

Demographics and key clinical characteristics of hemodialysis patients from the Gulf Cooperation Council participating in DOPPS



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Background / Objective

- Background**
 - The Gulf Cooperation Council (GCC) is made up of Kuwait, Saudi Arabia (SA), Bahrain, Qatar, United Arab Emirates (UAE) and Oman with a total population of more than 50 million
- Objective**
 - Present the first demographics and key clinical characteristics data and relationship with outcomes from DOPPS GCC countries

Methods

- Study Population:**
 - 927 patients on dialysis > 90 days from 40 randomly selected units from across the GCC countries enrolled in DOPPS 5 (2012-2015)

Results

- Table 1 shows the key clinical characteristics of the general dialysis population in the GCC countries
- Table 2 shows some more clinical and psycho-social characteristics of the GCC patients participating in DOPPS

Results

Table 1: Population and ESKD information by GCC country (2014)

| | Bahrain | Kuwait | Oman | Qatar | KSA | UAE |
|---|------------|-------------|-----------|----------|------------|-----------|
| General Population | | | | | | |
| Population size, n million ¹ | 1.5 | 4.1 | 4.2 | 2.2 | 30.9 | 9.0 |
| Proportion of population that are citizens ¹ , % | 46 | 31 | 56 | 13 | 67 | 12 |
| Dialysis Population | | | | | | |
| Total number of dialysis (HD / PD) patients (% HD) | 595 (90.6) | 1650 (89.5) | 1530 (92) | 700 (75) | 15780 (90) | 1870 (94) |
| Prevalence of Dialysis PMP | 410 | 400 | 365 | 320 | 513 | 210 |
| Prevalence of dialysis PMP, citizens only | 800 | 960 | 640 | 1230 | 645 | 760 |
| Dialysis population, % Citizens | 91 | 74 | 98 | 49 | 84 | 40 |
| Annual Dialysis Mortality | 14.65 | 11.5 | 8 | 8 | 11 | 8.5 |
| Number of Dialysis Centers (Public) | 5 (3) | 9 (8) | 21 (19) | 5 (5) | 187 (145) | 33 (22) |
| % of ESKD Due to Diabetes | 42 | 45 | 50 | 40 | 44 | 50 |
| % HCV positive patients on dialysis | 10.2 | 8 | 8 | 5 | 15.5 | 13 |
| % HBV positive patients on dialysis | 0.5 | 2 | 2 | 1 | 3.4 | 2 |

¹Secretariat General – The Cooperation Council for the Arab States of the Arabian Gulf. <http://www.gcc-sg.org/eng/>

Table 1: HD patient characteristics by DOPPS region (2012-2015)

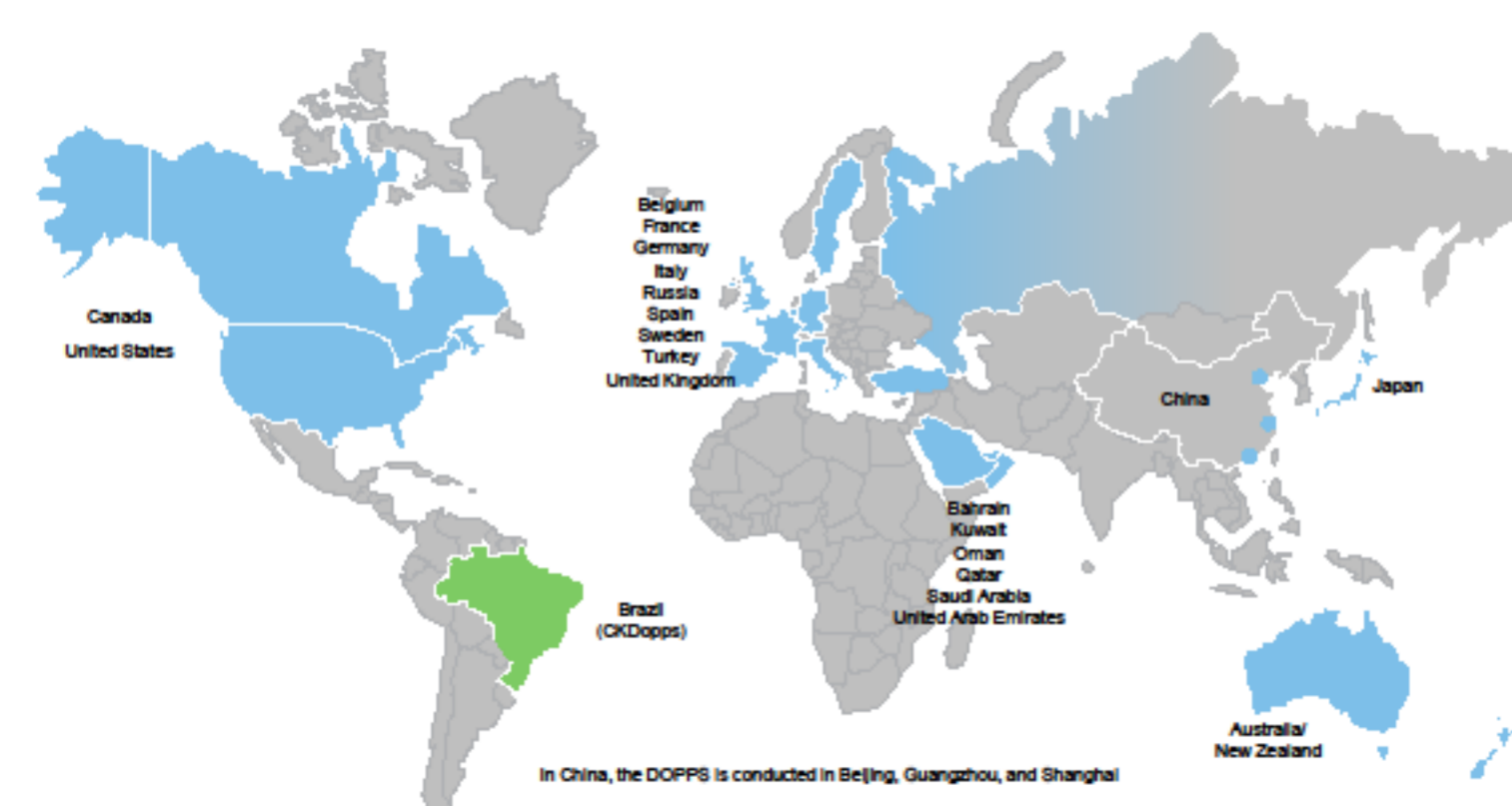
| | GCC | Europe | North America | Japan |
|--|------|--------|---------------|-------|
| Demographics | | | | |
| Age, years | 54.4 | 66.7 | 63.4 | 65.8 |
| Male, % | 56 | 61 | 57 | 64 |
| Married, % | 72 | 59 | 50 | 71 |
| Living with Family or Friends, % | 96 | 74 | 74 | 86 |
| Diabetes as ESKD cause, % | 41 | 25 | 43 | 35 |
| Hypertension as ESKD cause, % | 31 | 19 | 26 | 6 |
| Glomerulonephritis as ESKD cause, % | 10 | 20 | 13 | 40 |
| Body Mass Index, kg/m ² | 26.3 | 26.2 | 28.5 | 21.4 |
| Comorbidities | | | | |
| Peripheral Vascular Disease, % | 22 | 27 | 27 | 13 |
| Cancer, % | 1 | 16 | 15 | 10 |
| Neurologic Disease, % | 8 | 10 | 11 | 6 |
| Psychologic Disorder, % | 2 | 15 | 22 | 4 |
| Patient reported measures | | | | |
| Physical Component Summary (PCS) Score | 37.6 | 35.2 | 35.1 | 42.6 |
| Mental Component Summary (MCS) Score | 44.3 | 43.7 | 47.2 | 45.1 |
| CES – D > 10 Depressive Symptoms - % | 36 | 44 | 29 | 38 |

Statistics shown as mean or prevalence

Summary / Conclusion

- GCC countries are the top 6 countries in the world with more males than females in the population.
- Number of expatriates in GCC countries is large and in some it exceeds the number of local citizens. Access of expatriates to dialysis services is limited. Consequently, many of these expatriates leave the GCC upon reaching end-stage kidney disease (ESKD) and return to their home country. Therefore, dialysis incidence and prevalence rates in each country for citizens are much higher than dialysis incidence and prevalence rates for the total population
- Despite being young, the GCC dialysis population is plagued with diabetes and hypertension.
- Prevalence rates for ESKD are high, and diabetes is the leading cause.
- Hemodialysis is the dominant modality and hepatitis C still represents a challenge.
- Cancer rates in this region are low.
- Patients' reported quality of life in the GCC is comparable to other DOPPS regions.

DOPPS The Dialysis Outcomes and Practice Patterns Study



DOPPS is an international prospective cohort study of hemodialysis treatment and patient outcomes:

- DOPPS 1 (1996-2001):** 308 dialysis facilities and 17,034 patients in 7 countries (France, Germany, Italy, Japan, Spain, UK, and US)
- DOPPS 2 (2002-2004), DOPPS 3 (2005-2008), DOPPS 4 (2009-2011):** ≥300 facilities and 11,000 - 13,000 patients per study phase in 12 countries (DOPPS 1 countries + Australia, Belgium, Canada, New Zealand, and Sweden)
- DOPPS 5 (2012-2015):** ~500 facilities and 17,000 patients in nine new countries (Bahrain, China, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates, Russia, and Turkey) in addition to the 12 countries represented in DOPPS 4
- The DOPPS Program is supported by research grants from Amgen (founding sponsor, since 1996), Kyowa Hako Kirin (since 1999, in Japan), AbbVie Inc. (since 2009), Sanofi Renal (since 2009), Baxter Healthcare (since 2011), and Vifor Fresenius Medical Care Renal Pharma, Ltd (since 2011). Additional support is provided for specific projects and/or countries by a number of organizations. Additional information and slides available at www.dopps.org.
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Abstract #: XXXXX

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