#### Hand Function Impairment in Patients with End Stage Renal Failure

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## **Objective & Methodology**

#### Objective:

 To assess the hand function of in-patients with ESRF in PYNEH who need to have peritoneal dialysis.

#### Method:

- Patients referred from Renal ward of PYNEH
- Self-conducted or helper-conducted peritoneal dialysis
- Refer to Occupational therapy for hand functional assessments within 2 weeks post-Tenckhoff insertion

## **Hand Grip Strength**

 43% and 51% lower than the reference value for the male and female healthy Hong Kong Chinese adult (Tsang, 2005) respectively

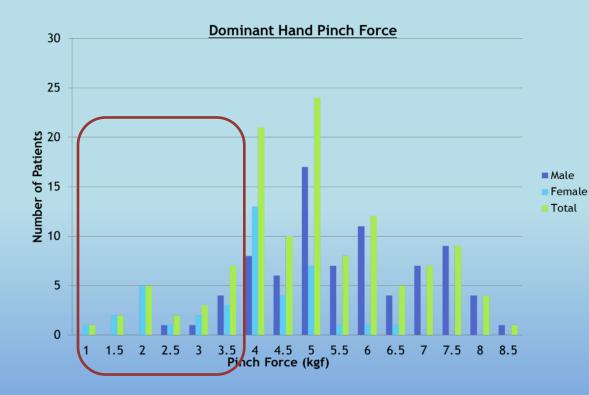




N=121 (K8 ward, PYNEH)

## **Pinch Grip Strength**

 7.5% male patients and 34.1% female patients were found to have pinch grip strength of dominant hand lower than 4 kgf





N=121 (K8 ward, PYNEH)

## **Manual Dexterity**

- Poor dexterity
- Around 30.0% below 25 percentile
- Around 50% below 50 percentile

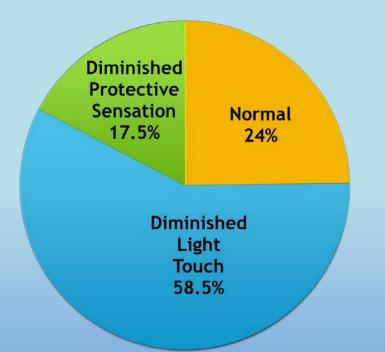




N=121 (K8 ward, PYNEH)

# Sensory Assessment

- 58.5% with diminished light touch and
- 17.5% with diminished protective sensation





N=121 (K8 ward, PYNEH)

#### **Hand Function Training**













#### Reference

- OTCOC (2014). Occupational Therapy service manual for rehabilitation of people with ESRF on dialysis, : Hospital Authority.
- Tsang, C. C. (2005). Reference Values for 6-Minute Walk Test and Hand-Grip Strength in Healthy Hong Kong Chinese Adults . Hong Kong Physiotherapy Journal, 23 6-12.