

Current Status & Future of Dialysis, Vascular Access & Interventional

Nephrology in South & South East Asia

Country: _____

Representative: _____

Burden of ESRD

| | | |
|--|---|--|
| National population (in millions) | | |
| Incident & prevalent ESRD population (Per Million) | Incidence / million | Prevalence/ million |
| %age of GDP as Total national health expenditure | | |
| Estimated Per Capita National Income (in USD) | | |
| Top 3 Etiologies of CKD (for e.g. DM,HT or Unknown) | Number 1 Etiology Number 2 Etiology Number 3 Etiology | |
| Average age of ESRD patient (in years) (at start of dialysis) | Male | female |
| Dialysis Drop Out Rate & cause distribution at 6 months <small>(Tick applicable reason from the right Column)</small> | Rate in % | Death Transplant Financial Reasons |
| Dialysis Drop Out rate & cause distribution at 12 months <small>(Tick applicable reason from the right Column)</small> | Rate in % | Death Transplant Financial Reasons |
| % distribution of Patients among HD/PD/Transplant/ Conservative | HD PD | () () |

| | | |
|--|--|--------------------------|
| | Transplant conservative | () () |
| % distribution of HD frequency per week of Patients (total must be 100%) | More than 2 per week Less than 2 per week 2 per week | () () () |
| Total no. of nephrologists in the country (Number) | | |
| Number of dialysis centers in the country (Number) | | |
| Average number of Dialysis machines per HD unit (the commonest one) | Less than 10 10-20 20-40 More than 40 | () () () () |
| % distribution of Funding for dialysis (Govt,* insurance or * OPP) | Govt PPP OPP | () () () |
| Are most of dialysis units supervised by Nephrologists directly? (Yes / No) | Yes | No |
| Monthly cost of Hemodialysis & CAPD (in USD \$) | | |

- **PPP-PUBLIC PRIVATE PARTNERSHIP** (means Government pays to private party to deliver dialysis)
- *** OPP-OUT OF POCKET PAYMENT** (means patient pays from his pocket)

Status Of Vascular Access

| % of Patients undergoing “Planned initiation” of HD vs. “Unplanned initiation “ | Planned initiation | Unplanned initiation |
|---|---------------------------|--------------------------|
| % of Incident Hemodialysis patients using AVF /AVG/ * TCC/ * NON TCC | AVF AVG TCC nTCC | () () () () |
| % of Prevalent Hemodialysis Patients using AVF /AVG/ * TCC / * NON TCC | AVF AVG TCC nTCC | () () () () |
| Average cost of AVF/AVG /* TCC & * NTCC procedure (in USD \$) | AVF AVG TCC nTCC | () () () () |
| AV Fistula Surgery done by: Nephrologist / Surgeons (%) | Nephrologist | Surgeons |
| AV Graft Surgery done by: Nephrologist / Surgeons (%) | Nephrologist | Surgeons |

****Tunneled Central Catheter (TCC) * Non Tunneled Catheter (NTCC) or Acute Catheter***

Interventional Nephrology (IN)

Who does the following Interventional Nephrology Procedures in your country.

| | | | |
|---|----------------|----------|--------|
| Non Tunneled Catheter | (Nephrologist) | (Others) | (both) |
| Tunneled Central Catheter (TCC) | (Nephrologist) | (Others) | (both) |
| Kidney Biopsy | (Nephrologist) | (Others) | (both) |
| AV Fistula | (Nephrologist) | (Others) | (both) |
| AV Graft | (Nephrologist) | (Others) | (both) |
| AVF Salvage Interventions (Peripheral & Central Angioplasty) | (Nephrologist) | (Others) | (both) |
| PD Catheter Placement | (Nephrologist) | (Others) | (both) |

What percent of nephrologists perform any IN procedure?

| |
|--|
| |
|--|

The common challenges to practice of Interventional Nephrology? (Can check more than one box if appropriate)

| | |
|------------------------------------|--|
| Time Constraint | |
| Lack of Backup Support | |
| No Formal Training | |
| Cost Issues | |
| Fear of Medico Legal Issues | |

| | |
|---|--|
| Lack of Incentive | |
| Specialised for a Non Interventional Nephrology Practice | |
| Not Applicable to our Institution / Practice | |

Do most of the Institutes run formal training programs for following procedures in your country? (Check the box you feel appropriate)

| | |
|--|--|
| Kidney Biopsy | |
| Tunnelled Catheter Placement | |
| Non Tunnelled Catheter Placement | |
| AV Fistula Surgery | |
| AV Graft Surgery | |
| AV Fistula / Graft salvage procedures | |
| PD Catheter Placement | |

Are Nephrology setups in your country equipped / use / or have access to equipment like?

| | | |
|--|------------|-----------|
| Ultrasound Machine | <i>yes</i> | <i>No</i> |
| Fluoroscopy / C- Arm / Cath lab | <i>yes</i> | <i>No</i> |

Does some nephrologists do cath-lab procedures in your country?

| | | |
|---|------------|-----------|
| Like Central or Peripheral Venous Angioplasty +/- Stenting | <i>yes</i> | <i>No</i> |
|---|------------|-----------|

| | | |
|--|-----|----|
| Renal Artery Angiography / Angioplasty / Stenting | yes | No |
|--|-----|----|

Vascular Access Surveillance (VAS)

| | | | |
|---|-------------|-------------|----------|
| (check the box you feel appropriate) | | | |
| % Of Primary Failure rates of AVF and TCC (at 3months) | AVF Failure | TCC Failure | |
| Vascular Access Surveillance (VAS) Routinely Practiced In Dialysis Units | Yes | No | Not Sure |
| Who is trained as Manpower For VAS (Technicians/ Nurses/ Doctors) | Technicians | Nurses | Doctors |
| What Is The Preferred VAS Method: | | | |
| Serial Clinical Examination Of AV Access | Yes | No | Not Sure |
| KT/V Or URR Measurements | Yes | No | Not Sure |
| Routine Ultrasound Of AV Access | Yes | No | Not Sure |

| | |
|---|--|
| Any Other Technique (name) | |
|---|--|

Future Predictions / Directions

| | | | | |
|---|-----------|--------|-------------|--------|
| Expected Growth Of ESKD Population in next 5 years (%) | No growth | < 10 % | 10 ~ 20% | > 20 % |
| Expected Growth Of Hemodialysis units in next 5 years (%)) | No growth | < 10 % | 10 ~ 20% | > 20 % |
| Expected Growth Of CAPD in next 5 years (%)) | No growth | < 10 % | 10 ~ 20% | > 20 % |
| Expected Quantitative Growth Of interventional Nephrology in next 5 years(%) | No growth | < 10 % | 10 ~ 20% | > 20 % |
| Expected Growth Of ESKD Population in next 5 years (%) | No growth | < 10 % | 10 ~ 20% | > 20 % |

Any Government Incentives/ Sponsored Programs/ Private Initiatives

Challenges to Practice of HD/PD in your Country

Expectations from & Contributions to South East Asia

References Used: