

# VU Research Portal

## Depressive and anxiety symptoms in Dutch chronic kidney disease patients

Loosman, W.L.

2016

### **document version**

Publisher's PDF, also known as Version of record

[Link to publication in VU Research Portal](#)

### **citation for published version (APA)**

Loosman, W. L. (2016). *Depressive and anxiety symptoms in Dutch chronic kidney disease patients*.

### **General rights**

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal ?

### **Take down policy**

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

### **E-mail address:**

[vuresearchportal.ub@vu.nl](mailto:vuresearchportal.ub@vu.nl)

# Chapter 8

## **Summary**





## SUMMARY

### Depressive and anxiety symptoms in Dutch chronic kidney disease patients

The topic of this doctoral dissertation is depressive and anxiety symptoms in Dutch chronic kidney disease (CKD) patients, and is divided in two parts with two separate aims. The first aim is to investigate the use of self-report questionnaires in dialysis patients (**chapter 2** and **3**). The second aim is to investigate the relevance of depressive and anxiety symptoms in Dutch CKD patients (**chapter 4, 5, and 6**). The focus of the second main is to examine the prevalence of depressive and anxiety symptoms among immigrant compared to native dialysis patients, associations of depressive and anxiety symptoms with type D personality, and the association of depressive and anxiety symptoms with adverse events such as mortality.

In **chapter 1** an introduction is given for the studies presented in this dissertation. Depressive and anxiety symptoms, often assessed by self-report questionnaires, are common in CKD patients, and associated with higher mortality rates and a lower health related quality of life (HRQOL). Moreover, several risk factors for depressive and anxiety symptoms have been explored such as marital status or gender. However, it is unclear whether immigrant status is a risk factor for the development of depressive and anxiety symptoms. Furthermore, type D personality is considered as a possible risk factor as well. Patients with type D (distressed) personality have the tendency to experience negative emotions across time (negative affectivity) and to inhibit emotional expression because of fear for social rejection (social inhibition). Previous research has shown that in patients with cardiovascular disease, type D personality is associated with higher morbidity and mortality rates independently of depressive and anxiety symptoms.

In **chapter 2** the validation of two self-report questionnaires is described. Somatic complaints of depression may overlap with complaints of uraemia. Therefore, the aim of this study is to validate a questionnaire with somatic complaints of depression (Beck Depression Inventory (BDI)) and a questionnaire without somatic complaints of depression (Hospital Anxiety and Depression Scale (HADS)). Both the HADS and the BDI were compared with the Mini International Neuropsychiatric Interview (semi-structured interview) as gold standard. In 2008, 62 subjects were included from the dialysis department of the Sint Lucas Andreas Hospital. Results showed that the Area Under the Curve (AUC) was 0.90 for both the HADS and the BDI. Therefore, both questionnaires proved to be a valid screening tool to assess depressive symptoms in dialysis patients, and perform equally well. This indicates that it does not matter if somatic items are included in a self-report questionnaire to assess depressive symptoms.

In **chapter 3** two HRQOL questionnaires (a version with 12 items and a version with 36 items) are compared. Short Form-36 (SF-36) is a self-report questionnaire that is often used to assess HRQOL in CKD patients. In order to save time Short Form-12 (SF-12) is developed. Patients were selected from NECOSAD (N=1,379), a prospective follow-up study among incident dialysis patients who completed questionnaires every six months. Cross-sectional scores and change in scores of SF-12 and SF-36 were compared. Results showed that SF-12 scores can be used to replicate SF-36 scores, and to detect HRQOL changes over time in groups of dialysis patients. SF-12 and SF-36 were similarly associated with short-term and long-term mortality. However, for individual patients considerable differences were observed between SF-12 and SF-36 scores. In addition, specific items and detailed information is lost in SF-12. These results implicate that if detailed information in individual patients is important in clinical practice, SF-36 is preferred.

In **chapter 4** we examine whether the prevalence of depressive and anxiety symptoms differs between immigrant and native dialysis patients. More specifically, our aim is to explore whether differences between immigrant and native dialysis patients can be explained by patient characteristics (i.e. sociodemographic and clinical). In total 494 dialysis patient were selected from the DIVERS study, a prospective cohort study among chronic dialysis patients in four large teaching hospitals and one university hospital in the Netherlands. Results showed that the prevalence of depressive and anxiety symptoms in immigrant dialysis patients is twofold higher compared to native dialysis patients. Differences between native and immigrant patients were more pronounced in Asian patients. After controlling for sociodemographic and clinical characteristics odds ratios remained the same. Therefore, patients characteristics did not explain the differences between native and immigrant dialysis patients. One possible explanation, could be the lack of cultural adaptation of immigrant patients. Future research is needed to explore the difference between native and immigrant dialysis patients.

In **chapter 5** we describe the prevalence of type D (distressed) personality, the association of type D personality with depressive and anxiety symptoms, and the stability of type D personality in dialysis patients. In total 349 patients were selected from the DIVERS study. Results showed that in dialysis patients the prevalence of type D personality was 21%, and that type D personality was associated with higher depressive and anxiety symptoms and lower quality of life. The presence of type D personality varies over time and its stability is comparable to the presence of depressive and anxiety symptoms. This may indicate that type D personality is more a state than a trait phenomenon.

Future research should address the association of type D personality with morbidity and mortality in dialysis patients, and whether it is an independent predictor of morbidity

and mortality. Multiple type D personality measurements may be needed to explore this association.

In **chapter 6** we describe the association of depressive and anxiety symptoms with adverse clinical outcome in Dutch CKD patients not on dialysis. The association of depressive symptoms with clinical outcome has not been examined in Europe. Anxiety and depressive symptoms often co-occur. However, as yet there are no data concerning a possible association of anxiety symptoms with adverse clinical outcome. We used data from 100 CKD patients not on dialysis from the outpatient clinic of the Sint Lucas Andreas Hospital. Results showed that depressive and anxiety symptoms are common in patients with CKD in the Netherlands. Depressive symptoms are associated with an increased risk of adverse clinical outcome (i.e. hospitalisation, starting with dialysis, and/or death) and anxiety symptoms show a trend for an increased risk of adverse clinical outcome. There seems to be no cumulative effect of anxiety symptoms on top of depressive symptoms. This implicates that depressive and anxiety symptoms should be evaluated early and future research should address appropriate therapeutic regimens and evaluate the effect of treatment of depression and anxiety on clinical outcome.

In **chapter 7**, the two main aims presented in this dissertation are discussed. First, we discuss the use of self-report questionnaires to assess depressive symptoms and HRQOL. In both cases, the use of a self-report questionnaire should depend on the reason for which a researcher or clinician wants to use the questionnaire. When assessing depressive symptoms, the BDI could be used in a research setting and the HADS in a clinical setting. When looking at HRQOL, SF-12 can be useful in a research setting, while SF-36 should be considered in clinical practice when detailed information about the individual patient is important. Secondly, we discuss the relevance of depressive and anxiety symptoms in Dutch CKD patients. We conclude that immigrant patients are at higher risk for developing depressive and anxiety symptoms. Future research should elucidate the nature of the difference between immigrant and native dialysis patients, because patient characteristics could not explain the difference. Type D personality should also be further assessed in dialysis patients preferably by using multiple measurements, because the prevalence of type D personality varies over time. Finally, the association of depressive and anxiety symptoms with adverse events emphasizes the need to assess these symptoms in CKD patients. Therefore, existing treatment options and clinical implications options are also discussed. Recognising and counselling of disease specific symptoms of depression and anxiety should be part of training of dialysis nursing staff. Assessment of depressive and anxiety symptoms (by using the HADS) should be regarded as an integral part of patient care at the nephrology department. The treating nephrology team could discuss the outcome with the patient. Thereafter, if counselling

of disease specific distress has insufficient results, the patients' primary care doctor or the psychiatric liaison service could be consulted.

In conclusion, this dissertation demonstrates the need to assess depressive and anxiety symptoms in Dutch CKD patients. There are several self-report questionnaire which could be used in clinical practice or in research. The choice for a questionnaire depends on the specific reason for which a clinician or researcher wants to use it. We showed that the prevalence of depressive and anxiety symptoms is high in both native and immigrant patients and that these symptoms have a negative effect on adverse events. Finally, the effect of type D personality on depressive and anxiety symptoms should be further examined. Future research should also aim to explore the effect of feasible treatment strategies on morbidity and mortality in Dutch CKD patients.