

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active. Results: Both patient and healthcare provider participants expressed that the multifaceted, complex nature of symptoms could be optimally approached through coordinated, multidisciplinary care. Symptoms related to hemodialysis seldom occur in isolation, as described by an allied health participant: "If the person's not sleeping and the person has restless leg or pruritus, there is a good chance that they are going to be depressed." As exemplified by the following themes, PROMs together with symptom management protocols provided a mechanism for escalating and coordinating care across disciplines: (1) Establishing distinct role definitions - clearly defined roles and responsibilities help to establish expectations and boundaries for which healthcare providers will manage what aspects of symptom management; (2) Streamlining referral processes - a straightforward referral process facilitates efficiency and reduces redundancy in how symptoms are managed among the different care providers; (3) Enhancing team communication - PROMs serve as a common language for all members of the multidisciplinary team to communicate about symptoms.

Conclusions: Participants described the potential utility of PROMs in facilitating effective multidisciplinary care through clearly established roles, referral processes, and mechanisms for team communication. Involving multidisciplinary care providers in PROM-informed patient care is one strategy to enhance symptom management among persons on hemodialysis. **Conflict of Interest:** This project was funded by a Kidney Foundation of Canada Health Research Grant. Dr. Meghan Elliott is supported by a Kidney Research Scientist Core Education and National Training (KRESCENT) program New Investigator Award.

POS-512

ASSESSMENT OF THE IMPACT OF COVID-19 ON THE WELL BEING OF OUR YOUNG ADULT DIALYSIS POPULATION:A SINGLE CENTRE EXPERIENCE



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Introduction: Renal disease is predominantly a disease of the elderly and middle aged, however in recent years there has been increase in the young adult population with renal disease. This is multifactorial but maybe contributed to by the increase in young ones transitioning from the paediatric services affected by multiple chronic conditions including renal disease (1) who previously would not have survived. End stage renal disease is best managed by transplantation which provides individuals who are fit enough for the surgery ultimately with the best quality of life. Despite this several of our young adults require dialysis temporarily and in some instances indefinitely. Dialysis for young people can be extremely daunting hence our practice of cohorting our young adults on a single shift where feasible; a practice adopted since 2015 (2). The current COVID 19 pandemic has led to significant change to how we deliver our dialysis service leading to further impact on young adult population.

Methods: Our young adults undergo regular assessment of their wellbeing in order to detect any instability early on. Adopted questionnaires utilizing multiple choice questions offering the opportunity for graded responses were administered. This allowed for patient driven responses enabled by adopting, Interpretative Phenominological Analysis (IPA) developed in conjunction with our psychology team. The serial questionnaires threw up concerns and consistency in variation of response among the Young Adults pre and post COVID19 when the cohorts had to be disbanded to enable cohorting of COVID-19 positive patients during the pandemic. Questionnaires of the same group of patients were compared pre and post COVID19 as closely as possible

Results: We analysed 16 questionnaires from Young adults aged 18 and 27 years, established on dialysis with mental capacity to independently complete questionnaires. The consistent emerging themes in our free text comment reflecting lived experiences were longing for peer support 61.5% transport 23% and communications 15% (Figure 4) 50% very satisfied with the dialysis environment when dialysing in cohorts whilst in the non-cohorted only 25% were very satisfied (Figure 1). Non-cohorting young adults only 68.75% felt they were understood either quiet well/ extremely well, 87.5% felt that they were understood either quiet well/ extremely well in comparison to whilst. Young patients preferred

dialysing in the same cohorts some direct quotes "Dialysing with older people can be depressing & demotivating", "I wouldn't mind dialysing with people my own age as I would feel less different seeing people like me" (Figure 3). Satisfaction overall young adult services remained high but fell from 87.5 to 75% post COVID19 (Figure 2)



Figure 1: Bar Graph demonstrating the results of Young Adults satisfactory with the dialysis environment



Figure 2: Bar Diagram demonstrating the results Young Adults family and friends in understanding and supporting their health condition and treatment





| Emerging themes | No of responses | Percentage response (%) |
|---------------------------------|--------------------|-------------------------|
| Desire to dialyse with peers | 8 | 61.53% |
| Communications | 2 | 15.38% |
| Transport | 3 | 23.07% |

Figure 4: Table demonstrating patients suggestions

Conclusions: COVID-19 has significantly impacted some our most vulnerable dialysis patients our young adults. The demographics of this group were predominantly females, with the age range of 18-27 years old which may have influenced overall responses however the message was consistent within the limitations. COVID19 pandemic is significantly impacting practice and care in some of the most vulnerable of our patients which is being little reported in our reports and journals.

Re-allocation of resources will need to be considered as we emerge from the pandemic as this is likely an impact that is being felt across the trust for young adults with chronic disease.

No conflict of interest

POS-513

RISK OF COVID-19 DISEASE, DIALYSIS UNIT ATTRIBUTES AND INFECTION CONTROL STRATEGY AMONG LONDON IN-CENTRE HAEMODIALYSIS PATIENTS: A RETROSPECTIVE COHORT STUDY



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Introduction: Patients with end-stage kidney disease experience some of the highest rates of COVID-19 disease. Alongside demographic and cardiometabolic risks, those receiving in-centre haemodialysis (ICHD) treatment face a unique set of challenges surrounding the requirement to regularly attend for life-extending treatment, thereby preventing self-isolation. We aimed to characterise the impact of community disease burden, dialysis unit attributes and the range of infection control strategies, on rates of COVID-19 disease among patients receiving ICHD in London, UK.

Methods: We used data collected by the Pan-London COVID-19 Renal Audit Group which included all adult patients receiving long-term ICHD provided by all seven London renal centres on 2 March 2020. A discrete-time multi-variable multi-level time-to-event analysis was used to examine associations with the risk of testing positive for SARS-Cov-2 infection, and admission to hospital with COVID-19 over 13 weeks.

Results: Data on 5,755 patients dialysing in 51 ICHD units from the 7 London renal centres were analysed. Of these, 981 (17.0%) patients tested positive and 465 (8.2%) were admitted with suspected COVID-19. Alongside established risk factors for disease, we observed a strong relationship between ICHD infection rates and rates reported in patients' local communities. In addition, dialysis unit size was associated with outcomes, as was layout, specifically the number of side rooms (hazard ratio, HR: 0.86, 95% CI: 0.80 to 0.93 for test positivity or admission per side room/20 stations). Reduced risk of admission was observed two weeks following institution of mask wearing in asymptomatic patients (HR: 0.63, 95% CI: 0.43 to 0.93). Rates of staff illness paralleled that of patients, but no associations were seen between rates of disease in patients and the different units' mitigation strategies.



Figure: Geographical distribution of cases by dialysis unit by week for the first 8 weeks of the pandemic and at the final follow-up week.

Each ICHD unit is represented by a circle. Circle size: number of patients dialysed; Circle colour: cumulative proportion of patients test positive for COVID-19 or admitted with suspected COVID-19. Underlying green intensity reflects number of cases in each middle layer super output area (not necessarily reflective of patients' home locality as, most, but not all, patients dialyse in their closest unit). Three units are not represented as they fall outside the area of the map. Dates represent the first day of the week represented..

Conclusions: These findings suggest the high risk of COVID-19 in the ICHD population relates to individual factors, and underlying community transmission, along with increased unit size and unfavourable unit layout. The results support interventions aimed at reducing transmission from asymptomatic patients and highlight the importance of preventing infection in nursing staff.

No conflict of interest

POS-514

MULTI-CENTRIC HEMODIALYSIS ELECTRONIC PATIENT REPORTED OUTCOME MEASURES (EPROM) SURVEY



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Introduction: Patient-reported outcome measures are widely used Internationally to report and monitor patients' subjective assessments of their symptoms, functional status and quality of life. They allow the efficacy of a clinical intervention to be measured from the patients' perspective. The Short Form health survey (SF36) is a well-documented scoring system that has been widely used and validated as a QoL assessment tool for the general population as well as patients on maintenance hemodialysis (MHD).

Patients on MHD experience decreased quality of life (QoL) and significantly greater rates of malnutrition, morbidity and mortality compared with the general population. QoL measurements are based on a patient's subjective sense of well-being and are commonly used as an important clinical measure to tailor medical treatments for patients on MHD. There is limited data available from Indian subcontinent. In our study we aim to evaluate the QoL and accessibility to healthcare teams of Indian patients on MHD.

Methods: This cross sectional, multi-centric study was performed in Nov 2020. A random sampling was employed to select the study participants. Patients with a history of psychiatric illness, significant impairment of hearing, speech, or cognitive disturbances were excluded. Among the several questionnaires available, modified RAND (SF-36) was used and circulated amongst MHD patients across 10 dialysis centres in hospitals across India. A proprietary software from Bloom Value Corporation was used for data capture by electronic means (online web based survey with cloud-based repository) and Power BI was used for analysis. Statistical analysis was performed using SPSS.

Results: A total of 206 MHD patients from 10 centres across India completed the survey. Mean age of the study participants was 52.3 years (20-80). 66.5% participants were male. 41.7%(86) were Diabetics, 74.7%(154) had hypertension while 11.1% (23) had heart disease. 60.2% (124) had a dialysis vintage of 1 - 5 years. Majority 50.5% (104) of the patients were on thrice a week MHD. 79.1% (163) MHD patients reported being currently unemployed. 48% (21 out of 43) of those patients who are currently employed reported being in sedentary jobs. 44.2%(91) patients reported paying out of pocket for their MHD (See Fig), the rest 16%(33)were supported by charities. 68%(140) patients reported feeling good about their health. 59.2% (122) reported feeling better about their health than a year ago. 64.1% (132) reported having some limitation of their physical activities. About 48% patients reported disturbances in their social activities due to emotional or