Senior Training Fellowship 2018

<u>Visiting Professorship – Nephro critical Care</u>

I would like to place on records my appreciation for this opportunity offered by the administration of Christian Medical College and the sponsors. The critical care units in CMC are closed except for nephrology input in renal replacement therapy. In most advanced centers, renal replacement therapy is managed by the intensivists. After transformation into a teaching department after the commencement of super specialty degree in critical care, it is more important to introduce renal replacement therapy into our domain.

University of Alberta Hospital has a 24 bedded critical care facility (General Systems Intensive Care Unit - E. Garner King Critical Care Unit) and is the referral center for the state of Alberta. Dialysis in a critical care environment was commenced in this ICU and unarguably, the best centre to learn.

Professor R T Noel Gibney, who has seen this program through from its start was my mentor and I was most lucky to be there when he was still service. Associate Professor Sean Bagshaw facilitated with the paper work.

I spent 8 weeks in the ICU as a Visiting Professor in Critical Care Nephrology and Renal Replacement therapy. This was a unique opportunity as I was able to work (observe) with all the consultants in the ICU and was able to learn all types renal replacement therapy including peritoneal dialysis. All the techniques I learnt may not be practiced here in CMC due to cost constraints, but may be used in select patients. It was a great learning experience in other areas of critical care too.

My visit to Canada could not have been a better time as I was able to attend the conference "Acute Kidney Injury and CRRT 2018" in San Diego in California where the theme matched my training in Edmonton, Canada. I was able to make few contacts which would enable us to take the ICU based dialysis a step further as detailed below.

Many patients in ICU with acute Kidney Injury are unstable especially in terms of cardiovascular system. Institution of blood purification therapies like intermittent hemodialysis or Continuous renal replacement therapies (CRRT) can make the patients more unstable and in many cases not possible. Peritoneal dialysis (PD), where there is no contraindication is a viable option in this group of patients and is not associated with instability and very cost effective. In our set up with cost constraints (CRRT can cost up to Rs. 30,000 per day) PD will be the right way to go. I have made contacts in Dr. Daniel Ponce in Brazil regarding and I am attaching the email communications I have had with her. Spending a period of two weeks in Intensive Care unit in Brazil will add value to the training I have had in Canada.

My visit to Canada was at the tail end of winter, but it was still freezing. It was minus 28 degrees to start with and weather was pleasant when I left only to face a harsh 39 degrees in Vellore! The warmth of everyone especially Prof and Mrs. Gibney kept the cold at bay. I stayed about a ¾ kilometer from the hospital and my stay was comfortable. Thanks for the funding. I was asked to talk about the wonderful work we do at Vellore and the quality of work in the ever increasing demand on our services was very much appreciated especially.

Future plans: I am at the moment liaising with the nephrologists who provide us with dialysis therapy. I am prescribing dialysis with their concurrence. I would like to take this forward as ICU based therapy, which would give us a better standing in the critical Care community, better training for our ICU trainees and last but not the least, reduce the burden on the already stretched nephrology team. I look forward to visit Brazil and start ICU based renal replacement therapy. Associate Professor Sean Bagshaw was keen to set up a MOU with our institution.

Thank you

Subramani