

Patient reported haemoglobin levels and anaemia: results of a National Kidney Federation survey compared with the current European Best Practice Guidelines

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Background and aims

- In end stage renal disease (ESRD), treatment with erythropoietin (EPO) should be considered when haemoglobin (Hb) levels are consistently lower than 11g/dL and all other causes of anaemia have been ruled out †.
- The objective of this study was to quantify patient understanding of anaemia and ascertain if European Best Practice Guidelines (EBPG) for the management of anaemia in ESRD were consistent with patient reported experience.

Methods

- A postal survey was sent to the readership of *Kidney Life* (NKF magazine – circulation @ 19,000) including patients who were either preparing for dialysis, on dialysis, or who had received a transplant.
- The survey asked questions related to anaemia status, EPO treatment, haemoglobin levels, anaemia-related symptoms and activities of daily living.

Results

- There were 2106 respondents of whom 4% were preparing for dialysis; 37% were on dialysis; 48% had been transplanted; and 9% were on dialysis following transplant failure.
- Anaemia was reported in 1280 respondents, of which 89% had received / were currently receiving EPO.
- Patients on dialysis following a transplant failure more often knew their haemoglobin level and a higher proportion reported being given EPO (Table 1).
- Overall, 77% of respondents reported receiving EPO. Of these, 43% didn't know their current Hb level 38% were unaware of their target Hb level.
- When considering EBPG targets in those that knew their Hb levels: 96% had Hb levels less than 11g/dL before starting EPO; this reduced to 28% following treatment. Among target-aware patients, 92% had an EBPG-compliant target.
- Among those bothered by anaemia symptoms, 80% on average reported improvement after receiving EPO (Figure 2).
- Patients experiencing difficulties with activities of daily living (ADLs) reported an average 48% improvement after receiving EPO (Figure 3).

Table 1. Patient characteristics by dialysis status

	Pre-dialysis (n=91)	Dialysis (n=783)	Transplant (n=1020)	Graft failure (n=198)	All (n=2106)
Male	52%	62%	53%	56%	56%
Mean age (years)	59	61	54	51	56
Knew current Hb	65%	64%	62%	78%	65%
↳ Current Hb >11	73%	67%	78%	67%	72%
Knew target Hb	53%	57%	59%	80%	60%
↳ Target Hb >11	100%	89%	95%	89%	92%
Received EPO	89%	91%	67%	96%	77%

Figure 1. Distribution of known Hb levels: starting EPO; current; and target

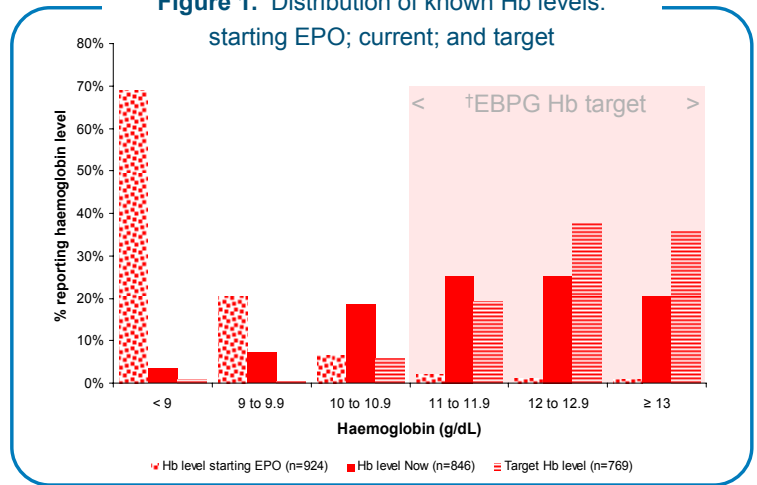


Figure 2. Improvement in anaemia-related symptoms after receiving EPO

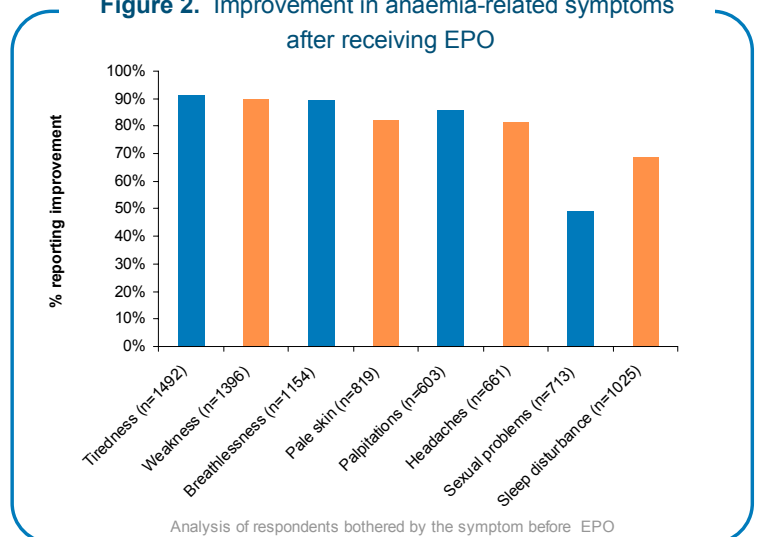
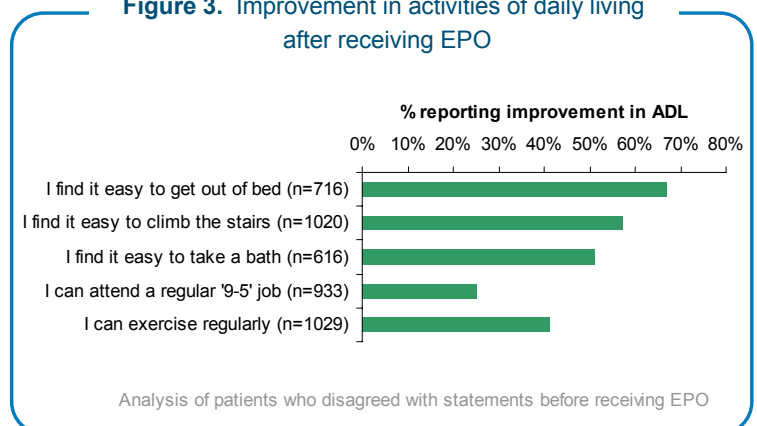


Figure 3. Improvement in activities of daily living after receiving EPO



Conclusions

- While the majority of anaemic renal patients receive EPO, awareness of Hb levels and anaemia in ESRD could be improved to promote understanding of symptoms and treatment.
- EPO is typically initiated when patient reported Hb levels are well below the EBPG target indicating that many anaemic patients are not currently appropriately managed.
- Patients who receive EPO show marked improvements in their symptoms of anaemia and activities of daily living.