

## Chronic Kidney Disease(CKD): An Emerging Health Problem

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Chronic kidney disease (CKD) is largely an unrecognised health problem in India. However, it is currently an important problem which will affect a larger population in India. India has been described as the diabetes capital of the world, every fifth diabetic in the world being Indian.[1] Hypertension is also widely prevalent. The Chennai Urban Rural Epidemiological study (CURES) cohort in Chennai showed that every fifth individual was hypertensive.[2] The increasing prevalence of diabetes, hypertension and associated risk factors such as obesity, hypercholesterolaemia and the metabolic syndrome points towards the potential for sustained and explosive growth of this silent epidemic.[3] Thus, it is essential to establish CKD as an important public health problem in India.

There is a paucity of data on prevalence of CKD in India. Several studies from different parts of the country showed a significant prevalence of CKD in the community.[4,5] The "Screening and Early Evaluation of Kidney Disease" (SEEK) Project, one such multicentric and multipartner project was initiated with the aim of establishing CKD as a public health problem and to develop and implement an education program in CKD care targeted at high risk individuals. "Screening and Early Evaluation of Kidney Disease" (SEEK) study which was started in 2006, which covered 21 centers with 53 community camps to include rural, semi-rural, semi-urban and urban communities from widely spread over in India, reported a high prevalence of CKD (17.4%). In this study CKD prevalence was 25.5% in urban and 9.4% in rural settings. Diabetes and Hypertension were main causes of CKD in this

study too.[4] The Chennai urban Rural Epidemiological study (CURES - part I 2003) conducted by V. Mohan from Madras Diabetic Research Foundation which covered 50,000 subjects revealed that 16% of the subject above the age of 20 Years were affected by Diabetes and 23% of the survey population had hypertension.[6] Study of M.K. Mani on rural population of Tamil Nadu rural covering 21,062 subjects detected hypertension in 5.26% and Diabetes in 3.64% and CKD up to stage III in 0.68% population.[5] It is observed that prevalence of CKD, though was low, the risk factors leading to CKD showed a higher prevalence in unpublished study conducted by Vaishali *et al*[7] in urban slums of Mumbai in 2007.

The average cost of each hemodialysis session in India varies from 150 in Government hospital to Rs 2000 in some corporate hospitals. The average cost of Kidney transplant varies from 50,000 in a Government set-up to Rs. 300000 in an average private hospital. Also, the yearly maintenance cost post transplant for drugs amounts to Rs. 120000 per year or is Rs. 10,000 per month. The average per capita income per annum is Rs. 20734 which makes it clear that these treatments are not affordable to an average Indian person. Thus, there is a pressing need to have haemodialysis and peritoneal dialysis centers at the outreach levels and on a mobile basis providing services at a subsidised rate.[8] Government of Maharashtra has initiated a very good initiative under the "Rajiv Gandhi Jeevandayee Arogya Yojana". It aims to improve the medical access facility for both Below poverty line(BPL) families and Above poverty line families(APL). This in turn will

enhance the quality of medical care to the BPL and APL families. There is a provision for renal transplantation under this scheme.[9] But, there is an urgent need to create awareness with respect to such schemes available and its health care utilisation.

The natural history of CKD has a prolonged asymptomatic period during which time substantial loss of kidney function can occur before clinical events become apparent. The individual's level of awareness of kidney disease in the population is low even in more informed settings.[10] It is observed that even in undergraduate medical curriculum, CKD is not given much emphasis. Therefore, there is an urgent need to create awareness with reference to, symptoms, signs, complications, consequences and the need for screening programmes at the community level. Media, print and Television, a powerful tool for creating awareness can be used at different levels. The World Kidney Day celebrated every year on the Third Thursday of March is an important landmark in the history of creating public awareness towards CKD. The theme for the year 2013 is "STOP Kidney Attack! Protect your kidneys, find out how." The theme focussed on the urgent need for raising awareness about Acute kidney Injury(AKI) amongst the physicians and hospital staff and also the general public.[11]

A multipronged, concentrated and sustained effort is needed to control this problem. Let us all join hands to combat and control this problem.

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