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Impact of mental health case management on dialysis compliance in renal patients with co-morbid mental health conditions



Aims and Background

This is study of a cohort of patients who had intensive case management by a liaison mental health nurse within a busy London dialysis unit. The objective is to quantify the impact of said intervention in terms of their compliance with dialysis treatment. The rationale for collating this information was to evaluate the service currently being provided as part of a pilot project within the King's Renal Department.

The department provide a range of services for patients with kidney disease within South East London. This includes, but not limited to, dialysis, management of acute and chronic kidney diseases, specialist outpatient renal services and pre-kidney transplant services. In terms of mental health provision, the service has a team of renal counsellors, a part time liaison mental health nurse and a part time consultant psychiatrist.

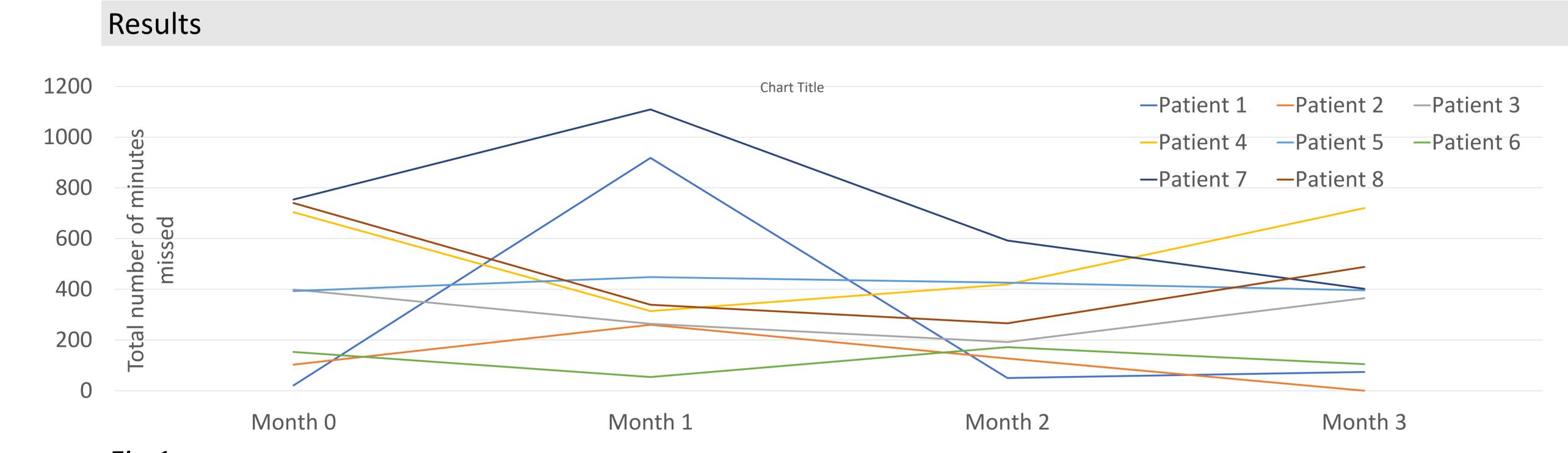
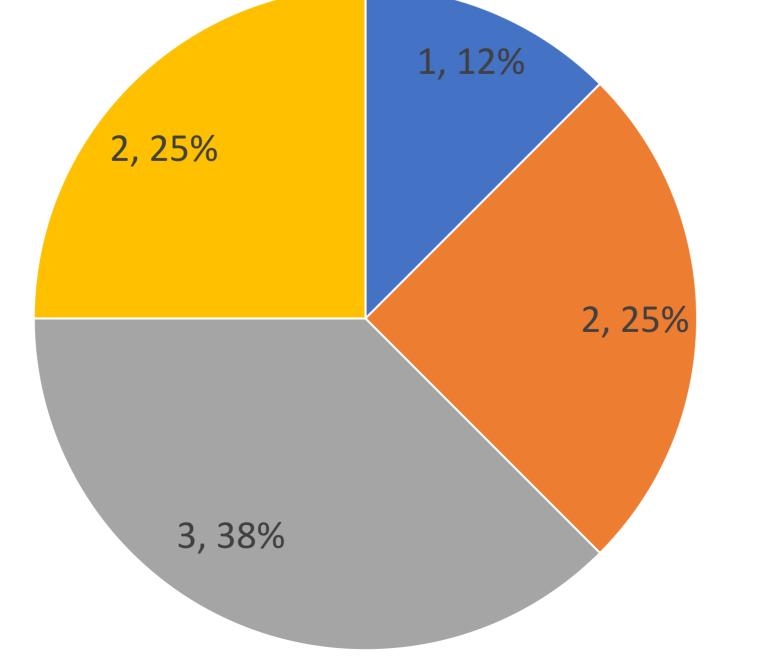


Fig 1
The study showed that 62.5% (5/8) of the patients who had intensive case management showed an overall reduction of their missed minutes on dialysis (MMD) after three months (fig 1). In total, there was an improvement of 21.9% (3267 to 2550 Minutes Missed) amongst all the patients. Furthermore, considering only those who did show an improvement, the shortfall was reduced by 36.7% overall (2149 to 1360 Minutes Missed).

The age range of this cohort of patients were from 31 – 64 years old. Their underlying diagnosis are recorded in fig 2



- F10-F19: Mental and behavioural disorders due to psychoactive substance use
- F20-F29: Schizophrenia, schizotypal and delusional disorders
- F30-39 : Mood (affective) Disorder
- F40-F48: Neurotic, stress-related and somatoform disorders

Method

A review of patients referred to the specialist renal mental health nurse for intensive case management were identified. This was a cohort of patient who, due to underlying mental health conditions, were not engaging with their dialysis treatment. These patients were assertively followed up by a renal mental health nurse which included regular reviews on the dialysis unit and linking up with their local mental health services and their primary care providers.

A cohort of 8 patients who had intensive case management between July 2019 – July 2020 were identified. The review looked at the total dialysis minute shortfall during the month prior to the beginning of intervention and three months after.

Discussion

Patients with long term health conditions often develop co-morbid mental health illness. This cohort of patients can sometimes find engagement with physical health services difficult due to the sequelae of their mental illness.

Haemodialysis patients with poor compliance have shown correlation with higher depression scores and poorer quality of life¹. Poor compliance have also been associated with poorer physical health outcomes. Patients who have skipped one or more session in a month has a 25% higher risk of death². There is also risk of increased average length of stay in hospitals and admission rates ³.

There is an associated cost impact to services. In 2018, the cost of dialysis was projected to be £431⁴ per week per patient for in-centre haemodialysis. Even within this small cohort of 8 patients, prior to the intervention, the cost lost to the service was £2235 monthly. This cost excluded any acute medical care required if they deteriorated physically.

Overall, early recognition and intensive case management of patients with co-morbid mental health conditions could potentially alleviate some of the issues above. It is recognised that the numbers are small and longitudinal studies would be required to see whether compliance is sustained over time. However the initial data is promising.

Conclusions

The findings of the assessment of the impact of a renal liaison mental health nurse suggests that integrating mental health care within the renal services could improve patients' compliance with treatment. This in turn could potentially reduce their usage of costly acute care pathways as well as improving patients' quality of life.

References:

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