Global overview of health systems oversight and financing for kidney care

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Reliable governance and health financing are critical to the abilities of health systems in different countries to sustainably meet the health needs of their peoples, including those with kidney disease. A comprehensive understanding of existing systems and infrastructure is therefore necessary to globally identify gaps in kidney care and prioritize areas for improvement. This multinational, cross-sectional survey, conducted by the ISN as part of the Global Kidney Health Atlas, examined the oversight, financing, and perceived quality of infrastructure for kidney care across the world. Overall, 125 countries, comprising 93% of the world's population, responded to the entire survey, with 122 countries responding to questions pertaining to this domain. National oversight of kidney care was most common in high-income countries while individual hospital oversight was most common in low-income countries. Parts of Africa and the Middle East appeared to have no organized oversight system. The proportion of countries in which health care system coverage for people with kidney disease was publicly funded and free varied for AKI (56%), nondialysis chronic kidney disease (40%), dialysis (63%), and kidney transplantation (57%), but was much less common in lower income countries, particularly Africa and Southeast Asia,

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which relied more heavily on private funding with out-of-pocket expenses for patients. Early detection and management of kidney disease were least likely to be covered by funding models. The perceived quality of health infrastructure supporting AKI and chronic kidney disease care was rated poor to extremely poor in none of the high-income countries but was rated poor to extremely poor in over 40% of low-income countries, particularly Africa. This study demonstrated significant gaps in oversight, funding, and infrastructure supporting health services caring for patients with kidney disease, especially in low- and middle-income countries.

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Health system oversight and financing are key determinants of the quality, efficiency, and equity of health care delivery.[1] Beyond overseeing the routine functioning and performance of health services, oversight is critical to their strategic development, regulation, and accountability. It shapes the capacity of health systems to develop and implement policies, identify and correct service deficiencies, advocate for health care in national development, and collaborate with stakeholders. Governance bodies should seek to achieve universal health coverage, which requires robust health financing systems.[2–4] In addition to generating sufficient funds to support the health system, financing systems must allow central pooling of funds for financial risk protection and facilitate equitable allocation of resources to areas of greatest need.

Due to differences in infrastructure and economy, significant global variability is expected in health system oversight and financing. In low-income countries, government contributions are less likely to be sufficient to fund health care, creating reliance on supplemental funding from external sources, including nongovernmental organizations (NGOs), community organizations, and private health insurance. Despite these contributions, resources may remain insufficient to ensure financial risk protection, and the monetary burden may be transferred to patients.[5] Lack of resources also compromises the adequacy of health service infrastructure and leads to low-quality health care delivery.[6]

The escalating prevalence and associated cost of kidney disease mandates a complete understanding of existing oversight and financing systems to drive effective, efficient, and sustainable service delivery. As the oversight and financing of health services caring for patients with kidney disease have not been previously reported, the present study was performed to examine health system oversight, financing, and infrastructural quality for delivering kidney care across International Society of Nephrology (ISN) regions[7] and 2014 World Bank country classification as low-, lower middle-, upper middle-, and high-income nations.[8]

RESULTS

Of the 130 countries surveyed, 125 countries participated (comprising 93% of the world's population) and 122 countries provided data pertaining to health system oversight and financing (97% response rate).

Health system oversight

Health system oversight of kidney care was performed by a national body in the majority of countries ($n = 80$, 66%). The highest proportions were reported from North and East Asia ($n = 6$, 100%) and Latin America and the Caribbean ($n = 13$, 81%) (Figure 1a). There were no appreciable differences in the frequencies of national oversight of kidney care between high-, upper middle-, lower middle-, and low-income countries (Figure 1b). Kidney care was managed at a provincial or regional level in 30% ($n = 37$) of countries and by NGOs in 15% of countries ($n = 18$). Oversight by NGOs was particularly common in low-income countries and in Oceania and Southeast Asia. Approximately one-half of countries ($n = 62$, 51%) relied on individual hospitals, trusts, or organizations to oversee governance. This approach was most common in low-income countries. Six percent ($n = 7$) of countries had no organized system for managing kidney care.

Health system financing

Only 19% ($n = 23$) of countries reported that their health system was publicly funded by government with no fees at the point of delivery (Table 1). An additional 24% ($n = 28$) of countries publicly funded their health system, but with fees at point of delivery. This approach was particularly common for low-income countries ($n = 7$, 41%). Nearly one-half ($n = 52$, 44%) of countries reported a mix of public and private funding, especially among high-income countries. Health systems of 13% ($n = 16$) of countries were funded through multiple sources, including government, NGOs, and community organizations. All residents were eligible for health coverage in more than one-half of respondent countries ($n = 69$, 58%). This proportion was similar across income groups. Newly Independent States (of the former Soviet Union) and Russian (5 of 6, 83%) countries had the highest rates of health coverage to their residents, while South Asian (2 of 5, 40%) countries had the lowest rates (Table 1).

Overall, in a publicly funded health care system, the majority of high-income countries publically financed all aspects of kidney care including dialysis, transplantation, management of chronic kidney disease (CKD) complications, management to reduce risk of CKD progression, early detection in individuals at risk, and management of acute kidney injury (AKI) (Table 2). Thirteen percent ($n = 2$) of low-, 19% ($n = 6$) of lower middle-, 40% ($n = 12$) of upper middle-, and 54% ($n = 19$) of high-income countries funded all aspects of kidney care.