

Improving chronic kidney disease care through group visits In Saudi Arabia

Ibrahim Hamed Aljumaiah

ممرض – التجمع الصحي الثالث – مستشفى الدرعية .
الرياض – السعودية.

Naser Ibrahim Althnayan

ممرض – التجمع الصحي الاول – مستشفى الملك خالد.
الخرج – السعودية.

Khaled Saeed Almassed

ممرض – التجمع الصحي الاول – مستشفى الملك خالد.
الخرج – السعودية.

Abstract

Since CDK necessitates kidney replacement when the disease is at its most advanced stage, there is a significant risk to the patient's life. Renal therapy replacement is used in Saudi Arabian healthcare, which is provided by both the public and commercial sectors. However, there are various additional methods that are employed as therapy for chronic illnesses, such as group visits. In order to enhance the treatment of chronic renal disease through group visits in Saudi Arabia, a descriptive study including a review of the most recent publications in the field was carried out. The outcomes demonstrated that this strategy had a favorable effect on the patient's self-confidence and ability to manage unpleasant emotions like anxiety. Additionally, it might bring down expenses and ease access to treatment. The use of GV as a therapeutic strategy in KSA is advised in light of these findings.

Keywords: *Chronic kidney disease, CDK, Group visits, GV, Renal therapy, Saudi Arabia.*

1. Introduction

The kidney is an organ of the body. Each kidney in our bodies is similar to the size of a fist, and it is located in the center of the back, right beneath the rib cage. Kidneys are responsible about clearing the body from the waste and extra water. Additionally, it maintains strong bones, helps in the production of red blood cells, and regulates body pressure. So it is important to mention that affected kidneys cannot keep maintain the body healthy (National Kdney Foundation, 2014).

Chronic kidney diseases have a massive impact on the quality of life, productivity, and life expectancy. Furthermore, the fifth stage of CDK is costly and requires renal replacement therapy at the conclusion. (Hassanien, 2013).

Saudi Arabia health care system consist of private and governmental sectors which provides medical services for chronic kidney disease. Facilities, organizations, and hospitals are well equipped and supplied with well-educated and qualified medial teams (Attar, 2020).

The objectives of vision of Saudi Arabia 2030 for health care sector includes improving the efficiency and health services. Furthermore, one of its goals is to advance medical therapy and enhance the expertise of medical team (Saudi vision 2030, 2021).

In light of prior data, it is important to shed the light on improving chronic kidney disease care through group visits in Saudi Arabia

1.1 Problem and questions

In industrialized nations, chronic disease has supplanted acute illness and infection as the primary cause of death. CKD is a genuine, escalating health issue that could have a detrimental impact on any country's healthcare system. For instance, the global prevalence of CDK in 2017 was roughly 9.1%, with 6975 million people affected. Additionally, chronic renal disease is one of the top five causes of death in many nations and ranks as the 12th leading cause of death globally (Assiry et al., 2022). According to age, there are about 9892 CKD patients in Saudi Arabia, which is a relatively high number (Almutary et al., 2013). It is crucial to emphasize that the incidence of this disease is constantly rising; for particular, between 1990 and 2014, there was an 87% increase in CDK prevalence (Evans & Lopau, 2020).

This disease occur slowly and in stages (National Kidney Foundation, 2014), more over most cases of CKD can be diagnosed using opportunistic serum creatinine testing (SCr) before the symptoms develop (So, 2018). However, It is also important to indicate that this disease has no symptoms in early stages (National Kidney Foundation, 2014).

Due to numerous variables, including a relatively high rate of diabetes, nephropathy, and an unhealthy lifestyle, Saudi Arabia is currently witnessing a huge increase in the number of CKD patients (Alateeq et al., 2018). Therefore, awareness and

managing the chronic disease from home become more important with the increasing of CDK prevalence in KSA. Moreover, there is a real demand to indicate the symptoms of CDK in early stage in order to stop the disease or prevent it from improving into a new stage (Alateeq et al., 2018; National Kidney Foundation, 2014).

In light of prior data, it become critical to make a review study for improving chronic kidney disease care through group visits in Saudi Arabia. Additionally, numerous publications examined the relationships among study factors, such as improving chronic kidney disease care with group visits (Montoya, 2013). While some of which made a prospective descriptive study to make a review about chronic kidney disease manifestations in Saudi Arabia. However, the study of improving chronic kidney disease care through group visits in Saudi Arabia did not receive the proper attention from researchers, leaving a research gap in the literature. The primary question around this research is:

" How could chronic kidney disease care be improved by the group visits in Saudi Arabia?

1.2 Importance

This study is important since it clarified the CDK's role in adverse patient outcomes and potential global mortality. Additionally, the cost of this chronic disease medication adds to the strain on the healthcare system in any country, including KSA. Furthermore, the findings of this review study provide some recommendations for Saudi Arabia to adopt new therapy procedures that are less expensive and more successful in treating or releasing CDK symptoms such as group visits.

1.3 Aim

This study's primary goal is to provide an overview of how group visits in Saudi Arabia could help people with chronic renal disease.

Methodology

A review of the most pertinent prior study was also done in order to present the findings of the descriptive study, which was completed using published papers and studies on numerous databases, including Google Scholar.

2. Chronic kidney disease

Chronic kidney disease (CKD) identified as any change in the kidney that lasts for three months or more which leads to a damage in kidney or the reduction of its' function. Kidney diseases does not happen suddenly.

According to the glomerular filtration rate (GFR), CDK has five levels, the fifth one is the most serious and hazardous one as shown in the table below (Almutary et al., 2013).

Table 1: Chronic kidney disease classification

Stage	Glomerular Filtration Rate	Description	Treatment stage
1	90+	Normal kidney function but urine findings or structural abnormalities or genetic trait point to kidney disease	Observation, control of blood pressure.
2	60-89	Mildly reduced kidney function, and other findings (as for stage 1) point to kidney disease	Observation, control of blood pressure and risk factors.
3A 3B	45-59 30-44	Moderately reduced kidney function	Observation, control of blood pressure and risk factors.
4	15-29	Severely reduced kidney function	Planning for endstage renal failure.
5	<15 or on dialysis	Very severe, or end stage kidney failure (sometimes called established renal failure)	Treatment choices.

The Cause of this disease are numerous and divers, some of which are more common than others (Winterbottom, 2015). However, the most common kidney disease causes are diabetes and high blood pressure (National Kdney Foundation, 2014).

The most negative effects on CDK patients is the need for life-long dialysis, or renal replacement therapy, moreover it rising the chance of having cardiovascular disease (Ji, et al., 2019).

3. Chronic kidney disease care in Saudi Arabia

Chronic kidney disease is a serious health problem in Saudi Arabia. In the last three decades the incidence and prevalence of end stage kidney stage has been rising rapidly. Additionally, replacing renal therapy became a demand for many people, resulting in an increase in the prevalence of this form of therapy in KSA. It is crucial to bring attention to the fact that the true number of CKD patients both globally AND in Saudi Arabia cannot be confined. There are numerous reasons that might cause CKD, but in Saudi Arabia genetic factors significantly contribute to the western region's rising prevalence of ESKD (Almutary et al., 2013).

Both the public and private sectors of Saudi Arabia's healthcare system are present. The ministry of health and other governmental organizations are included in the government sector and offer free medical services. While the private system necessitates out-of-pocket expenses and is crucial in delivering high-quality healthcare services (Hassanien, 2013).

Renal care in Saudi Arabia can lower risk factors and preventing the development of other chronic diseases (Hassanien, 2013). It is important to note that hemodialysis (HD), peritoneal dialysis (PD), and kidney transplantation from living and deceased donors comprise kidney replacement therapy in KSA (Attar, 2020).

Ministry of Health (MOH), Outsourcing Dialysis Centers (Diaverum and Davita fall within MOH's purview), Government Non-MOH, Private and Charitable Dialysis Centers, and the King Abdullah Hemodialysis Projects are the five sectors in which hemodialysis facilities are found in Saudi Arabia. It is essential to mention that these facilities are well-equipped and have a qualified medical team (Attar, 2020) .

4. Chronic kidney disease care through group visits

Group medical visits (GV) are a system where patients receive treatment jointly. This model aids in resolving various challenges the medical staff may have when treating chronic pain. Additionally, it enhances the care coordination and the quality of care (Dresner et al., 2016). GV are advised to increase patient access to care, increase patient satisfaction with care received, and ultimately reduce the cost of using healthcare (Thomas, 2021). Moreover, it is significant to indicate that participants in GV can feel less anxiety, more confident, and more ability to describe their thoughts and emotions. Actually this type of therapy can let the patients feel that they are not alone (Dresner et al., 2016).

According to Gardinera et al. (2017), medical professionals typically use pharmacological treatments to address chronic pain, which may raise the risk of hazardous side effects. Additionally, these drugs might not enhance mental and functional status or the quality of life. It is important to draw attention to the challenges patients may encounter when attempting non-pharmacological options. Low income, restricted insurance coverage of this form

of therapy, and lack of availability by the healthcare provider are some of these obstacles.

5. Recommendation for Improving chronic kidney disease care through group visits In Saudi Arabia

According to Evidence-based Synthesis Program (ESP)Center et al., (2012) group visits have a positive impact on patient's self-efficiency. Additionally, it might lead to better quality of life and health usage results. Additionally, group visits are thought to be an alternative for educating patients with chronic diseases and are just as effective than individual education visits. It is critical to remember that depending on the chronic illness, the intervention's characteristics and results varied.

Simmons & Kapustin (2011) highlighted that developing innovative, less expensive methods is now necessary to properly manage chronic diseases like diabetes and CDK and stop their progression. As a result, group visits or appointments that are shared with other patients are thought to be a good option in this situation. The needs of patients with chronic illnesses can be met by this kind of therapy, which can handle patient care and creative care.

According to previous data, group therapy sessions are a successful therapeutic approach for treating chronic diseases like CKD. The GV approach significantly effects on patient satisfaction with accessible healthcare, negative emotions, and self-confidence. Additionally, it lowers the expense of therapy

and makes it much simpler to get therapy. Unfortunately, this type of therapy is not used in Saudi Arabia, hence it is advised that KSA introduce it as a method for treating CDK sufferers.

6. Conclusion

The number of individuals in KSA who suffer from chronic renal disease is increasing every year, and the fifth stage of the disease poses a serious threat to the patients' lives. As a result, the healthcare system in KSA is making more attempts to limit or slow this rise by utilizing Kidney replacement therapy is employed to treat patients. However, alternative methods, such group visiting, are employed to treat chronic diseases. This kind of therapy can lessen negative feelings, boost confidence, lower costs, and finally make it simpler to get treatment .

The results support the recommendation that this therapy technique should be used in KSA to treat CDK.

7 Reference

- Alateeq, F. A., Aloriney, A. M., Alharbi, S. H., Ahmed, I. A., Alharbi, A. A., AlSogair, A. R., et al. (2018). Knowledge towards Chronic Kidney Disease Manifestations in Saudi Arabia. *Open Journal of Preventive Medicine*, 8(11), 315-323.
- Almutary, H., Bonner, A., & Douglas, C. (2013). Chronic Kidney Disease in Saudi Arabia : A Nursing Perspective. *Middle East Journal of Nursing*, 7(6), 17-25.
- Assiry, A., Alshahrani, S., Banji, O. J., Syed, N. K., & Syed, N. K. (2022). Public Awareness of Chronic Kidney Disease in Jazan Province, Saudi Arabia—A Cross-Sectional Survey. *healthcare*, 10(8), 1-14.
- Attar, B. A. (2020). Renal Replacement Therapy in the Kingdom of Saudi Arabia. *Saudi Journal of Kidney Diseases and Transplantation*, 31(6), 1458-1469.
- Dresner, D., Barnett, K. G., Scharer, K. R., Laird, L. D., & Laird, L. D. (2016). Listening to Their Words: A Qualitative Analysis of Integrative Medicine Group Visits in an Urban Underserved Medical Setting. *Pain Medicine*, 17(6), 1183-1191.

- Evans, M., & Lopau, K. (2020). The transition clinic in chronic kidney disease care. *Nephrology Dialysis Transplantation* , 35(Supplement_2), ii4-ii10.
- Evidence-based Synthesis Program (ESP)Center, centerl, P. V., OR, P., & Devan Kansagara M.D., M. D. (2012). *Group Visits Focusing on Education for the Management of Chronic Conditions in Adults: A Systematic Review*. USA: VA Health Services Research & Development.
- Gardinera, P., SophiaLestoquoy, A., Gergen-Barnett, K., Penti, B., F.White, L., Saper, R., et al. (2017). Design of the integrative medical group visits randomized control trial for underserved patients with chronic pain and depression. *Contemporary Clinical Trials*, 54 , 25-35.
- Hassanien, A. A. (2013). *Renal Care in Saudi Arabia: A Review of the Quality of Healthcare Management* . London : Imperial College London .
- Ji, A., Pan, C., Wang, H., Jin, Z., Lee, J. H., Wu, Q., et al. (2019). Prevalence and Associated Risk Factors of Chronic Kidney Disease in an Elderly Population from Eastern China. *International resarch and public health*, 16(22), 1-15.
- Montoya, V. (2013). *Improving Chronic Kidney Disease Care With Group Visits* . Florida - USA : University of Central Florida .

- National Kidney Foundation. (2014). *ABOUT CHRONIC KIDNEY DISEASE: A GUIDE FOR PATIENTS*. New York: National kidney foundation.
- Saudi vision 2030. (2021). *Health Sector Transformation Program Delivery Plan* . KSA : Saudi Arabia government.
- Simmons, C., & Kapustin, J. F. (2011). Diabetes Group Visits: An Alternative to Managing Chronic Disease Outcomes. *The Journal for Nurse Practitioners*, 7(8), 671-679.
- So, B. H. (2018). *Chronic Kidney Disease: Determining chronicity, prevalence, variation and survival in a community chronic kidney disease (CKD) cohort*. Glasgow - Scotland: University of Glasgow .
- Thomas, A. U. (2021). *A Retrospective Analysis of Integrative Group Medical Visits for our Medical Visits for Low-Income Patients With Anxiety Disorders in Primary Care* . Walden University .
- Winterbottom, J. (2015). *A cross-sectional, correlational survey to explore the relationship between Renal Association biochemical and haematological markers and health-related quality of life in patients receiving haemodialysis in the North West of England*. Manchester : University of Manchester .

