The effectiveness of education or behavioural interventions on adherence to phosphate control in adults receiving haemodialysis: A systematic review

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Aim

To identify the effectiveness of education or behavioural interventions on adherence to phosphate control in adults receiving HD.
Why phosphate control is needed?

• Adherence to a combination of phosphate control methods is a challenge
• In Australia, 27-75% of HD patients meet CARI target of 0.7 – 1.6mmol/L
• Untreated hyperphosphatemia is of great clinical significance to patient outcomes
Systematic Review Protocol

Inclusion

• Adults > 18 years
• On HD (all frequencies/duration of treatment)

Exclusion

• Haemodiafiltration

Types of studies

• Educational or behavioural interventions

Years

• 2005 to 2014
METHODS

Identification

1072 records identified through database search

1 additional record identified through other sources

204 duplicates removed

Screening

868 records screened

844 records excluded

Eligibility

25 full text articles assessed for eligibility

8 full-text articles excluded due to research design and irrelevant intervention

Included

N = 18

Total number of patients = 2,617

Design: RCT = 7, Cohort = 1,

Descriptive case series studies = 10
Results

- All studies focused on phosphate and its complications
  - 3 studies: dietary phosphate
  - 4 studies: medications (phosphate binders)
  - 9 studies: dietary phosphate and phosphate binders
  - 1 study taught patients about diet, medications and HD to control phosphate
- Heterogeneity of studies prevented a meta-analysis being performed
Implications for Practice

- Further robust studies required
- Some evidence suggests education sessions delivered over longer period promotes adherence
- A bundle of patient-centred support mechanisms