



Exploring the Role of Self-Care in Preventive Nephrology

Kalaivani Annadurai^{1*}, Raja Danasekaran², and Geetha Mani²

About the Authors

¹Associate Professor, Department of Community Medicine, Shri Sathya Sai Medical College & Research Institute

²Assistant Professor, Department of Community Medicine, Shri Sathya Sai Medical College & Research Institute

*Corresponding Author:

Kalaivani Annadurai
kalaimedicos11@gmail.com

Editor:

Brijesh Kumar Singh
Chief Managing Editor
Scholars Report

Citation and Copyrights

Citation: Annadurai K, Danasekaran R, and Mani G (2016) 'Exploring the role of self care in preventive nephrology', ScholReps, 1(2).

Copyright: © 2016 Annadurai K *et. al.* This is an open access article distributed under the terms of the Creative Commons Attribution 4.0, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Publication Details

Received: Nov 01, 2016

Accepted: Nov 28, 2016

Published: Dec 02, 2016

Funding: None.

Subject Section: Nephrology

Conflict of interest: The authors have read the journal's policy and have no conflicts.

Funding: None

Dear Editor,

Self-care is defined as any regulatory activity of an individual which is deliberate and self-initiated with the intention of improving, restoring health or preventing disease. [1] The Kidney is often the target organ for systemic diseases like hypertension, diabetes, cardiovascular diseases, autoimmune diseases, habitual drug use, and systemic infection. With growing epidemics of diabetes and hypertension in the developing nations, it is the high time to prioritize the idea of preventive nephrology into the mainstream health care services. Early kidney disease has no symptoms or signs and furthermore, there was a wide awareness gap on kidney diseases in the general population. [2]

Globally, kidney related mortality contributed to 1.4% of all deaths which is the 12th highest cause of death and moreover, 18 867 000 Disability Adjusted Life Years (DALY) were attributed to kidney related diseases. [3] Risk factors for Chronic Kidney Disease (CKD) are diabetes, hypertension, nephrotoxic drug use (lithium, calcineurin inhibitors, and chronic Non Steroidal Anti-inflammatory Drugs (NSAID) use), smoking, obesity, old age, cardiovascular disease, structural renal tract disease, family history of stage five kidney diseases or hereditary renal disease, presence of autoimmune diseases like systemic lupus erythematosus and past history of acute renal failure. [2]

The concept of preventive nephrology is based on the actions directed at averting renal disorders. Prevention of emergence of risk factors, early detection of renal diseases, determination of its underlying cause, treatment of reversible abnormalities and prevention of progression to end stage renal diseases, are the key features of preventive nephrology. Self-care is the main pillar against which many of the aspects of preventive nephrology have been built. Self-care in the context of preventive nephrology is broadly divided into general care and disease specific self-care. [4]

General self-care includes adaptation of healthy lifestyle practices like regular physical exercise which includes 150 minutes of moderate-intensity aerobic physical activity for adults throughout the week; taking balanced diet which stresses on salt intake of not more than 5 grams per day; avoidance of smoking, moderate alcohol consumption, regular health checkup and practicing responsible self-medication. [2], [5]

Center for Disease Control (CDC) has recommended screening for hypertension, dyslipidaemia, and obesity as early as 20 years of age. If the findings are normal, Blood Pressure(BP) should be checked once every two years, lipid profile once every 4-6 years and body mass index at every regular health care visit. CDC has also recommended starting screening for type 2 diabetes mellitus at the age of 45 and rechecking every three years if the glucose level is normal.[6]

Disease-specific self-care directed at prevention of renal diseases from high-risk chronic diseases like diabetes mellitus, hypertension, cardiovascular diseases which include home-based care, regular health checkup, adequate drug compliance, dietary restriction (DASH diet) as per physician advice, and avoidance of self-medication practices. Home based care includes BP monitoring and it has been found that home-based BP monitoring achieved better control of BP among hypertensives compared to those receiving usual care, self-monitoring of glucose using glucometer and American Diabetes Association has recommended glucose self-monitoring before each meal and before bed for effective glycemic control among diabetic patients.[7],[8]

Ultimately, self-care is incomplete without adequate awareness on recognition of symptoms and signs of renal diseases. High-risk groups should have their regular screening test annually if the reports are normal. Screening tests recommended for high-risk groups for CKD are urine albumin creatinine ratio and estimated glomerular filtration rate; these should be done annually for early detection of CKD.[2]

To conclude, self-care has been proved to be one of the major strategies to prevent the emergence and progression of kidney diseases. With an increasing burden of kidney diseases and lack of adequate awareness in the general community, it is the prime time for all the stakeholders to frame a program to bring down the growing magnitude of the problem by stressing the importance of self-care in preventing kidney diseases.

References:

1. Coburn D, Arcy CD, Torrance GM. Health and Canadian Society: Sociological Perspectives. University of Toronto Press, 1998 p 279-80.
PMID: DOI: PMCID:
2. Li PK, Chow KM, Matsuo S, Yang CW, Jha V, Becker G et al. Asian Chronic Kidney Disease (CKD) Best Practice Recommendations – Positional Statements for Early Detection of CKD from Asian Forum for CKD Initiatives (AFCKDI) Nephrology. 2011;16:633–41
PMID: DOI: PMCID:
3. Fogarty International Center. Global Burden of Disease for the Year 2001. By World Bank Region for Use in Disease Control. Priorities in Developing Countries. 2nd edn. 2004.
PMID: DOI: PMCID:
4. Vathala A, Yap HK. Preventive Nephrology: A Time for Action. Annals Academy of Medicine. 2005;34:1-2.
PMID: DOI: PMCID:
5. World Health Organization. Global strategy on diet, physical activity and health. 2004. http://www.who.int/dietphysicalactivity/strategy/eb11344/strategy_english_web.pdf?ua=. Access date 24.12.2014.
PMID: DOI: PMCID:
6. American Heart Association. Recommended Schedule for Screening Tests. Available from http://www.heart.org/HEARTORG/Conditions/Heart-Health/Screenings_UCM_428687_Article.jsp#. Last accessed on 29.12.2014.
PMID: DOI: PMCID:

7. Margolis KL, Asche SE, Bergdall AR, Dehmer SP, Groen SE, Kadrmas HM, Kerby TJ et al. Effect of Home Blood Pressure Telemonitoring and Pharmacist Management on Blood Pressure Control A Cluster Randomized Clinical Trial. JAMA. 2013;310:46-56.

PMID: DOI: PMCID:

8. American Diabetes Association. Standards of medical care in diabetes—2014. Diabetes Care. 2014; 37:S14–S80.

PMID: DOI: PMCID:

Authorship (author(s) contribution or attribution)

Contribution Details (ticked marked represent the authors contribution):

	Annadurai K	Danasekaran R	Mani G
Concepts	✓		
Design	✓		
Definition of intellectual content	✓		
Literature search	✓		
Clinical studies			
Experimental studies			
Data acquisition			
Data analysis			
Statistical analysis			
Manuscript preparation	✓		
Manuscript editing		✓	
Manuscript review			✓
Guarantor	✓		

Prior publication: Nil.

Source(s) of support: Nil.

Permissions: Nil.

Declaration

On behalf of all Co-Authors, the corresponding Author, states that this work is original and has not been published in whole or in part elsewhere.

9.