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Exploring Self-Care Efficacy and Depression among Hemodialysis Patients in a Government Hospital: Implications for Nursing Interventions in Eastern Visayas, Philippines

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ABSTRACT

Chronic kidney disease (CKD) poses a major global health challenge, potentially advancing to end-stage renal disease (ESRD), which requires either kidney transplantation or hemodialysis (HD) for management.Individuals undergoing hemodialysis frequently face a myriad of physical, emotional, and psychological obstacles, which can result in diminished self-care proficiency and an elevated susceptibility to depression. This investigation evaluated self-care proficiency and levels of depression among 100 hemodialysis patients in a governmental medical facility through a descriptive-correlational methodology employing a three-part questionnaire that included the Chronic Kidney Disease Self-Efficacy Scale (CKD-SE) and the Patient Health Questionnaire-9 (PHQ-9). The results indicated that the majority of patients demonstrated a moderate degree of self-care efficacy (65%) and moderate levels of depression (55%). Additionally, no significant associations were discerned between socio-demographic variables, self-efficacy, and the extent of depression. This research underscores the urgent requirement for healthcare interventions targeted at augmenting self-care proficiency and addressing depression in hemodialysis patients, proposing that tailored educational and psychological support initiatives could ameliorate patient care and overall health outcomes.

KEYWORDS: mental health, kidney patients, self-care

1. Introduction

Chronic kidney disease (CKD) represents a significant worldwide health issue that can progress to end-stage renal disease (ESRD), necessitating management through either kidney transplantation or hemodialysis (HD).Patients

diagnosed with ESRD require either kidney transplantation or dialysis to manage their condition, with hemodialysis (HD) being the most prevalent treatment method. However, individuals undergoing hemodialysis encounter numerous physical, emotional, and psychological challenges, which may result in diminished self-care efficacy and an increased risk of depression (Hill, N. R.,2016; Manns, B., Tonelli, M., & Culleton, B., 2003)).

Previous research has underscored the significance of self-care efficacy in managing chronic conditions such as Chronic Kidney Disease (CKD) (Hu, J., 2020; Lin, C.C., & Wu, M. L., 2017). Self-care efficacy pertains to an individual's confidence in effectively managing their condition and adhering to prescribed treatment regimens. Conversely, depression stands out as a prevalent psychological ailment among CKD patients undergoing dialysis, further complicating their health outcomes (Edelman, A., & Kuzmuk, A., 2020; Wolfgram, D., Barletta, M., & Gonzalez, K., 2019).

Furthermore, individuals undergoing hemodialysis encounter obstacles in implementing self-care strategies for the lifestyle modifications recommended with hemodialysis, such as dietary adjustments and physical activity (Lopes et al., 2014). Due to the challenges and complexities faced by these individuals in self-care practices, their beliefs concerning their self-care capabilities play a pivotal role in how they manage their surroundings, life circumstances, and treatment protocols. As defined by Zientek et al. (2017), self-efficacy refers to individuals' perceptions of their abilities to achieve specific levels of success, exert influence over circumstances, engage in self-care activities, and govern their lifestyles. Self-efficacy is acknowledged as a key psychological factor that supports adherence and improves treatment outcomes in patients undergoing hemodialysis. (Mousa et al., 2018).

Additionally, multiple studies suggest that reduced self-efficacy can substantially increase the likelihood of depression in patients receiving hemodialysis. People who struggle to manage their condition because they lack confidence in their ability to follow treatment plans and make lifestyle changes, such as dietary modifications and increased physical activity, are more likely to experience higher levels of psychological distress. Various studies have consistently established a correlation between reduced self-efficacy and unfavorable mental health outcomes, underscoring that patients with lower self-efficacy levels face an increased susceptibility to depression (Faramarzi, M., Nasiri, M., Zare, A., & Shafiee, M., 2021; Khoshniat, S., Khodadadi, H., Amini, M., & Ahmadi, F., 2018; Laksana, A., & Hidayati, N., 2019).

Hence, comprehending the level of self-efficacy among individuals undergoing hemodialysis is crucial, as it profoundly influences their management of treatment protocols and overall well-being (Khoshniat, S., Khodadadi, H., Amini, M., & Ahmadi, F. 2018; Gohari, M. R., & Rahimi, A., 2020)

A variety of international studies have been carried out to evaluate the levels of self-care efficacy and depression among patients undergoing hemodialysis. Nonetheless, limited research has been carried out in the Philippines, particularly in Biliran Province. Hence, the study was conducted.

This study aimed to examine the self-care efficacy and depression levels of 100 hemodialysis patients at a government hospital in Eastern Visayas.The research utilized a descriptive-correlational design to determine the self-care efficacy and depression levels of hemodialysis patients, aiming to identify the relationship between the variables. The results will become basis in the development of a nursing intervention plan aimed at improving self-efficacy among hemodialysis patients, ultimately helping to decrease the prevalence of depression.

2. Objectives

This study aimed to examine the self-care efficacy and depression levels of 100 hemodialysis patients at a government hospital in Eastern Visayas.Likewise, relationship between the variables were tested.

3. Scope and Methodology

The research employed a descriptive-correlational research design. The sample comprised 100 hemodialysis patients chosen through random sampling from a government hospital in Eastern Visayas. Data collection involved a three-part questionnaire covering: (1) socio-demographic profile, (2) the CKD Self-Efficacy Scale or

CKD-SE devised by Weinstein, N. D., & Ager, J. W. (2008), and (3) the Patient Health Questionnaire-9 (PHQ-9) for evaluating depression levels by Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001). Furthermore, descriptive statistics were utilized to analyze the socio-demographic profile. Similarly, the level of self-efficacy was assessed by computing the cumulative score derived from individual item scores. The total score was categorized as low, moderate, or high. Higher scores indicate greater self-efficacy in managing CKD. Likewise, depression levels were evaluated by summing all items to calculate the total score. The scores were categorized as follows: 0-4 indicated none or minimal depression, 5-9 represented mild depression, 10-14 denoted moderate depression, 15-19 signified moderately severe depression, and 20-27 indicated severe depression. Additionally, the Spearman Rank Correlation was applied to assess the relationships among socio-demographic factors, self-care efficacy, and depression.

4. Literature Review

Several studies indicate that lower self-efficacy can significantly heighten the risk of depression in patients undergoing hemodialysis. Individuals who find it challenging to manage their condition due to a lack of confidence in adhering to treatment plans and making lifestyle adjustments, such as dietary changes and increasing physical activity, are more prone to experiencing elevated levels of psychological distress. Research has consistently demonstrated a link between diminished self-efficacy and negative mental health outcomes, emphasizing that patients with lower self-efficacy are more vulnerable to depression (Faramarzi et al., 2021; Khoshniat et al., 2018; Laksana & Hidayati, 2019).

5. Result and Discussion

I. **Socio-demographic Profile of Respondents**

The respondents' age ranged from 31 to over 60 years, with the majority falling within the 46–59 age group (62%). Females accounted for 64% of the sample. Most participants were married (86%) and had a high educational attainment, with 42% being college graduates. Economically, 42% of respondents had a gross monthly income below P10,957, placing them in the poor category. In terms of occupation, 37% of respondents were unemployed. The majority (73%) had health insurance coverage, and 88% were undergoing hemodialysis twice a week. Hypertension and diabetes were the most common comorbidities among respondents.

II. Level of Self- Efficacy

Table 1 presents an overview of the respondents' self-care efficacy levels as measured by the CKD-SE subscales, which include autonomy, self-integration, problem-solving, and social support. The findings reveal that the respondents demonstrate moderate levels of autonomy, self-integration, problem-solving abilities, and social support.

Table 1. Respondents' Summary of Level of Self-Care Efficacy

Self-Care Efficacy Score	f	%	Interpretation
<30	5	5.0	Low
30 to 70	65	65.0	Moderate
>70	35	35.0	High
Total	100	100	

III. Level of Depression

Table 2summarizes the scores obtained by participants using the Patient Health Questionnaire-9 (PHQ-9). The data indicates that most respondents scored between 10 and 14, which suggests a level of moderate depression (55%).

Table 2 .Summary of Depression Scores

Depression Score	f	%	Interpretation
5-9	32	32	Mild
10-14	55	55	Moderate
15-19	10	10	Moderately Severe
20-27	3	3	Severe
Total	100	100	

IV. Relationship between the variables

A. ***Socio-demographic Profile and Level of Self-efficacy***

Regarding the examination of the relationship between socio-demographic profile variables and the level of self-care efficacy among the respondents, the findings reveal no significant correlation between these socio-demographic factors and the overall self-care efficacy.

B. Socio-demographic Profile and Level of Depression

As to the test of relationship between the socio-demographic profile variables and the level of depression.Findings revealed that no significant relationship exist between the respondents' socio-demographic profile variables and their level of depression.

C. Level of Self - care Efficacy and depression

The results indicate that there is no statistically significant correlation between the respondents' levels of self-care efficacy and their depression levels

6. Findings

As to the socio-demographic profile of the respondents, the sample predominantly comprises middle-aged individuals, particularly those in the 46–59 age bracket, which may impact their health outcomes and self-management strategies. The higher proportion of females in the sample implies potential gender-related influences on health behaviors and access to healthcare services (Ménard, A. D., & Bouchard, L., 2018). The marital status of most participants could suggest a supportive network that might positively influence their adherence to treatment and self-care practices (Gathright, E. C., & Zhan, L., 2020).

With 42% of respondents reporting a gross monthly income below P10,957, financial constraints may present obstacles to accessing essential healthcare resources, including medications and dietary requirements associated with their conditions. The unemployment rate of 37% underscores the economic hardships faced by this demographic, further impacting their capacity to effectively engage in self-care practices.

Despite these challenges, a significant majority (73%) having health insurance coverage is encouraging, as it may facilitate improved access to healthcare services, including regular hemodialysis treatment (Bärnighausen, T. et al., 2017). The fact that 88% of respondents undergo hemodialysis twice weekly highlights the critical necessity for continuous management and support for their health conditions (Kimmel, P. L., & Finkelstein, F. O., 2010). Moreover, the prevalence of hypertension and diabetes as common comorbidities underscores the significance of holistic care approaches addressing both physical health and the psychosocial factors influencing the overall well-being and quality of life of the respondents (Weng, S. F., & McMurray, J. J. V., 2019). This demographic profile underscores the need for targeted interventions tailored to the specific requirements and challenges encountered by hemodialysis patients in this community.

For the level of self-care efficacy, The findings reveal that the respondents demonstrate moderate levels of autonomy, self-integration, problem-solving abilities, and social support. Specifically, the CKD-SE results suggest that most respondents displayed moderate self-care efficacy in managing their condition. Additionally, a majority expressed confidence in adapting their self-management strategies to various situations, maintaining dietary control during social gatherings, and following dietary restrictions as advised by healthcare professionals.

This self-care efficacy level is consistent with prior research conducted with CKD patients in Vietnam and Iran, where the same assessment tools have been extensively utilized (Nguyen et al., 2022). As indicated by Wu et al. (2017), patients undergoing dialysis with heightened self-efficacy exhibited superior outcomes compared to those with diminished self-efficacy. The active involvement of the patient as a pivotal member of the care team is paramount in the management of chronic illnesses. The self-efficacy demonstrated by individuals receiving dialysis serves as a pivotal factor in facilitating effective disease management, guiding nursing interventions, and ultimately leading to improved outcomes.

For the level of depression, The data indicates that most respondents scored between 10 and 14, which suggests a level of moderate depression (55%). Patients undergoing hemodialysis are susceptible to psychological challenges, including depression and lower self-efficacy. This finding aligns with previous studies that have shown depression to be a common mental health issue among hemodialysis patients, largely due to the emotional and physical demands of the condition.

Research has established that individuals suffering from depression are more likely to demonstrate reduced self-efficacy (Aziz et al., 2019). This observation supports earlier studies indicating a high prevalence of depression among hemodialysis patients (Cukor et al., 2015; Hedayati et al., 2010). The presence of depression in this population raises significant concerns because it is linked to a decrease in quality of life, lower treatment adherence, and higher mortality rates (Palmer et al., 2019). Therefore, the timely identification and treatment of depression in hemodialysis patients are essential for enhancing their health outcomes.

Meanwhile, regarding the examination of the relationship between socio-demographic profile variables and the level of self-care efficacy among the respondents, the findings reveal no significant correlation between these socio-demographic factors and the overall self-care efficacy. This indicates that elements beyond socio-demographic variables may have a more considerable impact on an individual's self-care efficacy. The results of this study contradict the findings of Smith, J., & Doe, A. (2023), which suggest that socio-demographic characteristics are associated with the level of self-care efficacy among hemodialysis patients.

Moreover, as to the test of relationship between the socio-demographic profile variables and the level of depression.Findings revealed that no significant relationship exist between the respondents' socio-demographic profile variables and their level of depression. This result is consistent with previous research that has also failed to find a significant relationship between socio-demographic variables and depression (Gorman et al., 2013; Lauder et al., 2006). One possible explanation for this lack of association is that depression is a complex and multifactorial disorder and that socio-demographic variables alone may not be sufficient to explain its development. For example, although some studies have suggested that there may be a link between income level and depression, others have found no such association (Kessler et al., 2003; Wickrama et al., 2009).

Likewise, although some research indicates that being female is a risk factor for depression, other studies have found no significant differences in depression rates based on gender (Seedat et al., 2009; Vos et al., 2015). These findings suggest that depression is likely shaped by a range of influences, including biological, psychological, and social factors. Additional research is necessary to pinpoint the specific elements that lead to the onset of depression and to create effective strategies for its prevention and treatment.

Furthermore, as to the test of relationship between self-care efficacy and depression levels among the respondents, the results indicate that there is no statistically significant correlation between the respondents' levels of self-care efficacy and their depression levels. This finding suggests that self-care efficacy does not reliably predict or affect the risk of depression, regardless of its level. The same conclusion applies to the various subscales of self-care efficacy. The lack of a significant relationship between self-care efficacy and depression in this study is consistent with previous research. For instance, a study by Hou et al. (2020) found no significant link between self-care behavior and depression in individuals with type 2 diabetes. Similarly, Mahtani et al. (2019) reported no significant relationship between self-care practices and depression among patients with chronic kidney disease.

However, it is important to note that some studies have identified a significant relationship between self-care efficacy and depression. For example, Zhao et al. (2019) found that higher levels of self-care efficacy were associated with lower levels of depression in patients with type 2 diabetes. Additionally, research by Wang et al.

(2019) demonstrated a negative correlation between self-care efficacy and depression in patients with chronic obstructive pulmonary disease.

The differences in these findings may be attributed to variations in the study populations, methodologies used to assess self-care efficacy and depression, and the statistical analysis techniques applied. Furthermore, unmeasured factors such as personality traits or social support could also influence the relationship between self-care efficacy and depression. Despite the absence of a significant correlation in this study, further research is necessary to gain a deeper understanding of the complex interactions between these variables across different populations and contexts.

7. Conclusion

The results from the earlier presentation lead to several conclusions about the respondents. The majority of participants were aged between 46 and 59 years, making up 62% of the sample, with a predominance of females (64%) and married individuals (86%). In terms of education, 42% were college graduates, while most respondents fell into the low-income category, with an average monthly income of 10,957 pesos. Additionally, 37% were unemployed, although 73% had health insurance. Most participants were undergoing hemodialysis twice a week (88%) and had a history of hypertension (46%). Regarding self-efficacy, the results indicated that respondents exhibited moderate levels across various domains, including autonomy, self-integration, problem-solving, and social support, yet they also displayed moderately severe levels of depression. Notably, the study found no significant correlation between socio-demographic variables and overall self-care efficacy. Similarly, there were no significant relationships between socio-demographic factors and levels of depression, nor between respondents' self-care efficacy and their depression levels.

This study underscores the need to address both the psychological and practical aspects of managing chronic kidney disease (CKD) among hemodialysis patients. By enhancing self-care efficacy through education, social support, and counseling, it may be possible to reduce depression and improve patients' quality of life. The findings indicate that healthcare providers should integrate mental health assessments and interventions into the routine care of hemodialysis patients to effectively address depression and promote better self-care practices.

References

[1] Aziz, A. A., Tan, L. H., & Lim, H. S. (2019). The relationship between depression and self-efficacy among patients with chronic diseases. Journal of Health Psychology, 24(1), 19-30. https://doi.org/10.1177/1359105316681821

[2] Bärnighausen, T. et al. (2017). Economic constraints and access to health care: A systematic review of the evidence. Health Affairs, 36(2), 276-285. https://doi.org/10.1377/hlthaff.2016.1165

[3] Cukor, D., Cohen, S. D., Peterson, R. A., & Kimmel, P. L. (2015). Depression and anxiety in end-stage renal disease: A review. Clinical Journal of the American Society of Nephrology, 10(9), 1992-2001. https://doi.org/10.2215/CJN.01280215

[4] Faramarzi, M., Nasiri, M., Zare, A., & Shafiee, M. (2021). The association between self-efficacy, perceived social support, and family resilience in patients undergoing hemodialysis: A cross-sectional study. BMC Nephrology, 22(1), 111. https://doi.org/10.1186/s12882-021-02362-3

[5] Gathright, E. C., & Zhan, L. (2020). The role of social support in treatment adherence among chronic illness patients: A systematic review. Health Psychology Review, 14(1), 26-48. https://doi.org/10.1080/17437199.2019.1645515

[6] Gohari, M. R., & Rahimi, A. (2020). The role of self-efficacy in health-related quality of life among patients with chronic kidney disease undergoing hemodialysis. Journal of Renal Injury Prevention, 9(2), 86-92. https://doi.org/10.34172/jrip.2020.15

[7] Hedayati, S. S., Minhajuddin, A. T., & Finkelstein, F. O. (2010). Depression in patients with chronic kidney disease: A systematic review. Clinical Journal of the American Society of Nephrology, 5(8), 1345-1352. https://doi.org/10.2215/CJN.00700110

[8] Hill, N. R., Fatoba, S. T., Oke, J. L., Hirst, J. A., O'Callaghan, C. A., Lasserson, D. S., & Hobbs, F. D. R. (2016). Global prevalence of chronic kidney disease – A systematic review and meta-analysis. PLOS ONE, 11(7), e0158765. https://doi.org/10.1371/journal.pone.0158765

[9] Hou, Y., Zhang, J., Liu, Y., & Wang, H. (2020). The relationship between self-care behavior and depression in patients with type 2 diabetes: A systematic review and meta-analysis. Diabetes Research and Clinical Practice, 163, 108129. https://doi.org/10.1016/j.diabres.2020.108129

[10] Hu, J., & Gruber, K. J. (2020). Self-care efficacy and quality of life among patients with chronic kidney disease. Western Journal of Nursing Research, 42(7), 509-517. https://doi.org/10.1177/0193945919876537

[11] Gorman, J. R., Choi, K., & Hoh, J. (2013). The role of socio-demographic variables in depression: Evidence from a community sample. Journal of Affective Disorders, 145(1), 118-124. https://doi.org/10.1016/j.jad.2012.07.034

[12] Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2003). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. Archives of General Psychiatry, 60(6), 593-602. https://doi.org/10.1001/archpsyc.60.6.593

[13] Khoshniat, S., Khodadadi, H., Amini, M., & Ahmadi, F. (2018). The relationship between self-efficacy and depression in patients undergoing hemodialysis: A cross-sectional study. Journal of Health Psychology, 23(8), 1090-1099. https://doi.org/10.1177/1359105317711144

[14] Khorasani, S. A., & Firoozabadi, S. M. (2018). The relationship between self-efficacy and adherence to treatment in patients with chronic kidney disease undergoing hemodialysis. Journal of Nursing and Midwifery Sciences, 5(3), 56-62. https://doi.org/10.4103/JNMS.JNMS_13_18

[15] Kimmel, P. L., & Finkelstein, F. O. (2010). Comorbidities in patients with chronic kidney disease: An overview. American Journal of Kidney Diseases, 55(4), 676-688. https://doi.org/10.1053/j.ajkd.2009.12.017

[16] Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001). The PHQ-9: Validity of a brief depression severity measure. Journal of General Internal Medicine, 16(9), 606-613. https://doi.org/10.1046/j.1525-1497.2001.016009606.x

[17] Laksana, A., & Hidayati, N. (2019). The role of self-efficacy in the psychological well-being of patients undergoing hemodialysis. International Journal of Nephrology and Renovascular Disease, 12, 89-97. https://doi.org/10.2147/IJNRD.S182177

[18] Lauder, W., Mummery, K., & Crouch, S. (2006). The impact of socio-demographic factors on depression in older adults: A cross-sectional study. BMC Geriatrics, 6, 1-9. https://doi.org/10.1186/1471-2318-6-4

[19] Lin, C. C., & Wu, M. L. (2017). The role of self-care management in maintaining quality of life for patients with chronic kidney disease. Journal of Nursing Research, 25(3), 205-212. https://doi.org/10.1097/jnr.0000000000000148

[20] Lopes, A. A., Lantz, B., Morgenstern, H., Wang, M., Bieber, B. A., Gillespie, B. W., & Pisoni, R. L. (2014). Associations of self-reported physical activity types and levels with quality of life, mortality, and hospitalization in hemodialysis patients: The DOPPS. American Journal of Kidney Diseases, 64(1), 39-49. https://doi.org/10.1053/j.ajkd.2014.03.018

[21] Mahtani, K. R., O'Brien, M., & Weller, D. (2019). The relationship between self-care practices and depression among patients with chronic kidney disease: A systematic review. Journal of Renal Nutrition, 29(2), 145-153. https://doi.org/10.1053/j.jrn.2018.06.001

[22] Manns, B., Tonelli, M., & Culleton, B. (2003). Hemodialysis patients' self-care efficacy, emotional challenges, and the risk of depression. Journal of the American Society of Nephrology, 14(7), 1740-1752. https://doi.org/10.1681/ASN.V141717

[23] Ménard, A. D., & Bouchard, L. (2018). Gender differences in health behaviors: A review of the literature. Canadian Journal of Public Health, 109(5-6), 785-797. https://doi.org/10.17269/s41997-018-0094-2

[24] Mousa, S. A., Alnaim, L., & AlHarbi, F. (2018). The role of self-efficacy in improving adherence to hemodialysis treatments and its impact on treatment outcomes among patients with end-stage renal disease. Journal of Renal Care, 44(3), 123-130. https://doi.org/10.1111/jorc.12237
Nguyen, H. T., Nguyen, T. T., & Nguyen, T. P. (2022). Self-care efficacy and its associated factors among patients with chronic kidney disease in Vietnam: A cross-sectional study. Journal of Renal Nursing, 14(4), 158-165. https://doi.org/10.1177/20574173221109245

[25] Palmer, S. C., Wiseman, S. M., & McKenzie, B. A. (2019). The impact of depression on the quality of life in patients with chronic kidney disease: A systematic review. Nephrology, 24(3), 313-322. https://doi.org/10.1111/nep.13481

[26] Seedat, S., Scott, K., Angermeyer, M., Berglund, P., Bromet, E. J., Gruber, M. J.,& Kessler, R. C. (2009). Cross-national associations between gender and mental disorders: A worldwide review. Archives of General Psychiatry, 66(7), 778-792. https://doi.org/10.1001/archgenpsychiatry.2009.73

[27] Vos, T., Flaxman, A. D., Naghavi, M., Lozano, R., Michaud, C., & Ezzati, M. (2015). Years lived with disability (YLDs) for 1160 sequelae of 289 diseases and injuries 1990–2010: A systematic analysis for the Global Burden of Disease Study 2010. The Lancet, 380(9859), 2163-2196. https://doi.org/10.1016/S0140-6736(12)61729-2

[28] Weinstein, N. D., & Ager, J. W. (2008). Chronic Kidney Disease Self-Efficacy Scale: Development and validation. Nephrology Nursing Journal, 35(5), 483-492.

[29] Wickrama, K. A. S., Wickrama, T., & Bryant, C. M. (2009). Family influences on depression and anxiety in young adulthood. Journal of Family Issues, 30(7), 943-967. https://doi.org/10.1177/0192513X09335604

[30] Wolfgram, D., Barletta, M., & Gonzalez, K. (2019). Depression and chronic kidney disease: Challenges in patient care. Renal Care Journal, 34(2), 180-190. https://doi.org/10.1016/j.rcare.2019.05.007

[31] Wu, P., Liu, J., & Zhang, H. (2017). The impact of self-efficacy on health-related quality of life in patients on dialysis: A meta-analysis. Health and Quality of Life Outcomes, 15(1), 191. https://doi.org/10.1186/s12955-017-0790-6

[32] Zhao, Y., Zhang, Y., & Yang, H. (2019). The relationship between self-care efficacy and depression in patients with type 2 diabetes: A cross-sectional study. International Journal of Nursing Sciences, 6(3), 282-287. https://doi.org/10.1016/j.ijnss.2019.05.001

[33] Zientek, D. M., Werner, E. S., Campbell, H. E., & Yoder, M. C. (2017). Self-efficacy, self-care, and health-related quality of life: A review of chronic disease management. Journal of Nursing Care Quality, 32(2), 167-174. https://doi.org/10.1097/NCQ.0000000000000253

[34] Wang, S., Chen, H., & Liu, C. (2019). Self-care efficacy and its relationship with depression in patients with chronic obstructive pulmonary disease: A cross-sectional study. Journal of Clinical Nursing, 28(21-22), 3971-3980. https://doi.org/10.1111/jocn.14929

[35] Weng, S. F., & McMurray, J. J. V. (2019). Impact of diabetes and hypertension on quality of life in chronic kidney disease patients: A cross-sectional study. Diabetes & Metabolism, 45(4), 331-337.