

ISN Sister Renal Centers Programme: the journey towards establishing peritoneal dialysis in the Niger Delta, Nigeria

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Objectives

Renal centres from Port Harcourt, Nigeria and the UK formed an alliance through the ISN Sister Renal Centers programme to improve clinical care in nephrology in a low-middle income economy with significant issues in delivering dialysis for both acute and chronic kidney disease.

Methods

Pre-visit video conferencing provided educational and planning opportunities in the delivery of peritoneal dialysis for acute kidney injury (AKI).

Enquiries were made with two major dialysis fluid manufacturers about supply of fluids.

An initial visit to the sister hospital was undertaken by UK nephrologists with special interests in AKI and interventional nephrology.

A multidisciplinary workshop was undertaken with primary and secondary healthcare professionals, designing a project for the early recognition and referral of AKI, agreeing local definitions and indications for point of care testing.

A pop-up dialysis access workshop was undertaken in the dialysis unit over 3 days:

Didactic teaching on dialysis access methods

Small group teaching on the basics of PD and prescriptions

Simple and sustainable training tools for basic surgical procedures, PD catheter insertion and Seldinger technique

Dialysis access ultrasound training with volunteers examining abdominal anatomy and vascular access imaging

Hands on training with simple access phantoms

Results

Participants in the AKI workshop were energised by their work in designing the programme, with uniformly positive feedback.

Locally designed methodology was agreed to inform the next part of the project in AKI point of care testing. Tunnelled haemodialysis line insertion was achieved by local and visiting nephrologists, unique to the dialysis centre which normally relies on temporary femoral venous access.

Patients did not receive peritoneal dialysis access. Despite forward planning neither manufacturer's PD fluid were available at the appropriate time.

Reacting to the difficulties in establishing commercial fluid delivery discussions were commenced with the local pharmaceutical society in providing locally delivered dialysis solutions using locally available fluids (Hartman's/Ringers lactate and dextrose 50%)

Ongoing support through video links and future visits have been scheduled.

Conclusions

Significant gains have been made on our journey to establishing PD for AKI in the ISN Sister Hospital in Nigeria.

The difficulties in establishing affordable and reliable PD fluid supply have signposted a local solution.

Ongoing video-links for procedure training are in hand prior to follow up visits.

Ongoing links seek to establish a sustainable and affordable PD treatment for AKI and ESRD.

The centres are bidding for level A status to expand the programme across the Niger Delta region of Nigeria.