear includes mild fever, cough, and runny nose.



It is usually followed by coughing bouts that last for few minutes and a characteristic "whoop" sound produced by gasping for breaths between coughs. The "whoop" might not be present in case of minor disease. Other symptoms include vomiting or exhaustion during/after coughing fits. Complications of pertussis include pneumonia,

dehydration, seizures, and breathing difficulties [4].

The best way to prevent pertussis is by vaccination. It is a part of routine NHS vaccination as 6 in 1 vaccine for infants at 8, 12 and 16 weeks; 4 in 1 booster for preschool children; and between 16-32 weeks of pregnancy for pregnant women [5]. Antibiotics are used to treat pertussis as well as prevent the spread to others [3, 6].



RABIES – Dr Rosa Maharjan

This is a rapidly progressive disease of central nervous system which is usually transmitted by bite of an infected animal such as dog, bat, fox or cat. Rabies virus is a single stranded RNA virus under the family Rhabdoviridae with incubation of period of 20-90 days. Prodromal phase manifests with non-specific symptoms such as fever, headache, nausea, vomiting and malaise. There are two forms of acute neurological phase, which are encephalitic rabies (furious rabies) and

paralytic rabies. Confusion, hallucinations, seizures, hydrophobia and aerophilia are features of encephalitic rabies whereas flaccid paralysis predominates in paralytic rabies. RT-PCR to detect in specimen including CSF, fresh saliva, skin biopsy and brain tissue is highly sensitive and specific. Even with aggressive treatment and support, almost all patients have fatal outcomes. Hence prevention of rabies after exposure is extremely important. Local wound care must be done immediately after exposure by washing with soap and water thoroughly. Post-exposure prophylaxis including rabies vaccine, rabies immunoglobulin (if not vaccinated previously) and tetanus prophylaxis must be given.

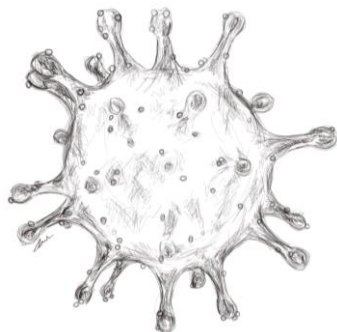


RUBELLA – Dr Pinky Maharjan

Rubella (a.k.a German Measles) is a mild childhood disease caused by a virus called Rubella. It spreads through coughs and sneezes of an infected person.

Symptoms usually occur within 2-3 weeks of contact with a virus. It is characterised by fever, cough, sore throat, body ache, runny nose, swollen lymph node behind the ears and a characteristic rash that starts from face and spreads

throughout the body. Rubella in children is usually self limiting; however, if a pregnant woman contracts this virus during first trimester of pregnancy, it may lead to miscarriage or development of serious problem in new born such as heart defect, cataract, deafness and mental retardation. Fortunately, vaccination against this virus provides a life long immunity. MMR is a combination vaccine which offers an effective protection from rubella, measles and mumps.



SARS – Dr Sandip Gurung

SARS is a severe, acute respiratory illness caused by SARS-CoV coronavirus that rapidly progresses to respiratory failure. The immediate source was presumed to be civet cats from bats and transmitted via droplet spread from person-to-person. Its symptoms include persistent fever (>38°C), chills, rigors, myalgia, dry cough, headache, diarrhoea, and

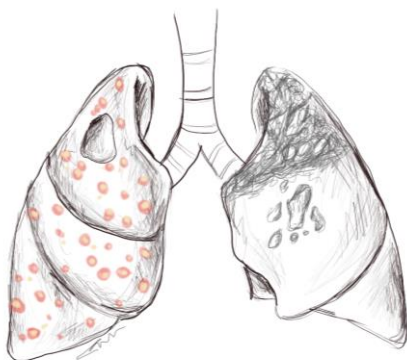
dyspnoea (difficulty in breathing) —with an abnormal CXR and reduced WCC. Most patients develop pneumonia. Management is supportive. >50% need supplemental O2 likewise about 20 % progress to ARDS (Acute respiratory distress syndrome) requiring invasive ventilation. No drugs have proven to be effective and experimental vaccines are still under development . Currently there is no known SARS transmission anywhere in the world.



SCABIES – Dr Suzani Shrestha

Scabies is an itchy and highly contagious disease caused by infestation of itch mite named sarcoptes scabiei. Direct skin contact is mode of transmission and sexual contact is the most common form of transmission.

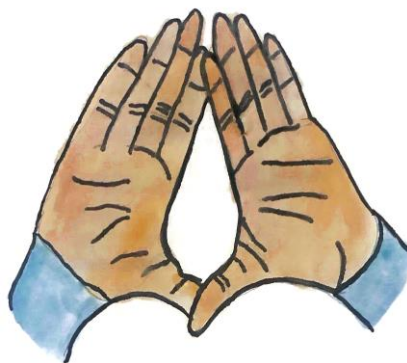
The mites that infest human are female and can be seen with magnifying glass or microscope. It presents with skin rash composed of small bumps and blister and causes intense itching worst at night. Excessive itching may lead to secondary skin infection. Area usually involved are the web between finger, wrist, back of elbow, umbilicus, knee, axillary fold, nipple, feet, genital area and may appear in whole body. It is important to note that symptoms may not appear for up to two months after infestation with the scabies mite. Even though one may remain asymptomatic but the likelihood of transmitting the infection to others is equally high. Treatment includes topical and oral scabidical drug such as; Permethrin cream and Ivermectin.



TUBERCULOSIS (TB) – Dr Sandip Gurung

TB is a chronic progressive mycobacterial infection. It kills 2 million people annually and causes death amongst most HIV patients. Transmission is via inhaled droplets from an infected person. It commonly affects lungs and may occur in 3 stages such as; 1) primary 2) latent and 3) active. Diagnosis is made by CXR and sputum testing while evaluating symptoms of productive cough >3wks, fever, CP, WL, night

sweats or a positive Mantoux test. Treatment includes A) initial phase 8wks on RIPE regime (Rifampicin, Isoniazid, Pyrazinamide, Ethambutol) and B) continuation phase 16wks on Rifampicin and Isoniazid. MDR-TB (Multi-drug resistant TB) remains a public health crisis.



VAGINOSIS - Dr Dr Angela Limbu

Bacterial vaginosis is a disease of young women caused by disequilibrium of the vaginal bacteria. There is a decline in Lactobacilli and infections start with Gardnerella vaginalis, allowing other opportunistic bacteria to thrive. Vaginosis is not a

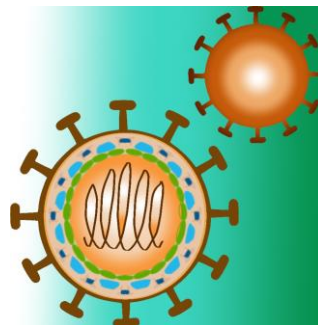
result of poor hygiene but in fact the opposite: excessive washing of the vagina with perfumed soaps or having multiple sex partners. Symptoms include increased vaginal, itching and burning urinating sensation or sometimes no symptoms. Vaginosis is not sexually transmitted although patients are at higher risk of contracting other STDs.

Bacterial vaginosis is diagnosed using the Amsel criteria

1. thin, white yellow discharge
2. clue cells on microscopy
3. vaginal fluid discharge of >4.5
4. Release of a fishy odor on adding alkali—10% potassium hydroxide solution.

At least three of the four criteria should be present for a confirmed diagnosis

Treatment is with Clindamycin or Metronidazole.



ZIKA VIRUS – Dr Sneha Bisht

Zika virus disease is caused by a virus transmitted primarily by Aedes mosquitoes, which bite during the day.1 People are usually asymptomatic or have flu like symptoms lasting about 2-7 days which includes fever, rash, conjunctivitis, malaise or headache. It can be transmitted from mother to fetus or by

from mother to fetus or by sexual contact and blood transfusion. Infection during pregnancy can cause birth defects and complications including preterm birth and miscarriage. It is detected by PCR of viral DNA in blood/ body fluid.2 There is no treatment but it can be prevented by vector control of mosquito, practicing safe sex by using barrier methods; condoms. An increased risk of neurologic complications is associated with Zika virus infection in adults and children.3

Happy Easter 2020 – Hind Vaidya

I captured the sunrise
Through the window to wish
Happy Easter 2020
No Easter eggs
No hugs
No game and surprise
No togetherness
Isolating because of coronavirus
Grandsons
Some of you planned to come to us
To spend Easter time with us
You could not make it
Because of countries lockdown
It is sad
But
It is for our own safety
COVID-19 is very scary
Come to the messenger
To wish you “Happy Easter”
Love you all
Stay safe and be well



Smiles Across Nepal is a North East based registered UK charity set up by local dentists & dental personnel in 2012, headed by Dr. Sanjeeb Nepali.

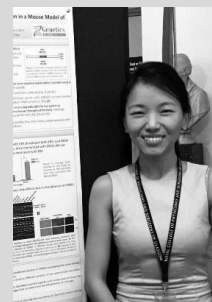
CHARITY DINNER FEBRUARY 2020

Our charity fundraising dinner was held at the Copthorne Hotel, Newcastle upon Tyne in February and was hugely successful and entertaining. Over £4000 was raised after expenses and that has helped us to be able to provide a lot of equipment and materials on our delayed trip which will now be in April 2020. The charity evening hosted by Dr. Sanjeeb Nepali was well attended and very entertaining with traditional Nepali dances as well as a fashion show.

DELAYED KHUMBU 2020 CHARITY MISSION

Our Khumbu 2020 trip has had to be postponed due to Covid-19 . However, it has been rescheduled to April 2021 whereby the team of 10 comprising of both dental & medical personnel will be going to this remote area of Nepal under the very snows of Everest. Our aims of the mission are:

- 1) Equip 2 outreach health centres with fully functioning dental surgeries
- 2) Donate useful medical equipment such as defibrillators.
- 3) Donate dental instruments.
- 4) Provide emergency dental and medical treatments in outreaches in Solu Khumbu areas.
- 5) Oral health and general medical health advice in the villages.
- 6) Visit monasteries where we will be screening monks and providing them with Oral health & general medical advice.
- 7) Visit Maiti Nepal orphanage where we usually donate funds as well as provide lunch for the children as well as providing them with oral health education.



Team Khumbu 2021: Left to right: Dr Sanjeeb Nepali, Dr Priyasma Gauchan, Dr Sachin Gurung, Dr Ang Sherpa, Dr Chandani Roka Magar

Most of the team will also be trekking to Everest Base Camp as a challenge to fundraise for Smiles Across Nepal. Watch out for our posts on Social media.

Our charity hike this year is the Old Man of Coniston.

We hope to continue creating many more smiles across Nepal. On behalf of Smiles Across Nepal we would like to thank all our supporters.

All dental & medical personnel are welcome to join and get involved with our unique charity and have an opportunity to visit Nepal at the same time.

For more information contact: Dr. Sanjeeb Nepali

Email: sanjeeb734@btinternet.com

Dr. Priyasma Gauchan Email: priyasma@hotmail.com

www.facebook.com/SmilesAcrossNepal

Instagram: #smiles_across_nepal



Join us on a charity climb!
CONISTON OLD MAN CHALLENGE
 Smiles Across Nepal
 The Old Man of Coniston
 Coniston
 START
 1 km
 GET READY TO CLIMB
 DATE: 29.08.2020
 LOCATION: LAKE DISTRICT
 Interested? Contact Dr. Sanjeeb Nepali
 Email: sanjeeb734@btinternet.com



Unity in Health (UiH) is a Charitable Incorporated Organisation registered in England and Wales since 2014. Our Mission is to promote the training and empowerment of the healthcare workforce practicing in the field of mental health in low and middle-income countries and support the creation of skilful work forces that have a central role in the reduction of health inequalities worldwide

The problem of mental illness in South Asia

Mental illness is a global and growing problem. As recognised by the inclusion of mental health and well-being and the prevention and treatment of substance abuse, in the 2015 UN Sustainable Development Goals' agenda.

However, in many parts of the world mental health is one of the most forgotten and ignored areas of clinical care. This is especially true for low- and middle-income countries where mental health often attracts little attention and investment from national governments, and for those affected - the public stigma of mental illness is a major barrier to seeking help and support.

The problem is particularly acute in South Asia, where around a third of the world's extremely poor live. Many of these people have experienced conflict, disaster, violence and abuse, putting them at risk of mental health problems and suicide. This is compounded by the huge stigma and superstition surrounding mental health, even amongst health professionals, and a severe lack of public awareness. This is particularly true for our focus country Nepal where civil war and recent natural disasters have left profound psychological scars on its people, and national and local authorities remain largely indifferent to mental health.

Unleashing the potential of healthcare professionals

As our name suggests, mental health is at the centre of our work. Our young UK-based NGO was founded at the end of 2014 by health professionals, for health professionals. Our mission is to support the training and professional development of mental healthcare staff working in low- and middle-income countries – doctors, nurses, psychologists, occupational therapists and many others. Through volunteer exchange programmes and an educational platform for local governments, educational institutions, health service providers and individual professionals, Jaya Mental Health encourages bilateral exchange of knowledge, information and human resources. Our aim is to unleash the potential that exists in every health professional and contribute to the creation of mental health services which are culturally relevant, inclusive and sustainable.

Mental healthcare in Nepal

At present, all of our programmes are in South Asia, focusing primarily on Nepal. Despite being considered a low-income country, over the last two decades, Nepal has made rapid progress in some areas of healthcare, such as reduced maternal and infant mortality rates. However, much remains to be done.

Nepal lacks essential structural and human resources able to meet the mental healthcare needs of its population: 15% to 20% of its inhabitants experience some form of mild to moderate mental disorder, and 3% to 4% experience a severe mental health problem. State-run mental health facilities include no more than 400 beds and human resources consist of 0.18 psychiatrists, 0.25 nurses, and 0.04 psychologists per 100,000 people.

Those suffering from mental illness are amongst the most fragile and vulnerable in present day Nepal. The need for high quality, effective and sustainable psychosocial and mental healthcare support is therefore urgent and vital to the well-being of those at greatest risk, as well as to the overall economic and social recovery of the country.



Sandakpur health post, where our monthly outreach clinic takes place



Rajani Bhandari, our clinical psychologist, seeing a patient at the clinic



Female Community Health Volunteer taking vital signs



Our projects in Nepal

Jaya Mental Health's projects focus on two main areas: direct service delivery, and capacity building initiatives.

Our largest project takes place in Ilam, Eastern Nepal, where numbers of mental health trained staff are extremely limited. Once a month and with the support of a team of psychiatrists from the Nepal Medical College, Kathmandu, we run a mental health outreach clinic in Sandakpur (catchment area of approximately 17,000 inhabitants). In addition to offering free specialist mental healthcare to local rural communities, we are also building the mental health capacity of local health and social staff – Health Assistants and Female Community Health Volunteers - the real experts on the needs of those living in this remote part of the country.

In the valley of Kathmandu, we've introduced an inpatient art therapy service for people suffering from severe mental illness and are working with a local NGO supporting child victims of severe forms of abuse and suffering from PTSD. This year, we also started a mental health training programme for school nurses, reaching out to over 430 professionals working in schools across the seven provinces of Nepal.

One of our most ambitious projects, done in partnership with the Psychiatrists Association of Nepal (PAN), is to develop psychiatric specialist training modules in Nepal. At present, there are no more than two Child Psychiatrists in the country, and very few others dedicated to Old Age, Forensic or most other Psychiatric specialities. Those who are practicing trained either in India, or in the West. Our aim is to support PAN with the implementation of Nepal-based training programmes for current and future local psychiatrists.

Get involved

There are many ways in which you can get involved with the work of Jaya Mental Health in Nepal, if you would like to find out more we would be delighted to hear from you; please contact us at info@unityinhealth.org.

Volunteer

Most of our projects rely on the input and participation of experienced health professionals who have trained and are knowledgeable in areas of psychiatry unavailable in Nepal. We aim to offer volunteers an opportunity to learn and bring back new skills to their workplaces, ensuring each placement is a win-win situation for both sides. We are also able to offer elective psychiatric placements in Nepal for those studying in the UK.

Give to our work

By giving to our work you can help us to equip and empower more health professionals in Nepal as they support vulnerable people.

Your donation could help us to train a Community Health Volunteer in rural Nepal in mental health first aid, or deliver a support group for healthcare staff currently struggling under extreme pressure because of Covid-19.

To give go to <https://unityinhealth.org/donate/>

Find out more

We have recently changed our charity name and our web page is currently being updated, however for those interested in our work please visit www.unityinhealth.org for more details on our projects and overall mission. To sign-up for our quarterly newsletter please contact us at info@unityinhealth.org

How Unity in Health is responding to Covid-19

- Raising awareness on infection prevention and Covid-19 control among rural communities in Eastern Nepal. We have been meeting with community leaders, teachers, faith healers and many others, spreading the word on what each can do to keep their families and communities safe and protected.
- Training Health Assistants (HAs) and Female Community Health Volunteers (FCHVs) on how to support people affected by the virus, offering them guidance on simple but effective ways to manage symptoms, contain infection, and promote recovery.
- Addressing the stigma surrounding infectious conditions, by encouraging open discussions within the communities we work with on the questions, fears and anxieties many have on this new and unpredictable virus.



Myself with Luvana Shrestha, Jaya Mental Health Nepal Country Representative



SWISS HOSPITAL EXPERIENCE OF A NEPALESE SURGEON WORKING IN THE UK

MR KAMAL RAJ ARYAL Consultant Colorectal and General Surgeon
James Paget University Hospitals

SUMMARY

This is a memoir of a Consultant Colorectal and General Surgeon currently working in the UK who had his higher surgical training in the UK with basic surgical training in Nepal and Medical School and Internship in Calcutta. The author describes his 1 week of Swiss Hospital and Conference experience and reflects on his experience of working in different countries. He won this award at the trans anal total mesorectal excision (TaTME) congress in St Gallen in September 2019.

Arrival

I arrived in St Gallen after a one hour delayed flight from London Heathrow to Zurich at the last weekend in February. On reaching Hospital accommodation, I telephoned Dr Walter Brunner who had organised my fellowship, to say I had reached St Gallen Hospital safely and was ready for the next day. The room looked immaculately clean and simple with all basic amenities required for a doctor in training.

Day 1

Preparation

Next day, I headed to house no 3 cafeteria just before 7:45. The doctors, all wearing white coats, came to the cafeteria before heading up to their daily duties. This provided an opportunity to get nourished and hydrated and discuss the days program as a team. I thought this would be something we could emulate all around the world. Walter had been on call at the weekend and had already done his ward round before we met up with each other at 8 am.

Then we headed up to Rorschach Hospital (an 82 bedded hospital compared with much bigger St Gallen 1000 bedded Hospital). On our way Walter explained to me the reconfiguration of the services - there are altogether 9 Hospitals in the Canton (region) at present which are being reduced to 4 - as a result, the days of Rorschach Hospital may be counted. This reminded me of many reconfigurations and mergers in the UK and how the smaller Hospitals are disadvantaged with such moves.

Rorschach Hospital

Once we got out of St Gallen, the car headed to the east then to the south and stopped at a beautiful car park with a beautiful view of lake Constance on the left side and hilltop on the right side. Walter took me to his office which was state of the art with dual screen desktop computer, television screen for video conferencing, chairs for consultation & meetings and a good collection of several books. I signed documents required to work in the hospital legally and I was given a white coat to wear which is impossible to see at any UK hospitals. He then saw a patient who had sigmoid colectomy for diverticular disease and had presented with constipation symptoms. In Switzerland all patient consultations are in the office with examinations next door as required. The patient got referred to urology as the ultrasound scan had shown pelvic/cecal dilatation without

hydronephrosis and colonoscopy had been normal.

Operations performed

Then we headed to the operating theatres. There had been an emergency admission overnight with painful hernia on the right groin. The senior registrar had laparoscoped and had found an inflamed appendix tip inside the femoral hernia, a new term for me called De Garengeot's Hernia. I had read about Meckel's diverticulum inside the hernia called Littre's hernia and appendix inside the inguinal hernia called Amyand's hernia but never had come across appendix inside femoral hernia. The peritoneal flap and dissection had been completed nicely exposing all the potential ipsilateral femoral, inguinal and obturator defects including contralateral femoral ring and both pubic bones very clearly. The mesh was fixed using cyanoacrylate glue rather than staples and the peritoneum was sutured using V lock sutures. Gelport was used as a single port in umbilicus - Walter has one of the highest number of single port site surgery experience to date. The standard laparoscopic equipment was used rather than curved. Walter said he tried angled/curved instruments initially but did not find any advantage over straight laparoscopic instruments over the years.

The next case was prolapsed sigmoid loop colostomy in a 62 year old male formed 6 months ago for inoperable obstructing upper rectal cancer with liver metastasis. A strict antiseptic ritual was followed - the stoma prolapse was pushed in using gauze soaked in Hartman's solution; then the skin was prepared using betadine 3 times coming to the mucosal surface at last. The stoma was mobilised and this was used to insert a Single Port System called Octo-Port (Dalim, Korea). An extra port on the right side for the telescope and another 5 mm port on the right lower quadrant was used for the working port. The efferent loop was dissected off to the site of cancer and was excised with division of the bowel just proximal to the cancer. I have thought in the past stapling the stump with cancer distally may cause a blow out of the stump. But as Walter explained, we need to make sure we divide the rectal stump close to the cancer to make sure it does not blow out. The rectal stump was oversewn using V lock. The omentum was mobilised from right to left for good blood supply. This was then patched to the rectal stump using V lock which was already in place in the rectal stump. The technique involved - the bite to omentum using V lock already stitched to mesenteric border, the V lock was taken back making a loop on the omentum, another bite was taken on the antimesenteric border of the rectal stump and final bite was taken to the omentum. This technique looked very simple but provided a good omental patch. The next step involved the repair of the stoma site using Dynamesh IPST, 2x15x15cm L2 meaning 2 cm long funnel with diameter of the funnel being 2 cm. Walter told me he generally uses 4 cm long funnel but that was not available that day and had to use 2 cm long one. Although called funnel the bottom of the funnel diameter remained same as the top of the funnel. The mesh was inserted in after taking the end of the colon through the funnel. The abdominal wall defect was narrowed. The Dynamesh was secured with secure strap all around to the peritoneum. The

junction of the perpendicular and flat bit of the mesh was secured to fascia using ethibond.

After this, I assisted Walter and his registrar with reversal of sigmoid colostomy. The story was interesting- patient had TaTME in 2015 and experienced complication – the anastomosis had healed well, but a minileak at the tip of the blind loop of the side to end Descendorectostomy. This was successfully treated with endosponge. Loop ileostomy was then reversed but the patient developed pelvic collection. So, laparotomy and pull through was done with protecting sigmoid colostomy 3 months before this operation today. Now this was being reversed following MRI scan which did not show any collection or fistula.

Lake Constance

I could not resist the temptation of visiting this beautiful lake about a mile down the Hospital on a sunny afternoon. So, after finishing the case, I headed down to lake Constance on foot while Walter saw his patients at outpatient clinic. I had lovely walk along the shores of the lake and headed back up the hill to the Hospital in about an hour or so to make sure I was able to see at least a couple of patients with Walter.

Cases in outpatient clinic

These included a male who had experienced Hinchey type 1 diverticulitis 6 weeks ago requiring hospital admission. The patient had kidney transplant, so he was in long term immunosuppression. Considering immunosuppression, sigmoid resection was indicated. His colonoscopy did not show anything untoward apart from diverticular disease. Patient had been told different things by different people and was rather confused before the consultation but looked very happy as he left the clinic with Walter's explanation and had decided to go ahead with sigmoid colectomy.

The next case was a thin lady but normal albumen of 42 with slow transit constipation and megacolon involving right colon, transverse and descending colon. Most of the markers used were still present on abdominal X ray. Walter explained that they had been managing conservatively for nearly 2 years and time had come to consider surgery. He asked me what surgery would be suitable and I said laparoscopic subtotal colectomy and ileorectal anastomosis. He said her sigmoid was not dilated so would perform ileo-sigmoid anastomosis rather than ileorectal.

Finishing the day

Walter checked all his clinic letters done that day and explained he would not like to leave anything pending for tomorrow. He explained how he had been able to make this change despite resistance from the administration for example typing the letter by the secretary. I wish we had similar efficiency in the UK National Health Service (NHS). May be a day will come when we will have "get things done today; do not leave for tomorrow". We checked theatre cases for next day and the day after – excellent anticipation and 'situation awareness'.

Then we headed to the ward and saw all patients before leaving the Hospital. Walter told me as a trainee he always did ward round 3 times a day – first thing in the morning, once after the lunch and before he left the Hospital. I wish all juniors would take this lesson in UK Hospitals. It reminded me of my fellowship days in Dundee when we did ward round two times every day.

While driving back to Hospital, Walter was called by one of the colorectal chiefs of another region (Canton) about a patient with low rectal cancer with sphincter involvement. Walter told amongst 5 local recurrences he had in 200 patients undergoing TaTME in his series 3 had intersphincteric excision. This meant, if sphincter is involved, we should go for abdominoperineal excision of rectum (APER). On reflection, amongst small number of 30 cases I have done so far, I had one recurrence and that was in intersphincteric APE.

Day 2

St Gallen Hospital

The first case in the theatres was a TaTME in a male patient on his 70s . Similar to many cases in UK, when surgeons started performing laparoscopic surgery, this patient came from another Hospital along with the surgeon who was training in TaTME surgery to St Gallen. The patient had BMI of 33 and the cancer was just palpable at the tip of my finger lying right anterior the distance was 9 cm from the anal verge. The patient had been sent at 7 am for such early 'knife on' skin. When I reached the operating theatres - patient was ready with bin bag in Lloyd Davis position with two theatre teams both at the top and bottom ready for action. As noted the day before, there was beautiful antiseptic ritual - preparation starting from abdomen to perineum done perfectly.

TaTME top part

The marked ileostomy site was opened in right iliac fossa to insert Octoport and pneumoperitoneum obtained at intraperitoneal pressure of 12mm Hg. The Octoport had 4 ports two for 10 or 12 mm instruments and two for 5 mm instruments. He used one more 5 mm port at right iliac fossa. Novadaque system 10 mm telescope was inserted via one of the ports in Octoport. Working port was right iliac fossa 5mm port which mostly included curved ligasure with hook fitted into the same unit. Either hook or curved jaw ligasure came out as required on flip of a button at the hand control. Used left handed trocar to retract tissues inserted via Octoport. An extra instrument if required was inserted via another port present in Octoport.

He started his dissection from the sacral promontary and continued this peritoneal incision to the left side of duodeno jejunal flexure. Went on deepening this via the proper planes. The inferior mesenteric artery (IMA) was dissected off close to the origin from the aorta. This was skeletonised to the level of adventitia when the artery looked pretty thin and easily controllable by ligasure.

He continued the medial dissection towards lateral side continuing towards as lateral as possible. He then he put a 20X20cm swab here, much larger than the 4x3 inches or 6X1 inches tonsil swabs I have been using in UK. The lateral dissection was only few minutes on dividing the membrane with visible swab medially. Walter described about Toldt fascia or Gerota's fascia or Zuckercandle's fascia the priorities given to different names depending upon where you came from. I came to know via Walter that both Gerota and Zuckercandle were Austrian anatomists around 1840s. Although we did see the vermiculations of left ureter very well we did discuss that if we are in proper plane without breaching the retroperitoneum layer which covers the ureter we do not need to see the ureter before division of the IMA.

TaTME bottom part

Walter went down the bottom and washed the rectum using betadine with a flatus tube connected to a betadine filled bladder syringe first. He explained that washing the rectum this way before inserting the Gelpoint path had higher chance of killing the tumour cells. This appeared very simple but this had never come to my mind before. I have thought many times, how effective is the betadine wash out, we do after application of the Gelpoint path particularly the space lying between the lateral side of the Gelpoint path and rectal mucosa. Then he applied Lonestar and hooks. Gelpoint holes were sutured using 2/0 vicryl with knots secured them on the grooves of the Lonestar as fixators rather than suturing holes in the perianal skin. This provided flexibility to direct the telescope at required site for better visibility during dissection, very innovative and thoughtful. He then inserted 4 ports rather than 3 along the outer side of the triangle present on the cap of the Gelpoint path – 12mm, right upper (10 o'clock) for telescope and gas, left upper and right lower 5mm for right and left handed instruments and 4th 5mm port inserted between 12mm port and left upper port for releasing the gas.

The 10mm Olympus scope which did not require separate light cable and provided no crowding of the instruments. While the abdominal surgeon clamped the sigmoid using Yeohans - Gelpoint path was inserted and pneumorectum was established. Purse string was applied using 1/0 PDS – excellent technique – no gap between the bites to make sure airtight was perfect without any chance of spillage of tumour cells distally. Another betadine washout was carried out and ready for the dissection. Hook on right hand was used to tattoo the mucosa circumferentially and 5 o'clock tattoo was deepened first to full thickness and until the Angel hair of the holy plane of total mesorectal excision (TME) could be seen.

Then he used this landmark to dissect posteriorly hooking the layers of the rectal wall and dividing decisively coming around 7 o'clock. This was then taken to the right and left and anterior bit was done last. When he was dividing the anterior rectal wall the rectum at the back was already retracting proximally making anterior dissection much more easier. The neurovascular bundle around 10 and 2 O'clock positions were seen but out of the way when the plane was right. Further dissection was carried out on the right plane anteriorly and some posteriorly. Insertion of swab again helped in retraction. The camera needed frequent cleanings to maintain the view. Met up anteriorly first with the abdominal team. It was quite difficult to carry on dissection sometimes due to obesity and narrow pelvis. Once anterior was done posterior then left side and lastly right side where the tumour was present. The tied end off the purse string sutures were up by the abdominal surgeon for better visibility at the bottom during dissection. This last bit was done from the top end. The mesocolon proximal to the division of the IMV was divided, colonic wall exposed, indocyanine green (ICG) testing carried out and colon was divided at the right place with tristaple. The free specimen was kept inside one litre capacity plastic bag and removed from the ileostomy site (this can be removed from the rectum as well). A colotomy was made at the antimesenteric border of the colon; a purse string applied and size 31 Anvil was fixed around it. He then went to the bottom again and applied purse string at the rectal stump. The anastomosis was carried out by pulling the anvil to the anus, tightening the purse string around it and Gun was finally inserted and anastomosis carried out. On second ICG testing it looked

very well vascularized. The donuts looked complete and the resected specimen looked perfect with smooth mesorectum all around. Ileostomy was matured at Octoport site and operation was complete. The next case was ready in the anaesthetic room when this patient was waking up.

Laparoscopic abdominoperineal resection (APER)

The next case included rectal cancer in her 60s who had locally advanced cancer including liver secondaries just above the anal verge infiltrating the posterior vaginal wall with fistulation. She was started on chemotherapy but symptoms due to fistula had become worse. So, she was planned for APER with posterior vaginectomy. This reminded me of a curative extra levator APER in prone position when I had to remove the posterior vaginal wall as well after neo adjuvant treatment few years ago though I did not need to remove the posterior vaginal wall as extensively as this case. Here the plan was not to turn the patient prone following completion of the laparoscopic bit.

Again, the lap bit started as planned with single port at the LIF at colostomy marked site. Two additional ports one 5mm RIF and one 12mm for camera at right at the level of umbilicus were placed. As in previous case the dissection started at sacral promontory – the IMA was divided at origin and IMV was divided low and lateral dissection completed very swiftly. There was no need for splenic flexure mobilization, rectal dissection was carried out low to the level of coccyx tip posteriorly and in front of the pouch of Douglas anteriorly. I helped Walter in holding the camera and retraction of the uterus. Colon division site was identified using ICG. He then made very nice omental flap and took this on the left of DJ flexure making sure small bowel does not go behind the omentum. Omentum was sutured with gauge piece and proximal end of the rectal stump and pushed this down to the pelvis. A drain was placed via the 5 mm port in right iliac fossa. He used prophylactic Dynamesh with funnel of the mesh traversing inwards and the mesh was secured on lay to the peritoneum using securestrap as described previously for stoma site. While another surgeon matured the stoma – Walter and I went to the bottom to complete the dissection. The technique was similar to other APERS- he went posteriorly mostly remaining just in front of the coccyx and met up with the top end. He divided the levators laterally and took out the post vaginal wall until above the tumour and divided the vagina off very close to the cervix above when the specimen was out. There did not appear any need for mesh placement in pelvis as the omentum was giving perfect fill up in the pelvis. Another drain was placed in the pelvis which came out of the perineum.

Day 3

St Gallen Hospital operating theatre

The first case was a 73-year old male with sigmoid and rectal cancers, the rectal cancer was located at 8cm from the anal verge. The patient had previous diaphragmatic rupture and adhesions and dissections around here was somewhat difficult. TaTME was carried out similar to the previous days' case. There was some bleeding at 10 o'clock position which was stopped very well.

The second case was Extralevator APER on a 58-year old male for cancer lying just above the anal verge. Had chemoradiotherapy completed 8 weeks ago. Abdominal dissection was similar to the previous day. I asked Walter what about the mesh fixation on lay position and whether he had

any patient where the small bowel had stuck to the mesh. Walter replied he did not have any such case to date. Then I asked him whether it was possible to place this mesh pre peritoneally. Walter's face lit up as if he had been reminded of something and he said "Oh yes that idea has been with me for about a year and let's try it today". He put the mesh pre-peritoneally making the space using stoma incision and used holding sutures to the fascia using endoclose. Walter via e mail communication after few days of the operation told me patient had been well and no pain due to tackers as would be usual if secure straps are used for on lay secure mesh placement. The patient was then turned to the prone position and extralevator APER was done in a standard way.

Lessons learned and change of practice from these 3 days

- Wash the rectum twice using betadine for TaTME.
- Single port surgery – start with cases like appendix first
- Take IMA high and take the dissection along to the left side of DJ flexure
- Construct omental flap for APER and lay this on the left of DJ flexure
- Swab suture to omentum and colon stump in APER
- Consider using Dynamesh prophylactically
- Consider using ligasure dual for hook and energy source
- Explore Yeohans with one blade fixed – I have found that it is in our TEO tray in the theatres

Travel to Geneva

In the evening Walter and I traveled to Geneva from St Gallen to attend the 18th Tripartite minimal invasive surgery (MIS) conference to be held for next 2 days. During our train journey, it was good opportunity to share some work experiences and other activities including holding number of courses. It was very enlightening for me to hear about Walter's minimal invasive course in Davos which is attended by more than 150 delegates from all over the World. I also had opportunity to ask about European Colorectal Congress (ECC) which is held in St Gallen each year in January attended by colorectal surgeons from all over the world. It transpired that St Gallen Hospital is not involved in organising this conference at present though it was in the past. We discussed about perioperative complications including being called too late in the operating theatres by a colleague when the complication is beyond rescue. The term 'plan continuation error' meaning a decision to continue with the original plan despite cues that suggested changing the course of action such as continuing causing numerous holes in small bowel in patient with contained leak which could have been rescued by carrying out a proximal stoma and drain. I was really amazed the amount of work Walter did and despite having worked the previous night doing lap Hartmann's he did not look tired. The train journey did give small opportunity to take away some of his tiredness.

Day 4 and 5 Tripartite Conference minimal invasive surgery

Geneva

After late night arrival around midnight in Geneva we headed for the MIS meeting in Hotel Starling just opposite the Geneva Airport.. The tripartite meeting is organised by either Austria, Germany or Switzerland and this year was the Swiss turn. As

this was being organised by Switzerland in Geneva there was French presence also. Some new updates in colorectal surgery were bowel prep not required but antibiotics are required and Foxtrot trial had shown that neoadjuvant chemotherapy is good for T3/T4 colon cancers. Low pressure laparoscopy at 6 to 10 mm Hg is good in less fit patients. Complete Mesorectal Excision (CME) for colon cancers yields 2 more nodes but there is more risk of bleeding. Appendicectomy may be useful for refractory ulcerative colitis as supported by ACCURE trial.

TaTME superiority was justified as there is residual mesorectum in 46 percent and circumferential margin positivity in 8 to 12 percent of lap TME cases. Low and middle rectal cancers have certainly superior results using TaTME. There was plea for avoiding intraoperative complications particularly - wrong plane, injury to vagina, urethra in male, ureter and CO2 embolism.

There was a session on complications actually encountered in clinical practice from different Hospitals across the region. An interesting case about a patient who leaked on testing anastomoses at multiple points. This was sutured and had stormy postoperative period including compartment syndrome. In such cases better to redo the anastomosis rather than suturing.

Finally, it was time to say goodbye. The COVID-19 pandemic was accelerating in Italy. Switzerland and other European countries did not have many as yet. Walter told me a patient had undergone appendicectomy recently who had visited China and was coughing but did not know whether she had COVID or not because they had not started testing for COVID 19 as yet. As I came back I got scared I may have caught the virus during travel. As I write this we are in the peak of the pandemic and we are all uncertain what is going to happen next.



Appendix - Accounts

NDA Membership Account			
INCOME AND EXPENDITURE FOR YEAR ENDED 31 MARCH 2020			
Balance brought forward	2260.89		
<u>Receipts</u>		<u>Payments</u>	
Members subscription	1090	NDA Conference	33763.88
Money raised from AGM	34198	Accountancy	324
Careers Day	0	Careers Day	311.97
Companies sponsor	1807	Website	146.68
Other sources	123.45	Deposit Radisson Durham for 2021 AGM	500
	37218.45	Refund loan to charity account	2000
		HEAP Refund to charity account	300
Total	39479.34		37346.53
		Balance	2132.81

NDA CHARITY ACCOUNT			
INCOME AND EXPENDITURE FOR YEAR ENDED 31 MARCH for 2019 & 2020			
	2018_2019	2019_2020	
Balance forward	12232.01	9389.23	
<u>Receipts</u>			
Fund raising Events & Charitable Donations	8988.70	14725.03	
Fund raising Norwich Charity Dinner postponed due to COVID	0	1201.25	
HEAP Refund	0	300	
Loan refund membership Account	102.50		
Cash refund NDA AGM	500.00		
Loan refund from NDA membership Account		2000	
subtotal	9591.20	18226.28	
Total	21823.21	27615.51	
<u>Payments</u>			
Accountancy	823	384	
Charitable Donations	3726	6850	
Cost of Fund raising	4713.48	7787.6	
Training in Nepal	269	1806	
HEAP	300		
Loan payment to NDA membership account	102.5		
Loan payment to NDA membership account	2000		
Cash withdrawal loan to NDA membership	500		
Website	0	813	
Total	12433.98	17640.60	
	Balance	9389.20	9974.90

UNDER 16's ART COMPETITION 2020 RUNNER UP
'MEDICAL BREAKTHROUGHS'



KAJOL ARYAL, AGED 15

