

Patient Satisfaction Score in Relation to Hemodialysis Guidelines and Practices: A European Multicenter Analysis

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Introduction

- Understanding patient values and exploring their perspectives and preferences are critical to caring for the dialysis population.
- Patient-centered outcomes such as engagement, symptoms, and satisfaction may not necessarily align with the physician-centered priorities of dialysis care—achieving clinical targets and reducing morbidity and mortality.
- Little is known about the factors that influence patients' experiences and satisfaction and how to improve patients' perception of care as compared with other routinely measured clinical indices of care (anemia, CKD-MBD, etc).
- In addition, uncertainty about factors influencing patient values is amplified by cultural differences in attitudes, expectations and normative practices across societies.

Objective

Patient experiences and satisfaction in relation to hemodialysis practices and international guidelines were investigated in this large international multicenter descriptive analysis.

Methods

- We enrolled 845 hemodialysis patients from 13 DaVita centers in Poland (8 centers, n=453) and Portugal (5 centers, n=392) in this study.
- An anonymous patient survey (14 questions, 5-grade scale: "agree completely" to "disagree") focusing on patient experiences and satisfaction with their care at the local facility was conducted.
- Practices, demographic information, and routine laboratory data were assessed in the month that the survey was performed and correlated to the anonymous survey results at the facility level.

Results

| Patient Demographics and Laboratory Values mean (SD) | | |
|--|------------|--|
| Age (years) | 68 (14) | |
| Dialysis at current center (months) | 40 (60) | |
| BMI (kg/m²) | 25.7 (5.5) | |
| Charlson comorbidity index | 7.1 (3.0) | |
| Hemodialysis (%) | 50.3 | |
| Hemodiafiltration (%) | 49.7 | |
| Arteriovenous fistula (%) | 76.3 | |
| Central venous catheter (%) | 16.5 | |
| Blood flow rate (mL/min) | 372 (57) | |
| Weekly treatment time (min) | 720 (76) | |
| Kt/V | 1.8 | |
| URR (%) | 77 (10) | |
| Interdialytic weight gain (L) | 2.2 (1.7) | |
| UF (L) | 2.2 (0.9) | |
| MAP (mm Hg) | 90 (15) | |
| Albumin (g/L) | 39.5 | |
| Phosphorus (mg/dL) | 4.7 | |
| iPTH (pg/mL) | 512 | |
| | | |

| Abbreviations: BMI, body mass index; iPTH, intact parathyroid hormone; UF, ultrafiltration; |
|---|
| URR, urea reduction ratio |

| Patient Survey Questions (Percentage responding "I agree") | |
|--|-----------|
| I am treated with respect by the staff at my clinic | 98% |
| I am involved in the decision about my dialysis | 94% |
| My questions are answered in a responsive manner | 97% |
| The staff spend enough time with me | 96% |
| I understand the way the clinic staff explains | 96% |
| The staff provide me with the information I need | 95% |
| The staff cares about me | 96% |
| I feel safe during treatment | 97% |
| The dialysis chairs and linen are comfortable | 90% |
| The dialysis clinic is clean and well maintained | 98% |
| I am happy with my transportation provider | 85% |
| My treatment starts on time | 90% |
| The mood at my clinic is pleasant and welcoming | 95% |
| I am happy with the overall service | 97% |
| Patient Satisfaction Score (mean ± SD) | |
| On a scale from 0 - 10, how likely to recommend? | 9.1 ± 1.6 |

- The overall mean (SD) patient satisfaction score (range, 0-10) was high 9.1 (1.6) and the net promoter score (NPS) was 71.
- High scores (>90% "agree") were observed for 13 of 14 questions.
- There were significant differences in patient satisfaction between dialysis facilities in both countries.
- Spearman correlation analyses at the facility level (n = 13) showed that patients involved in decision making had significantly higher Kt/V (P = 0.02).
- Patients who agreed that their "chairs and linen were comfortable" had significantly lower phosphorus (P = 0.02) and higher Kt/V (P < 0.001).
- Patients "happy with their transportation provider" had higher Kt/V (P = 0.002) and lower phosphorus (P < 0.05).
- Patients who agreed that their "treatment started on time" had higher Kt/V (P = 0.05).
- However, the overall satisfaction score was higher with low Kt/V (P = 0.004) and high phosphorus (P < 0.05).

Conclusions

- Patient experience and satisfaction surveys provide a critical and unique perspective on the quality of patient-centered healthcare delivery.
- Information derived from the direct evaluation of patient experience of care and patient satisfaction can be used to identify areas for improvement and support changes in care provision with the aim of improving the overall quality of care for patients.

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