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Symptom Distress, Illness Intrusiveness, Hope, and Depression in Dialysis Patients

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Purpose:

The prevalence of depression is 33.33% to 78.8% for hemodialysis patients, 19% to 51.5% for peritoneal dialysis patients, and 20% to 45% for kidney transplant recipients. Depression can increase symptoms, reduce treatment compliance, and thus increase hospitalization and morbidity rate. So we exploring the Influence of Biochemistry, Disease characteristics, Symptom Distress, Illness Intrusiveness, Social Support, and Hope on Depression in Dialysis Patients. Understanding the factors that influence depression can help to screen for high-risk groups and develop preventive measures for depression.

Methods:

The purpose of this study was to investigate depression among dialysis patients and its influencing factors, including demographics, disease characteristics, serum values (calcium, phosphorus, hemoglobin), symptom distress, illness intrusiveness, social support, and a sense of hope. The study used a descriptive study design. A convenience sample of 130 dialysis patients with end-stage renal diseases were recruited from a medical center in northern Taiwan.

The data were collected by using a structured questionnaire, including questions on demographics, the Symptom Distress Scale, the Illness Intrusiveness Ratings Scale, the Social Support Scale, the Herth Hope Index and the Center for Epidemiological Studies Depression Scale. The patient's serum calcium, phosphorus, and hemoglobin values were collected via medical records. The data were analyzed by IBM SPSS 22.0 software package. The main analytical methods included descriptive statistics, independent sample t-test, one-way analysis of variance, Pearson correlation analysis and hierarchical regression analysis.

Results:

The results of hierarchical regression analysis show that economic conditions, disease duration, hemoglobin, symptom distress, illness intrusiveness, social support, and sense of hope are important predictors for depression. The seven factors together can explain the 64% of variation in depression. The shorter the dialysis time, the worse the economic situation, the lower the hemoglobin, the more serious the symptoms, the higher the degree of disease interference, the lower the level of social support, and the lower the level of hope, the more depressed the dialysis patient serious.

Conclusion:

The results of the study can be used as a reference for screening high-risk groups of depression and providing appropriate care measures.

Title:

Symptom Distress, Illness Intrusiveness, Hope, and Depression in Dialysis Patients

Keywords:

Depression, Dialysis and Hope

References:

- Almutary, H., Bonner, A. & Douglas, C. (2016). Which patients with chronic kidney disease have the greatest symptom burden? A comparative study the of advanced CKD stage and dialysis modality. *Renal Care*, 42(2), 73-82. doi:10.1111/jorc.12152.
- Ali, A., Salih, RM.(2018). Renal anemia syndromes in Iraqi hemodialysis patients according to iron status. *Saudi Journal of Kidney Diseases and Transplantation*, 29,127-135.
- Bahmani, B., Najjar, M. M., Sayyah, M., Shafi-Abadi, A., & Kashani, H. H. (2016). The Effectiveness of Cognitive-Existential Group Therapy on Increasing Hope and Decreasing Depression in Women-Treated with Haemodialysis. *Global Journal of Health Science*, 8(6), 219-225. <http://doi.org/10.5539/gjhs.v8n6p219>.
- Chilcot, J., Moss-Morris, R., Artom, M., Harden, L., Picariello, F., Hughes, H., & ... Macdougall, I. C. (2016). Psychosocial and Clinical Correlates of Fatigue in Haemodialysis Patients: the Importance of Patients' Illness Cognitions and Behaviours. *International Journal Of Behavioral Medicine*, 23(3), 271-281. doi:10.1007/s12529-015-9525-8
- Cirillo, L., Cutruzzul, R., Somma, C., Gregori M., Cestone, G., Pizzarelli, C., Toccafondi, A., Pizzarelli, F., Dattolo, PC.(2018). Depressive Symptoms in Dialysis: Prevalence and Relationship with Uremia-Related Biochemical Parameters. *Blood Purification*. 46(4), 286-291. doi: 10.1159/000491014.
- Gerogianni, G., Lianos, E., Kouzoupis, A., Polikandrioti, M., Grapsa, E. (2017). The role of socio-demographic factors in depression and anxiety of patients on hemodialysis: an observational

cross-sectional study. *International Urology and Nephrology*, 20. doi: 10.1007/s11255-017-1738-0.

Abstract Summary:

How to reduce the incidence of depression in dialysis patients? The results of the study can be used as a reference for screening high-risk groups of depression and providing appropriate care measures.

Content Outline:

1. Introduction:

A. Dialysis prevalence rate

B. The impact of depression

2. Factors affecting depression:

demographics, disease characteristics, serum values (calcium, phosphorus, hemoglobin), symptom distress, illness intrusiveness, social support, and a sense of hope.

3. Research design and analysis

The study used a descriptive study design. The data were collected by using a structured questionnaire, including questions on demographics.

The data were analyzed by IBM SPSS 22.0 software package. The main analytical methods included descriptive statistics, independent sample t-test, one-way analysis of variance, Pearson correlation analysis and hierarchical regression analysis.

4. Research result

The seven factors together can explain the 64% of variation in depression.

5. Conclusion

The results of the study can be used as a reference for screening high-risk groups of depression and providing appropriate care measures.

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