

Identifying the nutritional profile of outpatient haemodialysis patients in Beaumont Hospital

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Introduction & Background

- Beaumont Hospital Kidney Centre is the largest provider of haemodialysis (HD) in the country (163 patients).
- There is a dedicated renal dietitian to provide dietary advice to outpatient HD patients.
- They are a complex patient group with numerous potential nutritional issues.
- Intensive nutritional input improves the nutritional status of these patients and reduces hospitalisations, treatment costs and mortality¹.
- The National Kidney Foundation has produced guidelines for nutrition in HD patients².
- Currently there is no profile of the nutritional issues impacting outpatient HD patient, in Beaumont Hospital, making it difficult to service plan and compare practice to current guidelines.

Aim & Objectives

Aim:

Establish the nutritional profile of HD patients in Beaumont Hospital by identifying the spectrum of nutritional issues with which they present.

Objectives:

- Identify the range of nutritional issues presented by haemodialysis patients.
- Determine if current renal dietetic input in Beaumont Hospital is meeting guidelines and recommendations.

Methods

Planning: The *Model for Improvement*, an audit tool used within Beaumont Hospital, was used to design and implement the audit (Figure 1.). The audit was registered with the Beaumont Hospital Clinical Governance & Audit Manager.

E-Med: E-Med was used to obtain all dietetic notes for Beaumont Hospital HD outpatients during 2018. E-Med is a National Renal IT system which includes notes from members of the multi-disciplinary team. The dietetic notes were reviewed to assess for the presence of a number of nutritional issues included in the audit form.

Audit Planning Tool

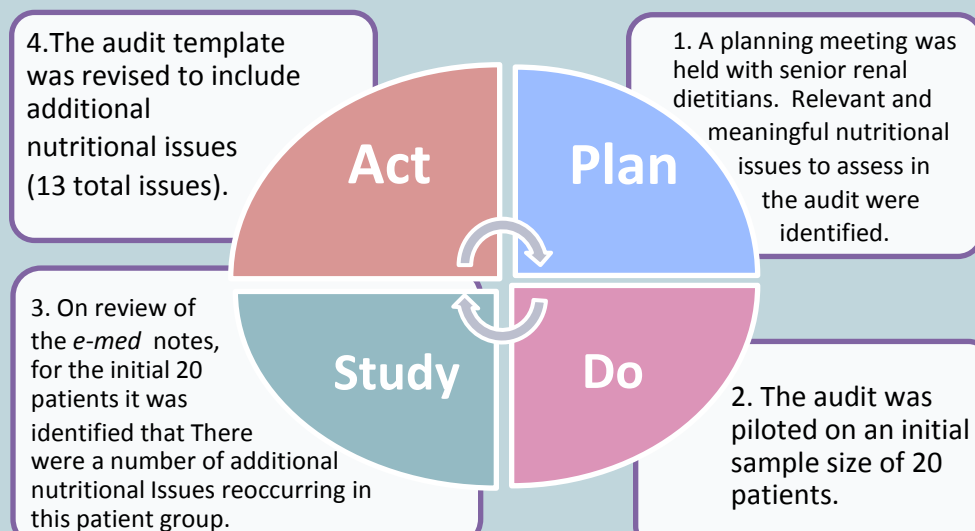


Figure. 1 The Model for Improvement

Results & Discussion

- 123 (75%) outpatient HD patients received direct dietetic intervention during 2018.
- 62% of HD patients received more than one direct dietetic intervention (Figure 2).

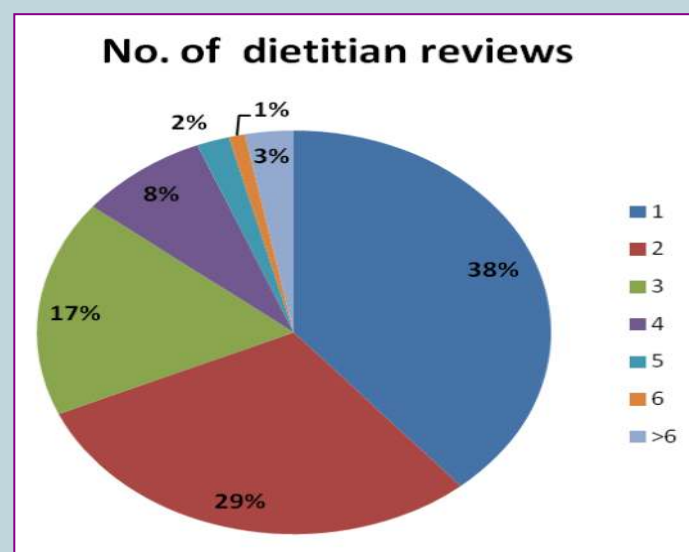


Figure 2. Number of dietitian reviews received by patients.

- 76% of HD patients had two or more nutrition related issues (Figure 3.).

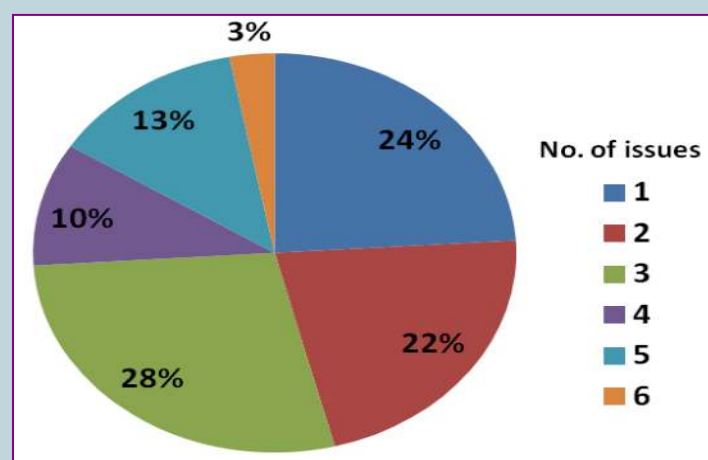


Figure 3. Percentage break down number of nutritional issues presented by patients

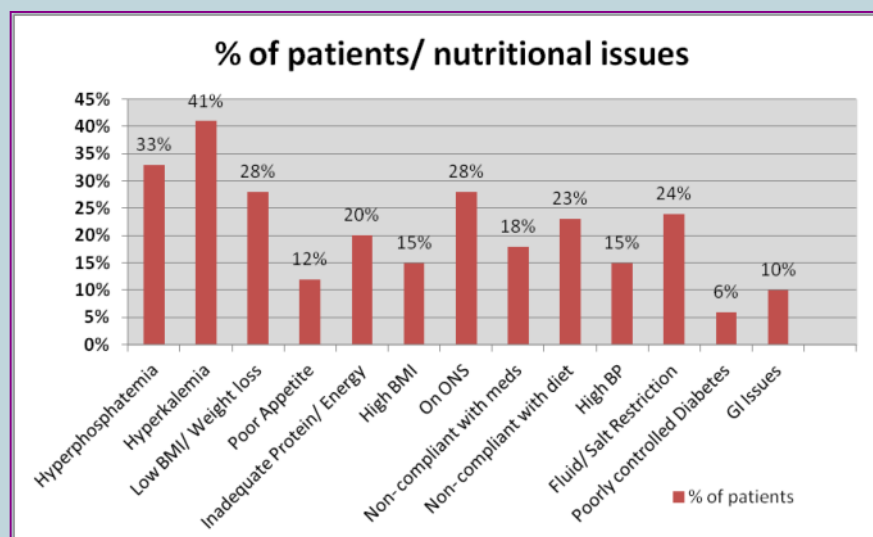


Figure 4. Breakdown of prevalence of noted nutritional issues.

- 25% of this patient group are not receiving the recommended 6 monthly review from a dietitian³. However, the nutritional status of all HD patients is monitored at a monthly MDT.
- The patient:dietitian ratio is below the INDI *Renal Interest Group* recommendation of 1:100.

Key Learning

- The haemodialysis patient cohort in Beaumont Hospital is a complex group with a wide range of nutritional issues.
- E-Med is a valuable tool to enable auditing of this patient group.
- There is a need to cross reference the results of this audit with data from other sources to ensure reliability. e.g. Beaumont Hospital statistical package.
- Future work: comparison of the nutritional profile of this patient group with that of the same patient group in other HD sites.
- This audit did not take into account Peritoneal Dialysis patients and Home Therapies patients in Beaumont Hospital. A future audit should aim to include these patient groups.

Conclusion

- The outpatient HD patients in Beaumont Hospital have a complex nutritional profile which requires extensive and ongoing renal dietetic input.
- The majority of these patients receive regular dietetic intervention.
- More dietetic staffing would allow for the achievement of best practice dietitian review times for haemodialysis patients.

References

1. Lacson, E. *et al.* (2007). Potential impact of nutritional intervention on end stage renal disease hospitalisation, death and treatment costs. *J Renal Nut*, 17(6): 363-371
2. National Kidney Foundation (2000). KDOQI Clinical Practice Guidelines for Nutrition in Chronic Renal Failure.
3. Fouqu, D. *et al.* (2007). EBPG Guideline on Nutrition. *Nephrol Dial Transplant*, 22 (2): 45-87

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