Hometherapies: What can we learn from ERA-EDTA

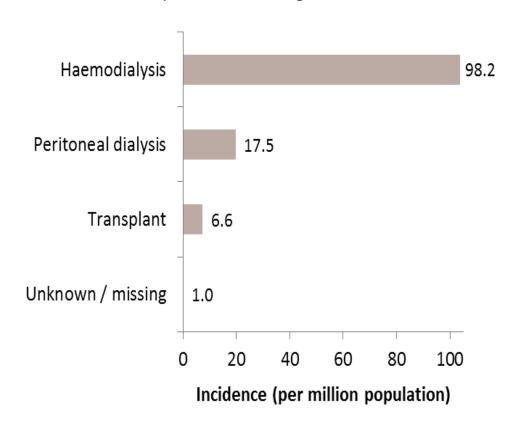
W. Van Biesen, Ghent University Hospital

SOMETIMES THE INFORMATION MISSING PROVIDES THE MOST INFORMATION

Incident patients accepted for RRT in 2013, at day 91 by established modality

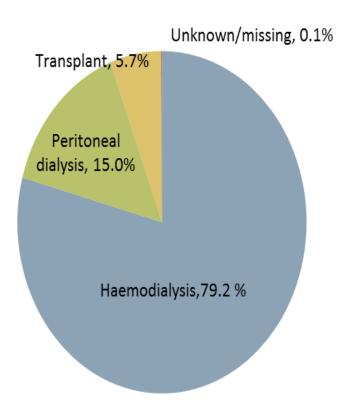
Incidence at day 91, by established modality

all patients starting RRT in 2013



Incidence at day 91, by established modality

all patients starting RRT in 2013



Incident patients accepted for RRT in 2013, at day 91

by established modality and age category

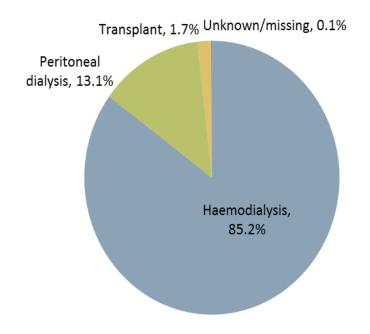
Incidence at day 91, by established modality

patients <u>younger than 65</u> years of age at start RRT in 2013

Peritoneal dialysis, 17.4% Haemodialysis, 71.9%

Incidence at day 91, by established modality

patients older than 65 years of age at start RRT in 2013

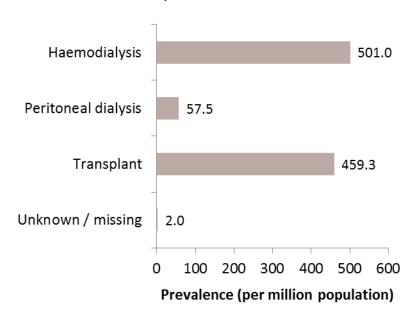


Prevalent patients on RRT in 2013

by established modality

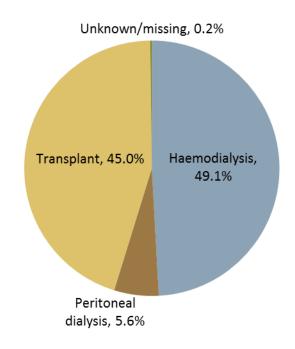
Prevalence, by established modality

all patients on RRT in 2013



Prevalence, by established modality

all patients on RRT in 2013



Prevalent patients on RRT in 2013

by established modality and age category



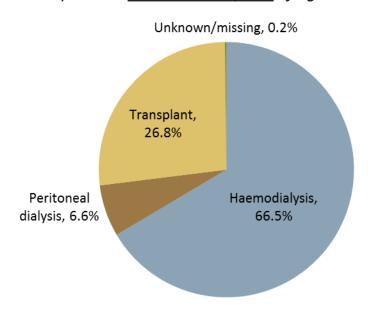
Prevalence, by established modality

patients younger than 65 years in 2013

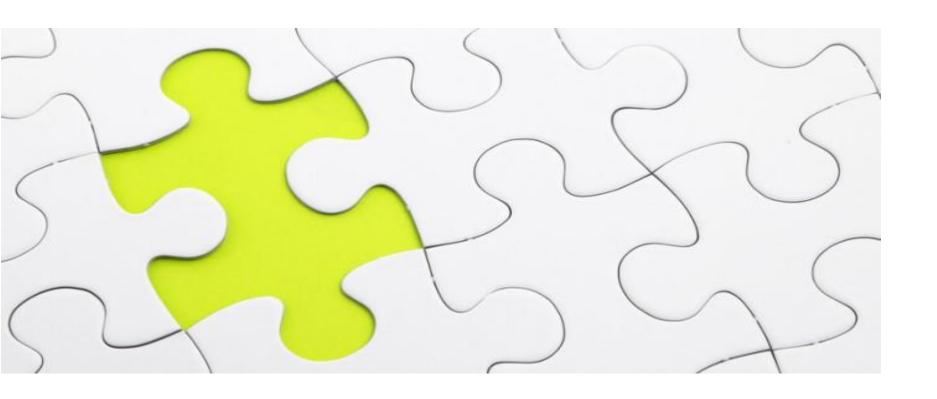
Unknown/missing, 0.2% Haemodialysis, 36.2% Peritoneal dialysis, 5.0%

Prevalence, by established modality

patients older than 65 years of age in 2013



Missing pieces

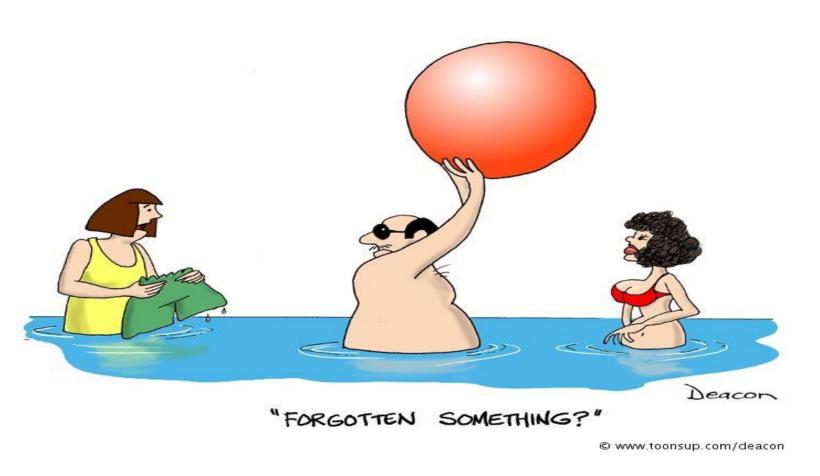


It is not only about single modalities... there is a lot of transition too....

Renal Replacement Therapy Transitions: International Research Collaborative

- The present research consortium will leverage available national and international renal registries and will encourage incorporation of other potential datasets globally with the following research aims:
 - To identify the incidence, predictors, risk factors, rationale(s) and outcomes of transitions between RRT modalities that are relevant to patients and care-providers.
 - To compare crude and adjusted death rates, morbidities and risk factors during the continuum of a given RRT modality, in the early (<3, <6 months) and late (> 6 months) period following a transition from that modality to other forms of RRT.
 - To describe the experience and perspectives of patients transitioning between RRTs.

Missing pieces



Oeps... did we forget about home haemodialysis?

Incident homeHD patients within ERA-EDTA registry

Table A.3.6
Incident counts
at day 91, by established therapy

| | Total | | | |
|--------------------------------------|-------|---------------------------|------------|--|
| | | HD hospital/ centre | HD home | |
| | N | N | N | |
| Austria † | 1117 | 866 | 1 | |
| Belgium, Dutch-speaking * | 1077 | 595 | 6-4 | |
| Belgium, French-speaking * | 780 | 495 | 6 | |
| Bosnia and Herzegovina | 386 | 361 | 0 | |
| Denmark | 622 | 375 | 0 | |
| Estonia | 79 | 52 | 0 | |
| Finland | 466 | 281 | 17 | |
| France | 9586 | 6673 | 5 | |
| Greece | 2128 | 1894 | 0 | |
| Iceland | 24 | 10 | 0 | |
| Norway | 488 | 302 | 0 | |
| Romania | 2581 | 2410 | 0 | |
| Serbia | 922 | 736 | 1 | |
| Slovenia | 236 | 0 | • | |
| Spain, Andalusia | 1025 | 803 | 0 | |
| Spain, Aragon | 167 | 125 | 0 | |
| Spain, Asturias † | 159 | 107 | 0 | |
| Spain, Basque country | 249 | 155 | 1 | |
| Spain, Cantabria * | 49 | 3.2 | 0 | |
| Spain, Castile and León * | 267 | 213 | 0 | |
| Spain, Castile-La Mancha * | 216 | 160 | 0 | |
| Spain, Catalonia † | 1052 | 540 | 0 | |
| Spain, Extremadura † | 132 | 111 | 1 | |
| Spain, Galicia | 385 | 275 | 0 | |
| Spain, Community of Madrid | 762 | 591 | 1 | |
| Spain, Region of Murcia | 153 | 116 | 0 | |
| Spain, Valencian region | 665 | 509 | 2 | |
| Sweden | 1000 | 0 | 7 | |
| The Netherlands | 1822 | 1241 | 0 | |
| United Kingdom, All countries * † § | 6520 | 4111 | 22 | |
| United Kingdom, England * # | 5564 | 3418 | 19 | |
| United Kingdom, Northern Ireland * # | 158 | 110 | 0 | |
| United Kingdom, Scotland | 486 | 368 | 1 | |
| United Kingdom, Wales * * | 320 | 219 | 3 | |

Total = 151

Incident homeHD patients within ERA-EDTA registry

Table A.3.8
Incident rates per million population, adjusted at day 91, by established therapy, adjusted for age and ge

| | Total | | HD home | |
|--------------------------------------|--------|---------------------------|------------|--|
| | | HD hospital/ centre | | |
| | Pmp | Pmp | Pmp | |
| Austria † | 128.3 | 99.6 | 0.2 | |
| Belgium, Dutch-speaking * | 155.4 | 85.6 | 9.2 | |
| Belgium, French-speaking * | 173.6 | 110.1 | 1.3 | |
| Bosnia and Herzegovina | 129.9 | 121.9 | • | |
| Denmark | 108.7 | 65.5 | 0 | |
| Estonia | 61.7 | 40.5 | • | |
| Finland | 81.0 | 48.1 | 3.3 | |
| France | 143.7 | 100.0 | 0.1 | |
| Greece | 171.9 | 1.52.0 | 0 | |
| Iceland | 85.0 | 36.9 | 0 | |
| Norway | 103.1 | 64.6 | 0 | |
| Romania | 1.30.5 | 121.9 | • | |
| Serbia | 1.26.4 | 100.4 | 0.2 | |
| Slovenia | 111.0 | 0 | • | |
| Spain, Andalusia | 129.4 | 101.9 | • | |
| Spain, Aragon | 113.2 | 84.1 | • | |
| Spain, Asturias † | 122.0 | 81.0 | • | |
| Spain, Basque country | 103.3 | 63.8 | 0.4 | |
| Spain, Cantabria * | 76.6 | 48.8 | • | |
| Spain, Castile and León * | 86.5 | 67.7 | 0 | |
| Spain, Castile-La Mancha * | 102.6 | 75.5 | • | |
| Spain, Catalonia † | 139.9 | 71.4 | 0 | |
| Spain, Extremadura † | 111.2 | 92.9 | 1.3 | |
| Spain, Galicia | 119.0 | 83.0 | • | |
| Spain, Community of Madrid | 1.26.0 | 98.6 | 0.2 | |
| Spain, Region of Murcia | 118.2 | 90.5 | 0 | |
| Spain, Valencian region | 126.8 | 97.0 | 0.4 | |
| Sweden | 100.5 | • | 0.8 | |
| The Netherlands | 109.1 | 74.9 | 0 | |
| United Kingdom, All countries * † § | 104.0 | 65.5 | 0.4 | |
| United Kingdom, England * † | 106.1 | 65.1 | 0.4 | |
| United Kingdom, Northern Ireland * † | 95.0 | 66.3 | 0 | |
| United Kingdom, Scotland | 90.7 | 68.4 | 0.2 | |
| United Kingdom, Wales * * | 98.8 | 66.3 | 1.3 | |

Prevalent homeHD patients within ERA-EDTA registry

Table A.3.9

Percentages of established therapy, unadjusted at day 91

| | Total | | |
|--------------------------------------|-------|---------------------------|------------|
| | | HD hospital/ centre | HD home |
| | % | % | % |
| Austria † | 100 | 77.6 | 0.1 |
| Belgium, Dutch-speaking * | 100 | 55.2 | 5.9 |
| Belgium, French-speaking * | 100 | 63.5 | 8.0 |
| Bosnia and Herzegovina | 100 | 93.5 | 0 |
| Denmark | 100 | 60.3 | 0 |
| Estonia | 100 | 65.8 | 0 |
| Finland | 100 | 60.3 | 3.6 |
| France | 100 | 69.6 | 0.1 |
| Greece | 100 | 89.0 | 0 |
| Iceland | 100 | 41.7 | 0 |
| Norway | 100 | 61.9 | 0 |
| Romania | 100 | 93.4 | 0 |
| Serbia | 100 | 79.8 | 0.1 |
| Slovenia | 100 | 0 | 0 |
| Spain, Andalusia | 100 | 78.3 | 0 |
| Spain, Aragon | 100 | 74.9 | 0 |
| Spain, Asturias f | 100 | 67.4 | 0 |
| Spain, Basque country | 100 | 62.2 | 0.4 |
| Spain, Cantabria * | 100 | 65.3 | 0 |
| Spain, Castile and León * | 100 | 79.8 | 0 |
| Spain, Castile-La Mancha * | 100 | 74.1 | 0 |
| Spain, Catalonia † | 100 | 51.3 | 0 |
| Spain, Extremadura † | 100 | 84.3 | 1.0 |
| Spain, Galicia | 100 | 71.4 | 0 |
| Spain, Community of Madrid | 100 | 77.6 | 0.1 |
| Spain, Region of Murcia | 100 | 75.8 | 0 |
| Spain, Valencian region | 100 | 76.5 | 0.3 |
| Sweden | 100 | 0 | 0.7 |
| The Netherlands | 100 | 68.1 | 0 |
| United Kingdom, All countries * † § | 100 | 63.0 | 0.3 |
| United Kingdom, England * † | 100 | 61.4 | 0.3 |
| United Kingdom, Northern Ireland * † | 100 | 69.6 | 0 |
| United Kingdom, Scotland | 100 | 75.7 | 0.2 |
| United Kingdom, Wales * † | 100 | 68.5 | 0.9 |
| | | | |

Table A.4.6

Prevalent counts

prevalent patients on December 31, by established therap

| | Total | | |
|------------------------------------|-------|---------------------------|------------|
| | | HD hospital/ centre | HD home |
| | N | N | N |
| Austria | 8906 | 3034 | 4 |
| Belgium, Dutch-speaking * | 7823 | 2470 | 101 |
| Belgium, French-speaking * | 6005 | 2348 | 53 |
| Bosnia and Herzegovina | 2620 | 2098 | 0 |
| Denmark | 4973 | 1859 | 149 |
| Estonia | 754 | 243 | 0 |
| Finland | 4492 | 955 | 104 |
| France | 77199 | 30383 | 245 |
| Greece | 12832 | 7429 | 1 |
| Iceland | 222 | 48 | 0 |
| Norway | 4574 | 1062 | 17 |
| Romania | 16162 | 13309 | 7 |
| Serbia | 5651 | 3631 | 28 |
| Slovenia | 2077 | 560 | 0 |
| Spain, Andalusia | 9295 | 4133 | 8 |
| Spain, Aragon | 1510 | 542 | 2 |
| Spain, Asturias | 1208 | 425 | 0 |
| Spain, Basque country | 2553 | 809 | 3 |
| Spain, Cantabria * | 588 | 198 | 0 |
| Spain, Castile and León * | 2817 | 1212 | 2 |
| Spain, Castile-La Mancha * | 2138 | 810 | 3 |
| Spain, Catalonia | 9534 | 1993 | 3 |
| Spain, Extremadura | 1194 | 579 | 8 |
| Spain, Galicia | 3363 | 1472 | 9 |
| Spain, Community of Madrid | 6491 | 2201 | 14 |
| Spain, Region of Murcia | 1767 | 897 | 0 |
| Spain, Valencian region | 6303 | 3321 | 10 |
| Sweden | 9020 | 0 | 143 |
| The Netherlands | 15887 | 5362 | 217 |
| United Kingdom, All countries * § | 56781 | 20710 | 1168 |
| United Kingdom, England * | 47961 | 17366 | 992 |
| United Kingdom, Northern Ireland * | 1548 | 577 | 31 |
| United Kingdom, Scotland | 4614 | 1812 | 55 |
| United Kingdom, Wales * | 2731 | 964 | 90 |

Impact of Homedialysis on HD quality

Haemodialysis dose practice patterns in Europe

| Table 2. Number of HD se | essions per w | eek | | | | |
|--------------------------|---------------|----------------------------|-----------------|-----------------|-----------------------------|----------|
| | N | Fewer than 3 sessions/week | 3 sessions/week | 4 sessions/week | Daily haemodialysis ≥5/week | P^* |
| Modality | | % | % | % | % | < 0.0001 |
| Full-care centre | 15 709 | 6.1 | 92.4 | 1.1 | 0.4 | |
| Limited care centre | 4453 | 2.9 | 95.8 | 0.4 | 0.9 | |
| Home care | 339 | 0.6 | 83.8 | 8.0 | 7.7 | |

219

Impact of Homedialysis on HD quality

| Haemodialysis dose practic | e patterns in | Europe | | • | | • | 219 |
|----------------------------|---------------|-------------------------|---------------|------------------|-------------------|------------------|----------|
| Table 2. Number of HD se | ssions per w | reek | | | | | |
| | N | Fewer than 3 sessions/w | eek 3 session | s/week 4 session | ons/week Daily ha | emodialysis ≥5/w | eek P* |
| Modality | | % | % | % | % | | < 0.0001 |
| Full-care centre | 15 709 | 6.1 | 92.4 | 1.1 | 0.4 | | |
| Limited care centre | 4453 | 2.9 | 95.8 | 0.4 | 0.9 | | |
| Home care | 339 | 0.6 | 83.8 | 8.0 | 7.7 | | |
| Table 3. Mean dialysis len | gth per sess | ion | | | | | |
| | | N | ≤3 h | 3–4 h | 4–6 h | ≥6 h | P* |
| Modality | | 9/ | 6 | % | % | % | < 0.0001 |
| Full-care centre | | 15 608 6 | .0 | 71.8 | 20.5 | 1.8 | |

71.4

41.7

4.6

9.8

4422

338

Limited-care centre

Home care

1.9

14.5

22.0

34.0

Impact of Homedialysis on HD quality

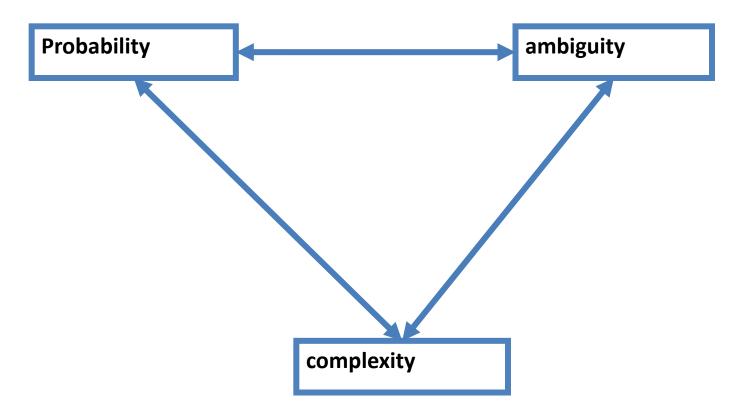
| Haemodialysis dose practi Table 2. Number of HD s | | | | | | | | | 219 |
|--|----------------|------------------|-------------|------------|---------|---------------|----------|---------------------------|----------|
| | r r | | | | | | | | |
| | N | Fewer than 3 ses | ssions/week | 3 sessions | /week 4 | sessions/week | Daily h | $aemodialysis \ge 5/week$ | P^* |
| Modality | | % | | % | % | | % | | <0.0001 |
| Full-care centre | 15 709 | 6.1 | | 92.4 | 1.1 | l | 0.4 | | |
| Limited care centre | 4453 | 2.9 | | 95.8 | 0.4 | 1 | 0.9 | | |
| Home care | 339 | 0.6 | | 83.8 | 8.0 |) | 7.7 | | |
| Table 3. Mean dialysis le | ngth per sessi | ion | | | | | | | |
| | | N | ≤3 ł | 1 | 3–4 h | 4 | –6 h | ≥6 h | P* |
| Modality | | | % | | % | % | | % | < 0.0001 |
| Full-care centre | | 15 608 | 6.0 | | 71.8 | 20 | | 1.8 | |
| Limited-care centre | | 4422 | 4.6 | | 71.4 | 22 | 0 | 1.9 | |
| Home care | | 338 | 9.8 | | 41.7 | 34 | .0 | 14.5 | |
| Table 4. Total weekly HE | O duration | | | | | | | | |
| | | N | <12 | h/week | | 12 h/week | | >12 h/week | P^* |
| Modality | | | % | | 9 | 6 | 9 | % | < 0.0001 |
| Full-care centre | | 18 169 | 18.5 | | 5 | 8.8 | 2 | 22.7 | |
| Limited-care centre | | 4416 | 11.9 | | 6 | 3.7 | 2 | 24.4 | |
| Home care | | 342 | 8.5 | | 3 | 5.4 | | 56.1 | |

Educating end-stage renal disease patients on dialysis modality selection: clinical advice from the European Renal Best Practice (ERBP) Advisory Board

Adrian Covic¹, Bert Bammens², Thierry Lobbedez³, Liviu Segall¹, Olof Heimbürger⁴, Wim van Biesen⁵, Denis Fouque⁶ and Raymond Vanholder⁵

Nephrol Dial Transplant (2010) 25: 1757–1759 doi: 10.1093/ndt/gfq206 Advance Access publication 14 April 2010 Educating end-stage renal disease patients on dialysis modality selection: clinical advice from the European Renal Best Practice (ERBP) Advisory Board

Adrian Covic¹, Bert Bammens², Thierry Lobbedez³, Liviu Segall¹, Olof Heimbürger⁴, Wim van Biesen⁵, Denis Fouque⁶ and Raymond Vanholder⁵



CONTEXT: the patient

The Context - within the Integrated Care Model

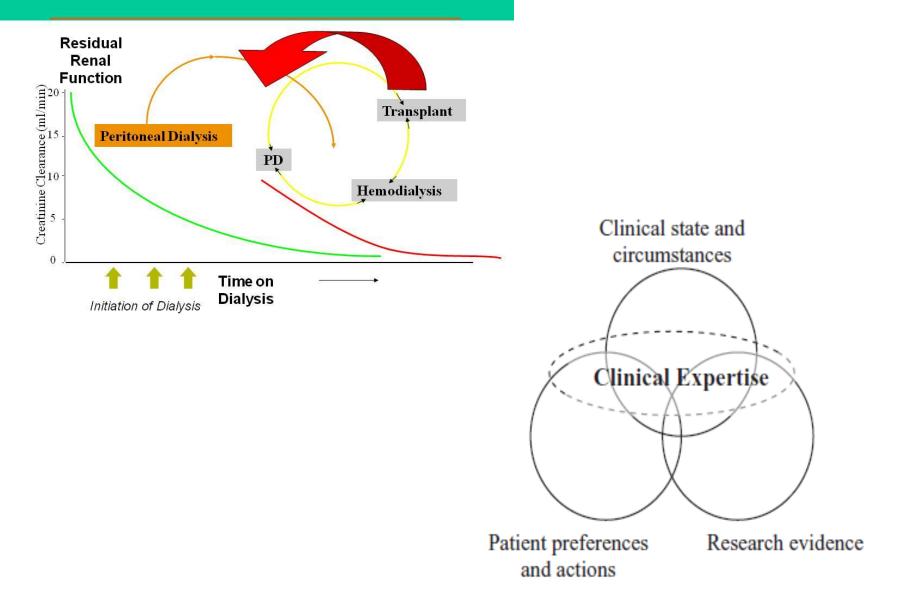


Figure 1 Evidence-based decision-making for clinical contexts.

Shared decison making



Shared decison making





Shared decison making





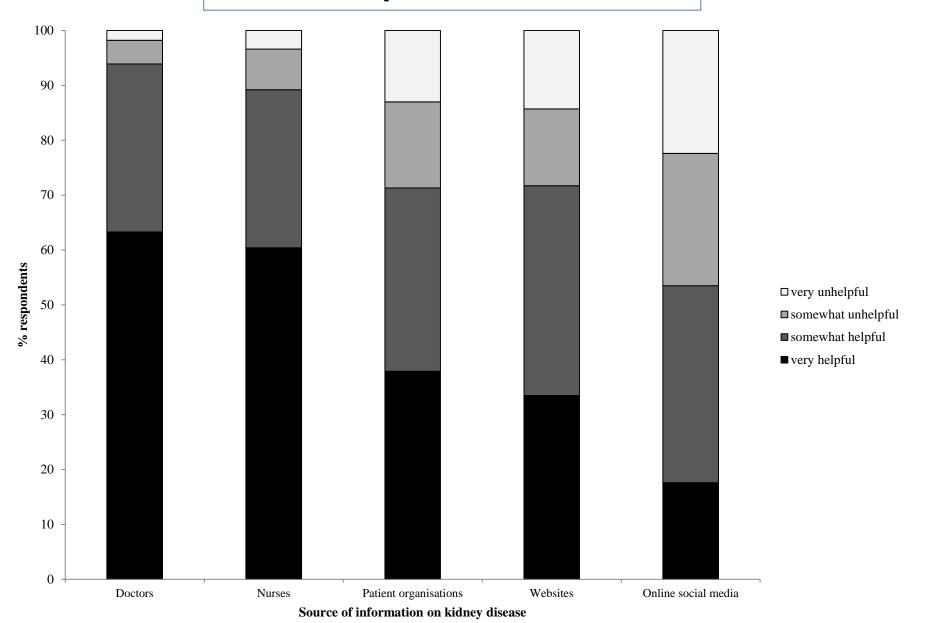
Decide

Patient perspectives on informed decisionmaking surrounding dialysis initiation

Methods. Ninety-nine maintenance dialysis patients recruited from 15 outpatient dialysis centers in North Carolina completed semistructured interviews on information provision and communication about the initiation of dialysis. These data were examined with content analysis. In addition, informed decision-making (IDM) scores were created by summing

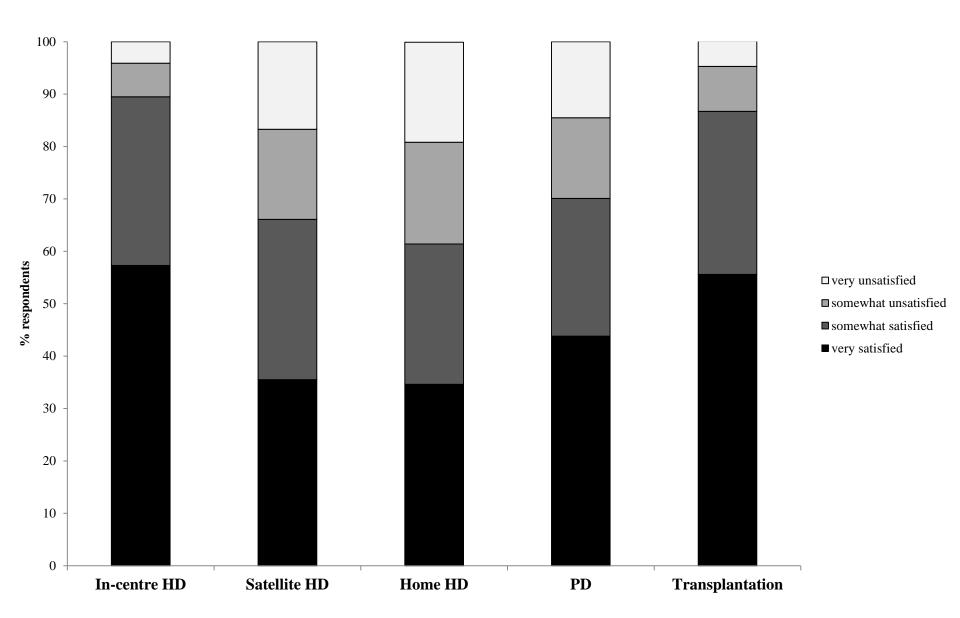
| Table 3. Number (%) of patients responding 'Yes' to each informed decision-making item | | | | | |
|---|-----------|--|--|--|--|
| Content of the item | n (%) | | | | |
| Condition that led to kidney failure | 53 (53.5) | | | | |
| How long you would live with or without dialysis | 45 (45.5) | | | | |
| Dialysis options, such as peritoneal dialysis and hemodialysis | 59 (59.6) | | | | |
| Benefits and burdens associated with each type of dialysis | 32 (32.3) | | | | |
| Doctor asked your values and preferences for those dialysis options | 20 (20.2) | | | | |
| How your daily life might change after starting dialysis | 44 (44.4) | | | | |
| 7. Need for dialysis for the rest of your life unless you receive kidney transplantation | 82 (82.8) | | | | |
| 8. Not starting dialysis could be an option | 1 (1.0) | | | | |
| Doctor tried to make sure you understood what he/she told you | 74 (74.7) | | | | |
| 10. Doctor tried to understand what was important to you | 58 (58.6) | | | | |

Sources of patient information



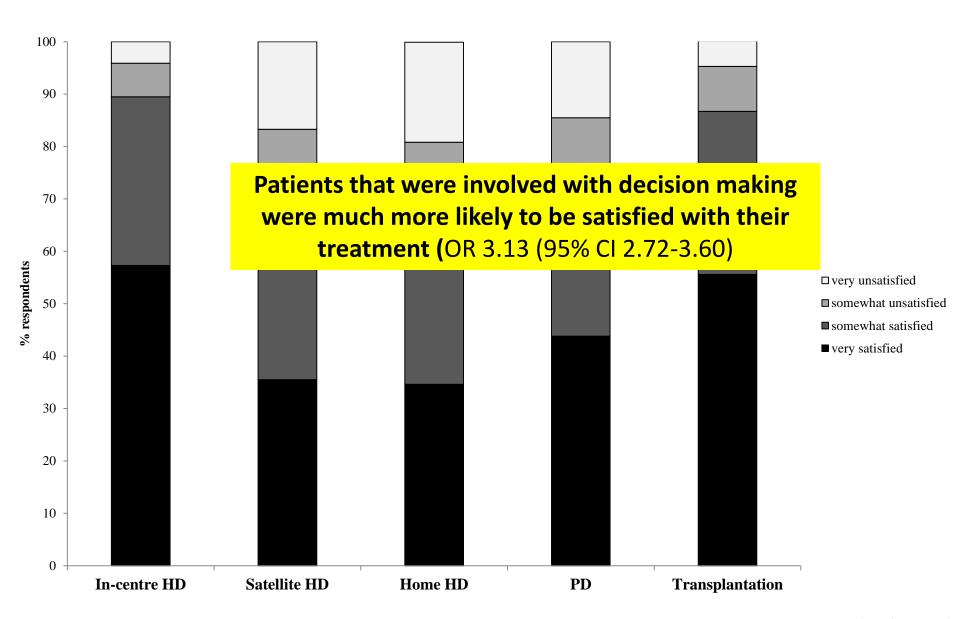
Ceapir survey, Van Biesen et al, Plos One

Sources of patient information



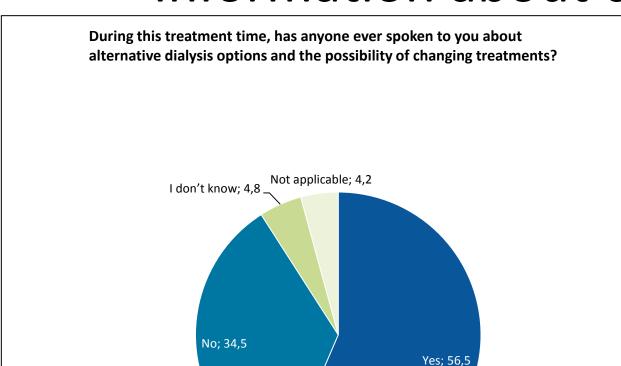
Ceapir survey, Van Biesen et al, plos One

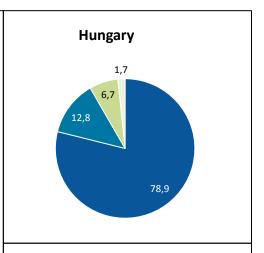
Sources of patient information

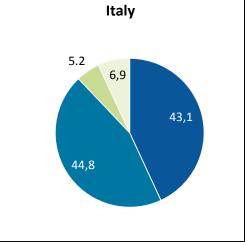


Ceapir survey, Van Biesen et al, submitted

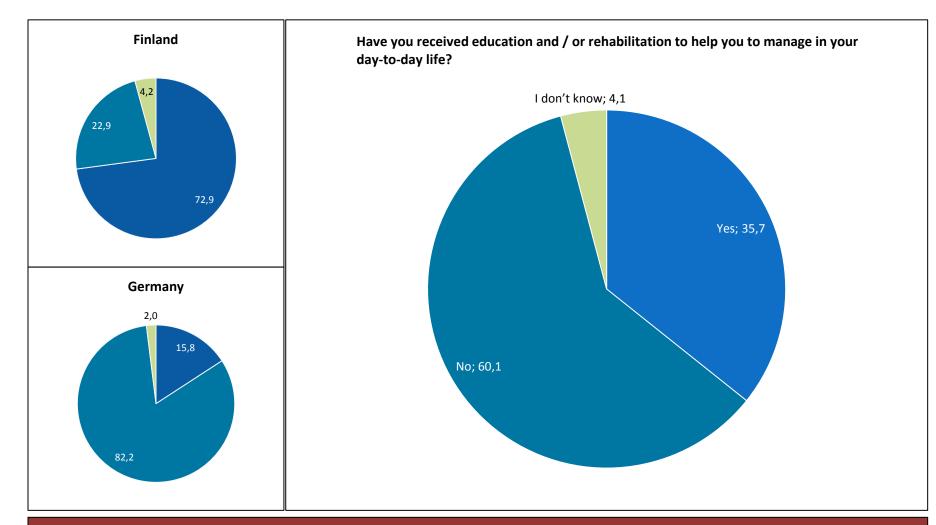
Information about choice







Almost a half of respondents in Europe do not recall having discussed alternative treatment options.



Nearly two-thirds of patients did not receive the education or rehabilitation they need to help reconcile their kidney condition with their day-to-day life.

The views of patients and carers in treatment decision making for chronic kidney disease: systematic review and thematic synthesis of qualitative studies

Lack of information—Eleven of 18 studies reported that patients or their carers did not have the information they wanted on treatment options, regardless of whether transplantation, dialysis, or palliative care was preferred. Family members of patients were especially concerned about their lack of knowledge of the different treatments available and the practicalities in managing each treatment.

The views of patients and carers in treatment decision making for chronic kidney disease: systematic review and thematic synthesis of qualitative studies

Timing of information—Ten studies reported the importance of the timing of information on treatment options. Patients recounted being too unwell to take in the information presented or too rushed into making a decision without having time to discuss the options with their families. Information about kidney transplantation was commonly introduced to patients after dialysis had been established. For some patients information about treatment options came after undergoing surgery for vascular access.

Maintaining lifestyle—The medical outcomes of treatment were considered less important than the effect of the treatment on the patient's lifestyle—that is, patients were less concerned about their longevity than they were about their quality of life. Treatment choices were based on minimising disruption to usual activities, upholding responsibilities, and maintaining personal interests. Examples of this included the ability to continue working, maintain a social life, or care for grandchildren (see table 4).

Morton et al, BMJ, 2009

Patient Information: Predialysis

- 1. Patients do not recall having been informed at all
- 2. Patients are informed "too late" i.e. in a state when they are uraemic, desperate, depressed by their diagnosis....
 - Language too difficult
 - Irrelevant information
 - Too much information
- 3. Their is a "communication problem" between medical staff and patients on which topics/factors to value
 - Empathic listening
 - Motivational interviewing
- 4. Patients tend to make heuristic, not objective decisions
 - Danger of exposing them to other patients



"Shared Decision Making"

