



Simposio SIGG-SIN
CONOSCIAMO IL PAZIENTE ANZIANO CON MALATTIA RENALE CRONICA?

Head to head: dialysis dilemma.

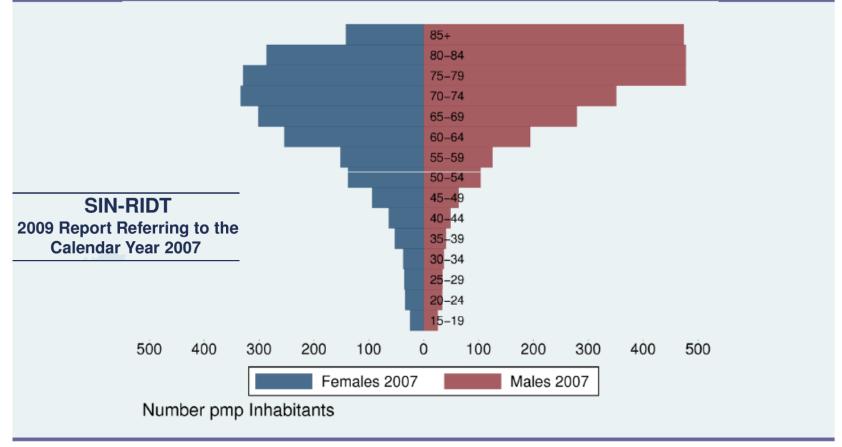


Filippo Aucella, M.D.





ESRD INCIDENCE by Gender ang Age Categories



50th. Congress of the Italian Society of Nephrology Bologna, October 2009





Clinical Practices and Outcomes in Elderly Hemodialysis Patients: Results from the Dialysis Outcomes and Practice Patterns Study

15

Years on dialysis

(DOPPS) Survival (%) Survival (%) ANZ Europe <45 yrs (n=95) 80 80 <45 yrs (n=660) 70 70 60 60 50 50 45-74 yrs 40 40 30 20 20 10 ≥ 75 yrs (n=592) 10 ≥75 yrs (n=47)15 10 15 Years on dialysis Years on dialysis **North America** Japan Survival (%) Survival (%) 90 <45 yrs (n=486) 80 80 <45 yrs (n=484) 70 70 60 60 50 50 40 n=1167)30 20 20 ≥75 yrs 10 10 ≥75 yrs (n=165) : (n=360)

15

10

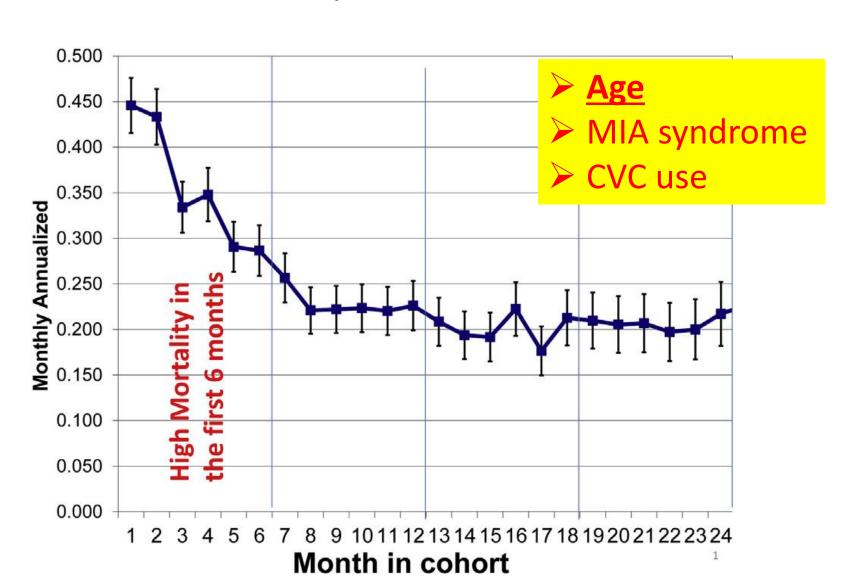
Years on dialysis

Clin J Am Soc Nephrol 6: 1651–1662, 2011.

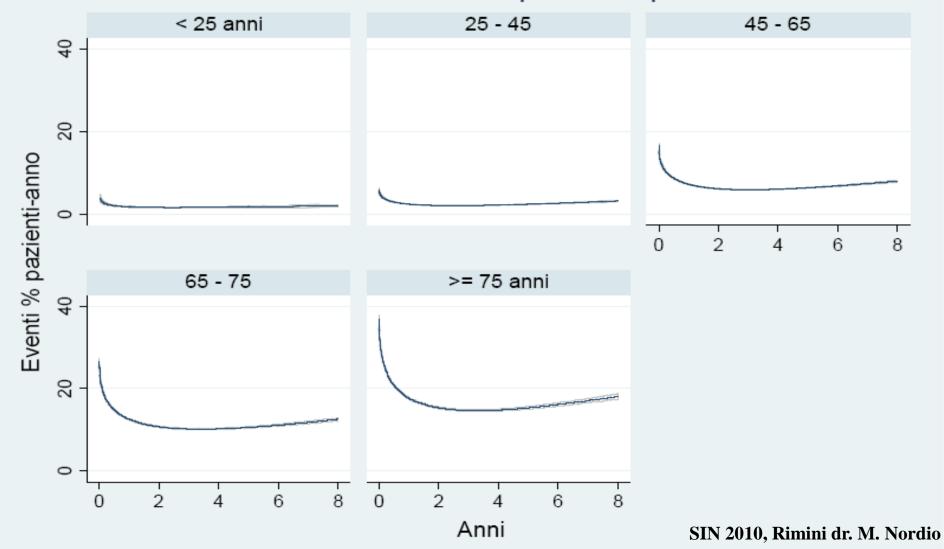
- 1. Mean age increased in all DOPPS countries;
- 2. Mortality risk was 3-6 higher in the elderly;
- 3. Causes of death overall were similar for elderly and younger patients;
- 4. Elderly patients reported poorer QoL.

Patterns and Predictors of Early Mortality in Incident Hemodialysis Patients: New Insights

Am J Nephrol 2012;35:548-558

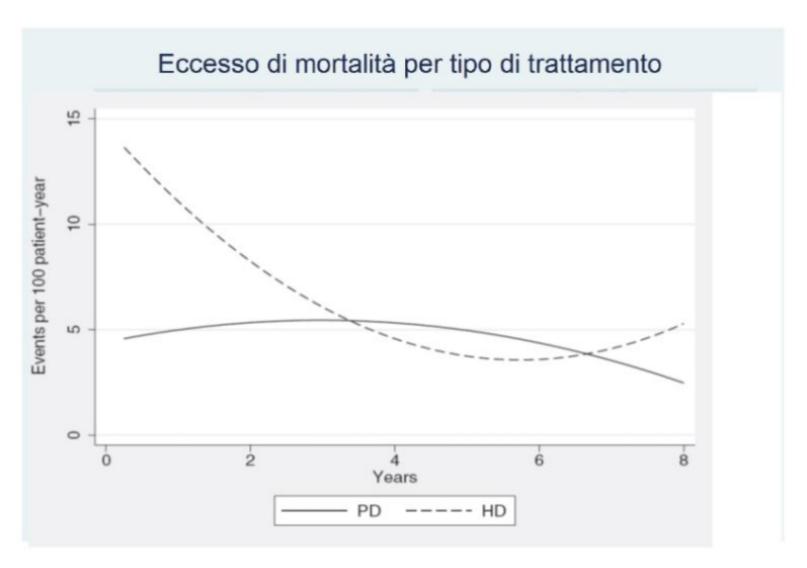


Eccesso di mortalità predetto per età





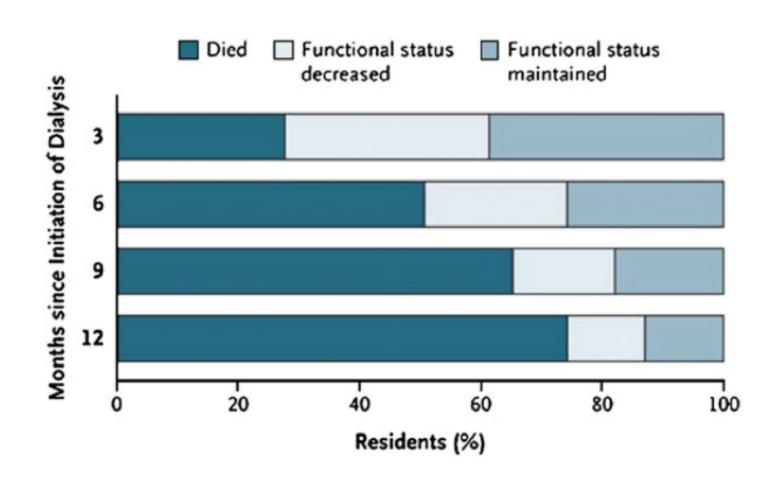




Nordio M et al. Am J Kidney Dis 2012; 59: 819-28

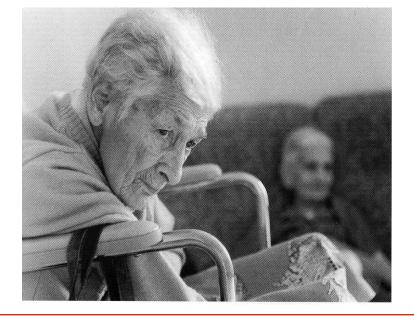
Functional Status of Elderly Adults before and after Initiation of Dialysis

N Engl J Med 2009;361:1539-47.







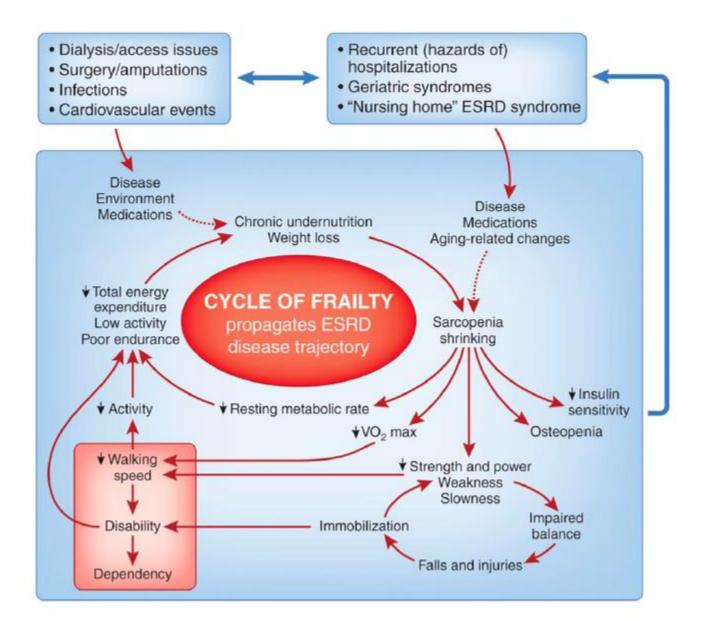


Frail individuals have greater nonspecific vulnerability and are more susceptible to adverse health outcomes, including Hospitalization and Mortality

Fried, Waltson, Ferrucci, Hazzard's Geriatric Medicine and Gerontology, 6th Edition, 2009: 631-45

Cycle of Frailty with trigger entry point health events

cJASN 2013 Ethics Series



Considerations in Starting a Patient with Advanced Frailty on Dialysis: Complex Biology Meets Challenging Ethics

Mark Swidler

Clin J Am Soc Nephrol 8: 1421-1428, 2013.

Frail renal phenotype

- Karnofsky score<50 (disabled; requires special care and assistance)
- 2. Age older >85
- 3. Presence of geriatric syndromes: Dementia, Nonambulatory status, Positive frailty testing, albumin<35 g/L, significant symptom burden
- 4. "Would you be surprised if this patient died in the next year?" No
- 5. Low survival probabilities by CCI>8; FREIN clinical score>9; Nursing home patient; Hemodialysis mortality predictor; Four chronic conditions.

Considerations in Starting a Patient with Advanced Frailty on Dialysis: Complex Biology Meets Challenging Ethics

Mark Swidler

Clin J Am Soc Nephrol 8: 1421–1428, 2013.

Healthy/usual

Most optimal dialysis patient
Might also be a transplant candidate

Vulnerable

More typical dialysis candidate
Characterized by increasing hospitalizations and unpredictable outcomes

Frail

Most susceptible to poor near-term outcome (6–12 months)
High risk of multiple and prolonged hospitalizations
Some are nursing home patients

with marked functional disability.

Table 1. Mean life expectancy by quartile following dialysis initiation according to age and renal phenotype

Danal Dhanatana Overtilas	Life Expectancy by Age Group (yrs)					
Renal Phenotype Quartiles	65–69	70–74	75–79	80-84	85–89	90+
25th Percentile (0–25; frail)	0.9	0.7	0.5	0.4	0.3	0.2
50th Percentile (25–75; vulnerable)	2.5	2.1	1.7	1.3	0.9	0.6
75th Percentile (75–100; healthy)	4.6	4.3	3.7	3.0	2.3	1.7

Impact of frailty on patient management (1)

Frailty aspects	Clinical considerations	Health care challenges		
Cognitive impairment	Degree of impairment and appropriateness of dialysis	Cognitive assessment into routine nephrologic care		
	Strategies to limit the impact of dialysis on cognitive impairment	Time for complex discussions and advance care planning		
		Adjustment to dialysis		
	Potential impact of dialysis on functional decline	Liaison with geriatric teams for assessment, falls clinics, and community support		
Functional impairment	Dependence and optimal dialysis modality	Involvement of rehabilitation teams		
	Exercise as a preventive strategy	Routine use of exercise physiotherapists		
	Falls and fracture risk			
	Transport requirements	Cost of transport		

Kidney International (2017) **91,** 294–303;

Impact of frailty on patient management (2)

Frailty aspects	Clinical considerations	Health care challenges	
Protein energy wasting	Prognostic marker for outcomes on dialysis	Regular dietetic review and access to nutritional supplements	
	Ensuring adequate nutritional support	Support in community for shopping, preparing food	
Multimorbidity	Dialysis tolerability and time to dialysis recovery	Adjustment of HD to reduce time to recover	
	Polypharmacy and risk of adverse reactions	Increased use of PD	
		Involvement of pharmacists to review medications	
		Resetting of goals to restrict medications to symptom control	

Mini-Review

Dialysis in Late Life: Benefit or Burden

Sarbjit V. Jassal*† and Diane Watson*

University of Toronto, Toronto, Ontario, Canada Clin J Am Soc Nephrol 4: 2008–2012, 2009.

Elderly patients who are on dialysis seem to have a higher burden of age-related problems, or "geriatric syndromes," such as frailty, falls, and cognitive impairment.

There is also emerging evidence that dialysis initiation may be associated with accelerated rates of functional and/or cognitive decline.

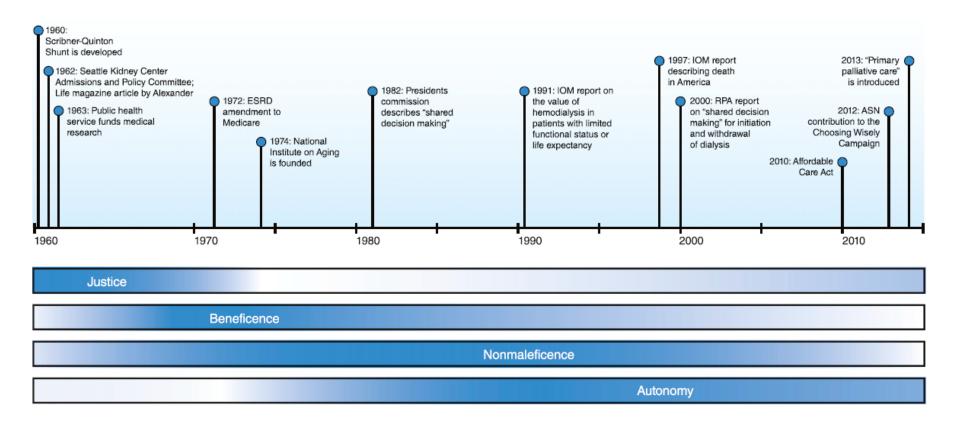
Thus, appropriate medical training is required for individuals who care for complex older dialysis patients.

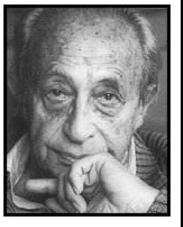




Timeline of important events and publications related to the development of dialysis

CJASN 2016, Ethics Series





Hans Jonas

Technique, Medicine & Ethics

Practice of responsability principle

...customize the treatment...

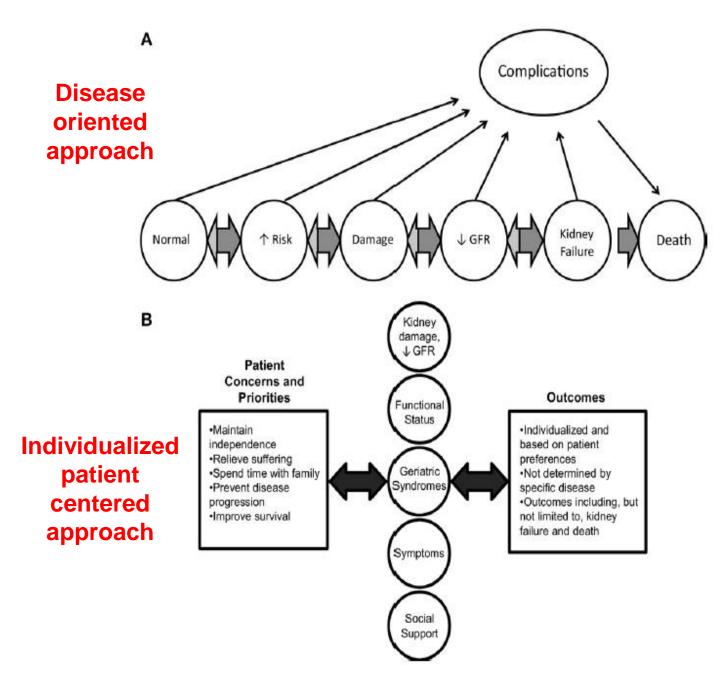
"the patient trusts that the treatment is aimed at him alone."



BIBLIOTECA EINAUDI

Bowling et al AJKD 2012







When and How Should Dialysis be Discontinued?

Non-Dialysis Therapy: A Better Policy Than Dialysis Followed by Withdrawal?

Hippocrates (460–375 bc) stated

"The physician who cannot inform his patient what would be the probable issue of his complaint, if allowed to follow its natural course, is not qualified to prescribe any rational treatment for its cure"

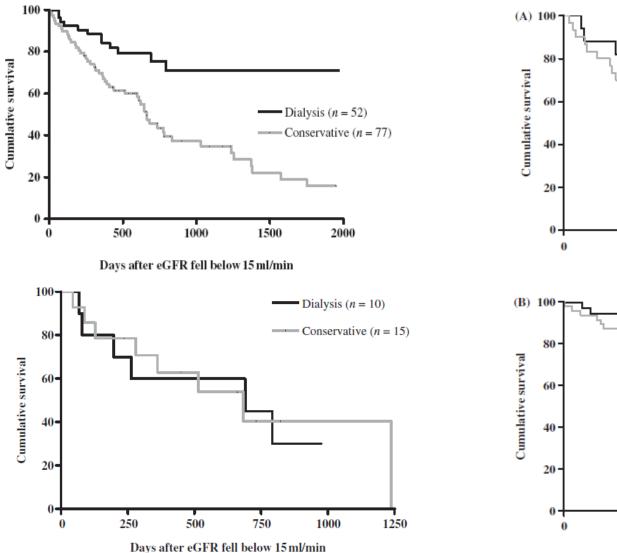
WE NEED TO MEASURE FRAILTY AND MORTALITY RISK

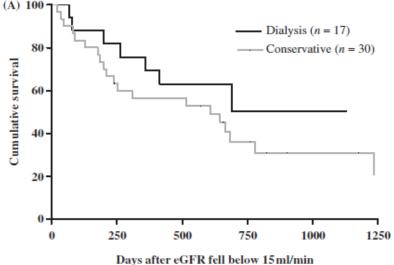


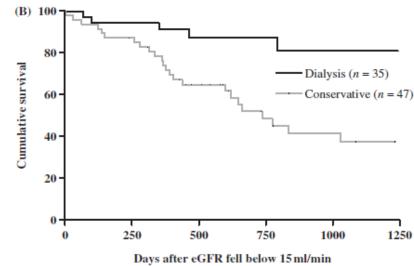


Dialysis or not? A comparative survival study of patients over 75 years with chronic kidney disease stage 5

Nephrol Dial Transplant (2007) 22: 1955-1962









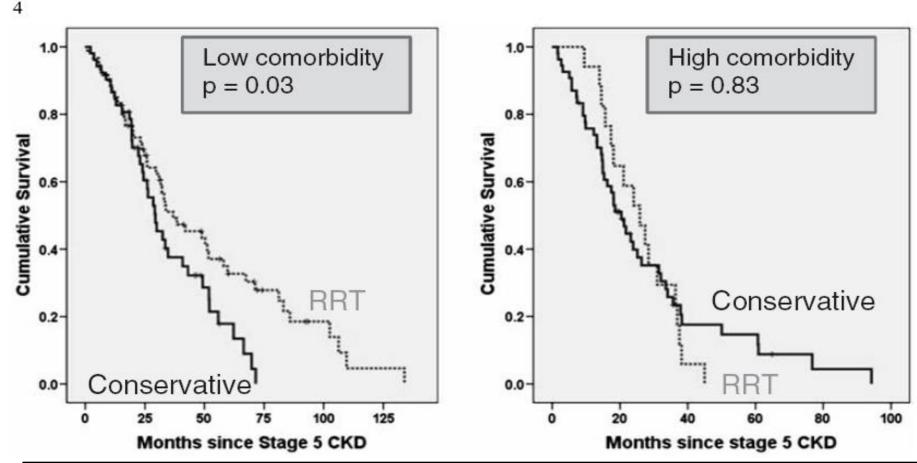


Original Article



Survival of elderly patients with stage 5 CKD: comparison of conservative management and renal replacement therapy

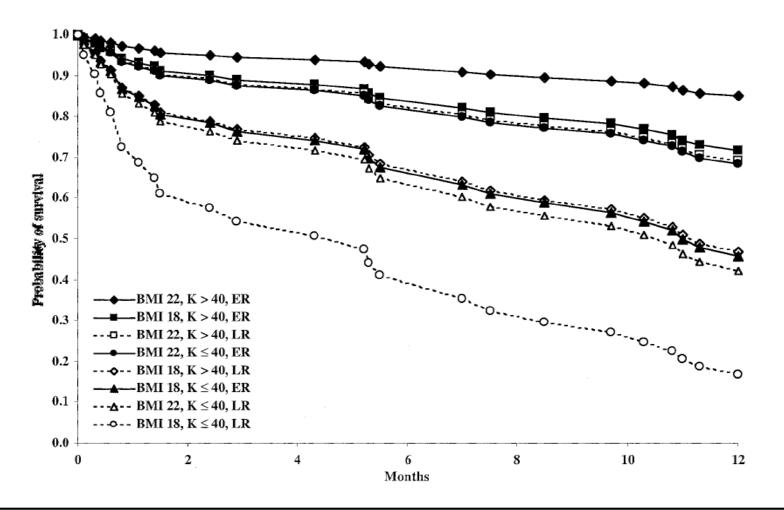
Shahid M. Chandna, Maria Da Silva-Gane, Catherine Marshall, Paul Warwicker, Roger N. Greenwood and Ken Farrington







Octogenarians Reaching End-Stage Renal Disease: Cohort Study of Decision-Making and Clinical Outcomes







Clinical Practice Guideline on management of older patients with chronic kidney disease stage 3b or higher (eGFR<45 mL/min/1.73 m²): a summary document from the European Renal Best Practice Group

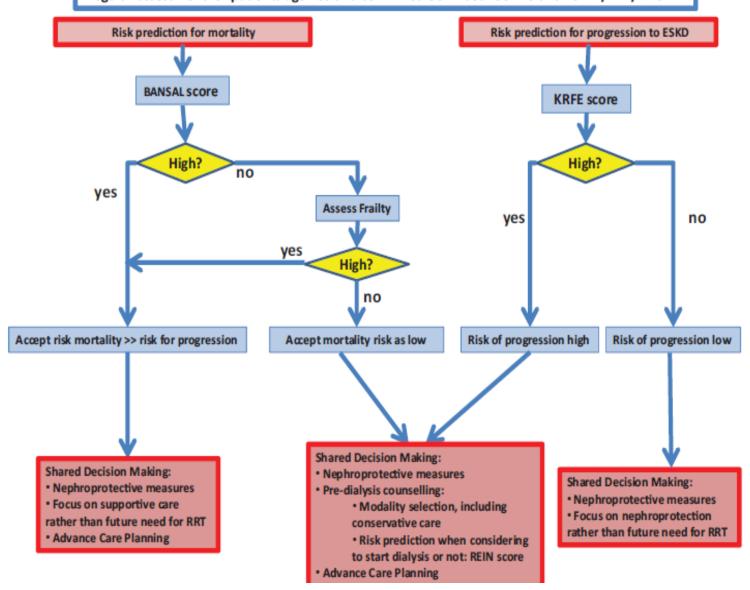
Nephrol Dial Transplant (2017) 32: 9-16

Q6: WHAT IS THE BENEFIT OF DIALYSIS IN FRAIL AND OLDER PATIENTS?

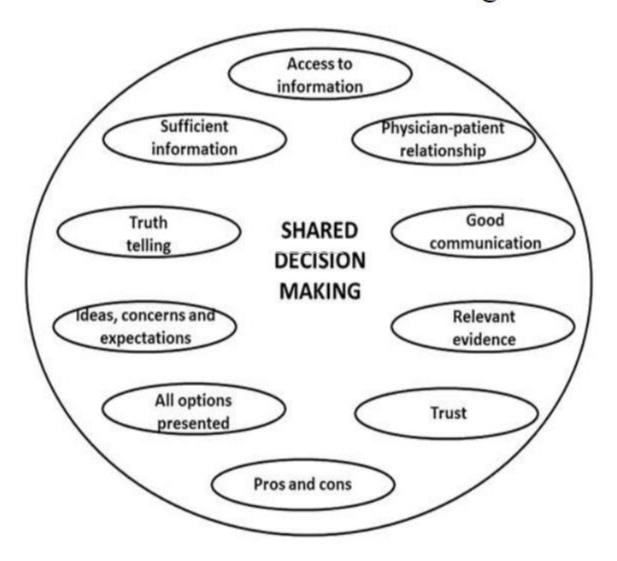
- 6.1 We recommend use of validated tools as explained in Questions 2 and 3 to project likely outcomes and help decide the appropriateness of discussing options for RRT (see Figure 1)
- 6.2 We recommend that the option for conservative management be discussed during the shared decision-making process on different management options for ESKD (1D)
- 6.3 We recommend the REIN score can be useful to stratify short term/6 month mortality risk of patients intending to start RRT (1C)



Regular assessment for patients age >65 and confirmed eGFR between 15 and 45 mL/min/1.73 m²



Dialysis or conservative care for frail older patients: ethics of shared decision-making

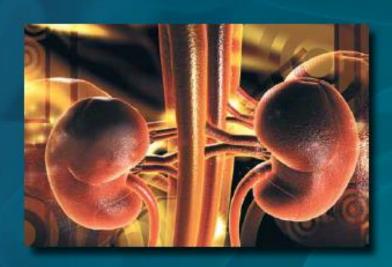


Muthalagappan S et al: Nephrol Dial Transplant 2013; 28: 2717-22

Shared Decision-Making in the Appropriate Initiation of and Withdrawal from Dialysis

Clinical Practice Guideline

Second Edition





Rockville, Maryland October 2010

Recommendation No. 1

Develop a physician-patient relationship for shared decision-making.

Recommendation No. 2

Fully inform AKI, stage 4 and 5 CKD, and ESRD patients about their diagnosis, prognosis, and all treatment options.

Recommendation No. 3

Give all patients with AKI, stage 5 CKD, or ESRD an estimate of prognosis specific to their overall condition.

Recommendation No. 4

Institute advance care planning.

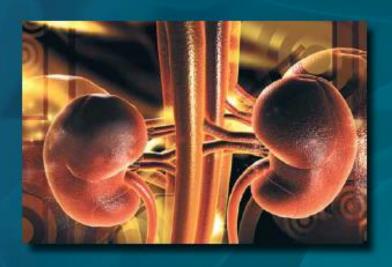
Recommendation No. 5*

If appropriate, forgo (withhold initiating or withdraw ongoing) dialysis for patients with AKI, CKD, or ESRD in certain, well-defined situations.

Shared Decision-Making in the Appropriate Initiation of and Withdrawal from Dialysis

Clinical Practice Guideline

Second Edition





Rockville, Maryland October 2010

Recommendation No. 6

Consider forgoing dialysis for AKI, CKD, or ESRD pts with very poor prognosis or for whom dialysis cannot be provided safely.

Recommendation No. 7

Consider a time-limited trial of dialysis for uncertain prognosis, or for whom a consensus cannot be reached about providing dialysis.

Recommendation No. 8

Establish a systematic due process approach for conflict resolution if there is disagreement about what decision should be made with regard to dialysis

Recommendation No. 9

To improve patient-centered outcomes, offer palliative care services and interventions to all who suffer from burdens of their disease.

Recommendation No. 10

Use a systematic approach to communicate about diagnosis, prognosis, treatment options, and goals of care.

"Conservative therapy should be discussed, not as a last resort when there is "nothing left to do," but as a clear option that might be most effective in promoting patient goals"

PALLIATIVE CARE WHO definition

Palliative care is an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual.

REASONS FOR OFFERING PALLIATIVE CARE TO ESRD PATIENTS

Lichodziejewska-Niemierko M, JN 2008; 21 (suppl 13)

- Limited survival
- Ageing population
- Increasing number of disabled patients with high comorbidity
- Frequent and long hospitalizations
- Numerous symptoms pain, fatigue, negative emotions
- Bad quality of life
- Problem of withdrawing / withholding dialysis
- Terminal care for patients and their families





Mini-Review

Dialysis in Late Life: Benefit or Burden

Sarbjit V. Jassal*† and Diane Watson* *University of Toronto, Toronto, Ontario, Canada*Clin J Am Soc Nephrol 4: 2008–2012, 2009

Nonaggressive Renal Care and End-of-Life Care

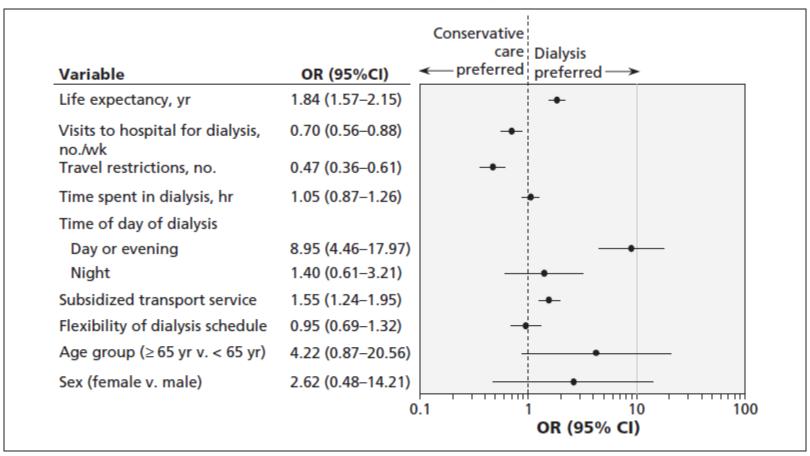
The term "nonaggressive renal care" has been deliberately chosen in preference to conservative care. It is critical that not starting or withdrawal from dialysis not be viewed as "withdrawal of care" or passive care. Rather, nonaggressive renal care is an intensive approach that prioritizes comfort. Active care is given for all physical symptoms and emotional and spiritual needs akin to the palliative cancer literature. Specific training for doctors regarding management of pain, depression, and renal-specific symptoms (e.g., myoclonic jerks, fluid accumulation, itching) is needed.





Factors influencing patient choice of dialysis versus conservative care to treat end-stage kidney disease

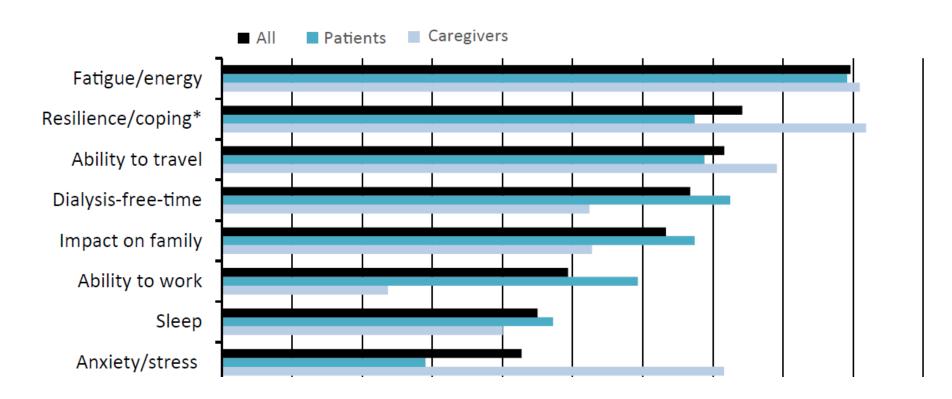
CMAJ, March 20, 2012, 184(5)



patients are willing to forgo up to 7 months of life expectancy on dialysis to reduce hospital visits and up to 15 months to be able to travel.

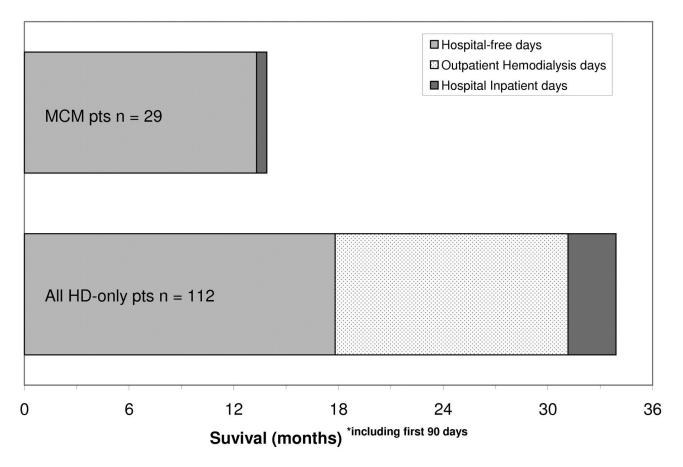
Patient and Caregiver Priorities for Outcomes in Hemodialysis: An International Nominal Group Technique Study

Am J Kidney Dis. 68(3):444-454.



what really matters to hd pts? ...patients tend to prioritize outcomes that are more relevant to their daily living and well-being....clinicians may become more patient-orientated

Distribution of Days Survived: Hospital-free Days, Outpatient Hemodialysis Days and Hospital Inpatient Days



HD pts spent 47.5% of the days they survived at or in the hospital (173 d patient/ year) *vs* MCM pts, who spent 4.3% of the days they survived at or in the hospital (16 d patient/ year).





COnsiderations of Nephrologists when SuggestIng Dialysis in Elderly patients with Renal failure (CONSIDER): a discrete choice experiment

Nephrol Dial Transplant (2014) 29: 2302-2309

- ➤ Nephrologists are also willing to forgo up to 12 months of patient survival to avoid significant decline in QoL
- Cognitive state, patient preference and QOL were the most influential factors when nephrologists are deciding whether to recommend dialysis to elderly patients
- ➤ The influence of patient preference also means that strategies to improve education regarding dialysis and supportive care that encompasses details on how treatment will affect daily life, functionality and families are urgently needed



The strange case of Mr. H. Starting dialysis at 90 years of age: clinical choices impact on ethical decisions Piccoli et al. BMC Medical Ethics (2017) 18:61

No longer manageable with conservative care, in spite of good clinical conditions;

dialysis is the next step, but its morbidity is challenging;

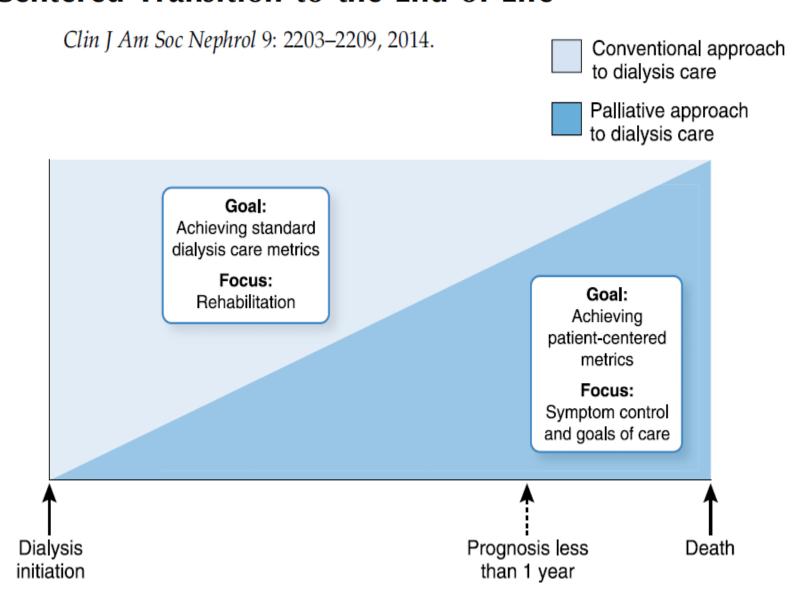
analysed according to principlism (beneficence, non-maleficence, justice and respect for autonomy);

a personalized incremental dialysis approach, one session per week, adapting the timing to the patient's daily life, can limit side effects and "dialysis shock";

this may be a tailor-made approach as an alternative to therapeutic nihilism, in very old and fragile patients.

"Dialysis should follow life, not life dialysis" Interview with Sonia Angelini, on RRT for over 30 years.

A Palliative Approach to Dialysis Care: A Patient-Centered Transition to the End of Life



A Palliative Approach to Dialysis Care: A Patient-Centered Transition to the End of Life

Clin J Am Soc Nephrol 9: 2203–2209, 2014.

Issue	Current Disease-Focused Metrics for Conventional Delivery of Dialysis Care	A Patient-Centered Palliative Approach to Dialysis Care
Vascular access	Creation and maintenance of an AV fistula	Central venous catheter acceptable
Dialysis adequacy	Target small solute clearance based on current standards (Kt/V>1.2 for HD and Kt/V>1.7 for PD), intensifying the dialysis prescription as needed to achieve targets	Lower clearance acceptable if changes in dialysi prescription increase demands inconsistent with patient preference
Cardiovascular disease	Treat CV risk factors, potentially targeting BP and dyslipidemia	Tolerate hypertension to avoid symptoms; no indication for dyslipidemia treatment
Mineral and bone disorder	Dietary counseling; binders to control hyperphosphatemia; vitamin D analogues with or without calcimimetics for secondary hyperparathyroidism	Limited restrictions; more permissive hyperphosphatemia and hyperparathyroidism
Nutrition	Encourage dietary protein intake while limiting potassium (if HD), sodium, and phosphorus intake	Reduce dietary restrictions
Laboratory monitoring	Routine monthly laboratory tests	Minimal necessary



The Jaspers lesson

(Karl Jasper The physician in the technology age)

The physician must combine the technical work ("technical therapy") with clinical experience ("biological care") and, once the scientific medicine clashes with its limit, must educate himself in the search for the sense and of the ethos ("philosophy").

Nullus medicus nisi philosophus