

Complementary and Alternative Medicine (CAM) in Chronic Kidney Disease (CKD): More Evidence Needed

Shamsuddin N^{1*}, Gnanasan S², Karuppanan M² and Farooqui M³

¹Department of Pharmacy, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia

²Department of Pharmacy Practice, Faculty of Pharmacy, Universiti Teknologi MARA, Puncak Alam Campus, Shah Alam, Selangor, Malaysia

³Department of Pharmacy Practice, Unaizah College of Pharmacy, Qassim University, Unaizah, Qassim, Saudi Arabia

*Corresponding author: Noorasyikin Shamsuddin, Department of Pharmacy, Faculty of Medicine, University of Malaya, 50603 Lembah Pantai, Kuala Lumpur, Malaysia, Tel: 6037967751; Fax: 603-79674964; E-mail: noorasyikin@um.edu.my

Received date: October 03, 2016; Accepted date: October 14, 2016; Published date: October 16, 2016

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

Letter to Editor

Dear Editor,

Chronic Kidney Disease (CKD) is an irreversible condition that is now becoming a global threat worldwide. The overall prevalence of CKD in the United States is expected to rise from 13% between 1999 to 2004 to 16.7% in 2030 [1]. In Malaysia, it was reported that 2.5 million of Malaysian has been diagnosed with CKD and there is a steady increase of 500,000 to 600,000 patients annually [2]. As this condition is irreversible, the control of blood pressure, glucose, cholesterol and renal replacement therapy serve as the cornerstone of treatment of CKD.

The use of Complementary and Alternative Medicine (CAM) has been extensively reported in patients with chronic diseases, such as cancer, hypertension, diabetes mellitus and asthma. Interestingly, only a handful of studies have been carried out to determine the prevalence of CAM use in different stages of CKD [3-10]. The prevalence of CAM use reported from these studies ranged from 24 - 64 percent. The studies focused on different subtypes of CKD, but were mostly conducted in patients with advanced stage of CKD (dialysis patients) [4-7,10]. The high prevalence of CAM use may be due to unaffordable treatment options, such as renal replacement therapy, especially in low and middle-income countries. Albeit routinely advised to abstain themselves from using herbs in view of their failing kidney, herbs are reported to be the most common form of CAM used by CKD patients [6,8-10]. The reasons why CKD patients are using CAM are due to strong influence from family and friends, as well as perceived benefits of the CAM recommended [11]. Many studies revealed low disclosure rates (10-30%) of their CAM use to the attending physicians [3,6,8,9].

Conspicuous use of herbal medicine may be a growing threat to CKD patients. The risks of using herbs in CKD patients include worsening of kidney functions, as demonstrated to be caused by a few herbs that contain aristolochic acids as one of the active bio-compounds. We would like to draw attention on the risks posed by some herbal medicines, especially in Chinese herbal medicine that may contain renal toxic herbs. The available herbal products are mostly not well regulated and have no clear statement of content and medically-related information. This condition has worsened with various marketing strategies of herbal companies through mass and social media that leads to surge of public interests in the use of herbal medicine regardless of their low credibility.

On the other side of the coin, a few compounds like curcumin and resveratrol have been shown to possess renoprotective effects by modulating inflammation processes. The potential benefits of herbs are

mainly derived from *in vivo* studies. More clinical studies are needed to determine the renoprotective effects in patients. CAM may also help CKD patients in slowing the progression of renal failure and alleviating some of the symptoms of CKD, such as pruritus, fatigue, depression and uremic bruising [12].

CKD has been known to significantly impair the quality of life of the patients. A review by Soni et al. [13] stated that even patients who are at earlier stages of CKD (stage 1 and 2), already had a decreased health-related quality of life (HRQOL) compared to the normal population. The efficacy of mind-body medicine, like acupuncture, acupressure, yoga and Tai-chi in improving HRQOL of CKD patients have been highlighted in a few studies, but many of the studies either suffer from poorly designed methodology or small sample size. It is also unclear whether patients use CAM to restore their kidney functions or to treat CKD-related symptoms, such as pruritus, anemia, sexual dysfunction or depression. Therefore, we strongly urged more studies to be carried out to ascertain the real reason of CAM usage in CKD patients and whether there is any significant improvement in the HRQOL of CKD patients after using CAM. It is imperative that future studies are well-designed, so that more evidences on efficacy and safety data are produced which could eventually improve CKD patients HRQOL.

References

1. Coresh J, Selvin E, Stevens LA, Manzi J, Kusek JW, et al. (2007) Prevalence of chronic kidney disease in the United States. *JAMA* 298: 2038-2047.
2. Cruz A (2014) 2.5 mil Malaysians suffer from kidney disease. In: *The SunDaily*. Kuala Lumpur, Malaysia.
3. Akyol AD, Yildirim Y, Toker E, Yavuz B (2011) The use of complementary and alternative medicine among chronic renal failure patients. *J Clin Nurs* 20: 1035-1043.
4. Arjuna Rao A, Phaneendra D, Pavani CD, Soundararajan P, Rani N, et al. (2016) Usage of complementary and alternative medicine among patients with chronic kidney disease on maintenance hemodialysis. *J Pharm Bioallied Sci* 8: 52-57.
5. Birdee GS, Phillips RS, Brown RS (2013) Use of Complementary and Alternative Medicine among Patients with End-Stage Renal Disease. *Evid Based Complement Alternat Med* 2013: 1-6.
6. Kara B (2009) Herbal product use in a sample of Turkish patients undergoing haemodialysis. *J Clin Nurs* 18: 2197-2205.
7. Nowack R, Ballé C, Birnkammer F, Koch W, Sessler R, et al. (2009) Complementary and Alternative Medications Consumed by Renal Patients in Southern Germany. *J Ren Nutr* 19: 211-219.
8. Osman NA, Hassanein SM, Leil MM, NasrAllah MM (2015) Complementary and Alternative Medicine Use Among Patients With

-
- Chronic Kidney Disease and Kidney Transplant Recipients. *J Ren Nutr* 25: 466-471.
9. Tangkiatkumjai M, Boardman H, Praditpornsilpa K, Walker DM (2013) Prevalence of herbal and dietary supplement usage in Thai outpatients with chronic kidney disease: a cross-sectional survey. *BMC Complement Altern Med* 13: 1-9.
 10. Zyoud SeH, Al-Jabi SW, Sweileh WM, Tabeeb GH, Ayaseh NA, et al. (2016) Use of complementary and alternative medicines in haemodialysis patients: a cross-sectional study from Palestine. *BMC Complement Altern Med* 16: 1-8.
 11. Tangkiatkumjai M, Boardman H, Praditpornsilpa K, Walker DM (2014) Reasons why Thai patients with chronic kidney disease use or do not use herbal and dietary supplements. *BMC Complement Altern Med* 14: 1-9.
 12. Markell MS (2005) Potential Benefits of Complementary Medicine Modalities in Patients With Chronic Kidney Disease. *Adv Chronic Kidney Dis* 12: 292-299.
 13. Soni RK, Weisbord SD, Unruh ML (2010) Health-related quality of life outcomes in Chronic kidney disease. *Curr Opin Nephrol Hypertens* 19: 153-159.