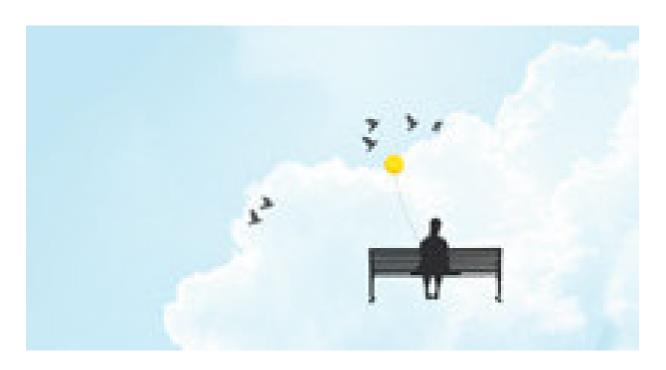


# How common is ESRF and death in children?

- 70s
- 80s
- 90s
- 2000s



#### ORIGINAL ARTICLE

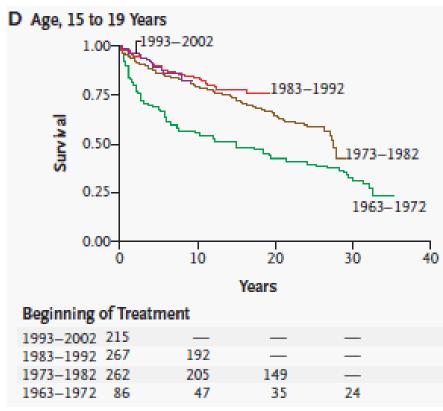
# Long-Term Survival of Children with End-Stage Renal Disease

Stephen P. McDonald, Ph.D., and Jonathan C. Craig, Ph.D., for the Australian and New Zealand Paediatric Nephrology Association



## Survival with ESRF

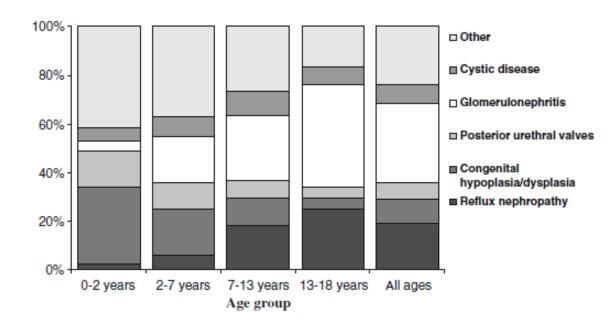




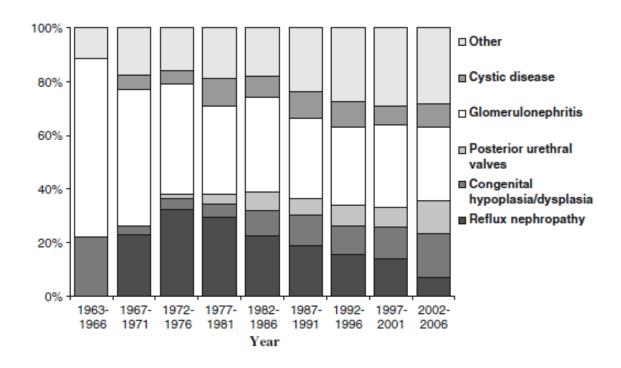
## Who

- Advance warning: Prenatal Testing
- Predictions
- Anuric neonate
- Neonate with multiple disabilities
- Syndromic but can go home
- Other Causes
  - Cancer
  - Infection
  - Accident

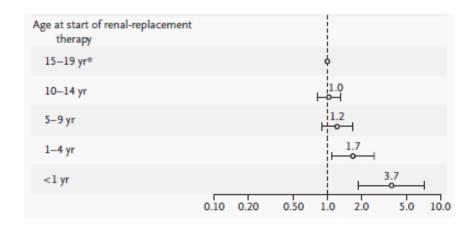
# Causes of ESRF in Children (ANZ) By Age



# Causes of ESRF in Children (ANZ) By Decade



## Relative Risk of Death with ESRF



	Hazard Ratio		
Decade therapy initiated			
1993-2002*	0		
1983-1992	1.4		
1973–1982	2.0		
1963–1972	4.2		

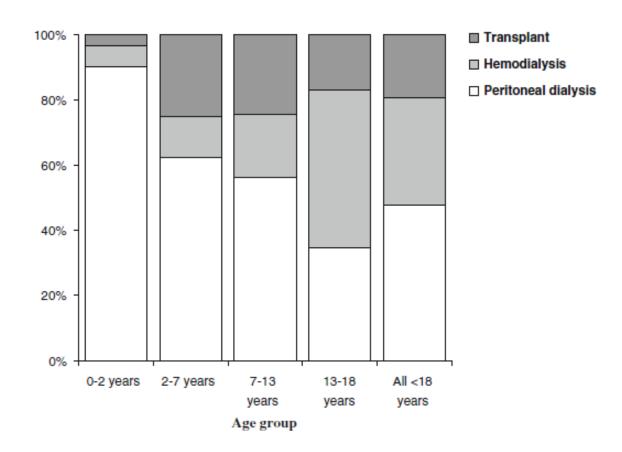


## Absolute Risk of Death With RF

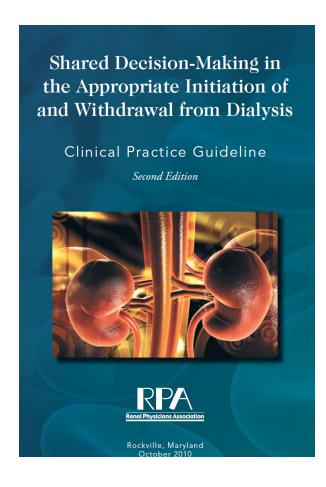
Table 3. Age-Specific Rate Ratios for Death within 10 Years among Children Who Started Renal-Replacement Therapy in Australia in the Period from 1963 to 2002, as Compared with Age-Specific Mortality among the General Australian Population.\*

Decade Therapy Started	Rate Ratio for Death			
	0-4 Yr	5–9 Yr	10–14 Yr	15–19 Yr
1963-1972	116 (37-358)	236 (98–566)	111 (64–198)	52 (36–75)
1973-1982	63 (26–151)	122 (75–199)	71 (49–104)	20 (14-28)
1983-1992	30 (16–57)	30 (13-73)	37 (23–59)	19 (13-27)
1993-2002	32 (17-59)	94 (39–226)	35 (16-78)	30 (18-49)

## Initial Treatment for RF







#### Establishing Family-centered Shared Decision-Making

#### Recommendation No. 1

Develop a patient-physician relationship that promotes family-centered shared decision-making for all pediatric patients with AKI, CKD, and ESRD.

#### Informing Patients and Parents

#### Recommendation No. 2

Fully inform patients with AKI, stage 4 or stage 5 CKD, or ESRD and their parents about the diagnosis, prognosis, and all appropriate treatment options. Inform children and adolescents in a developmentally appropriate manner, and if feasible, seek their assent about treatment decisions.

#### Recommendation No. 3

Facilitate informed decisions about dialysis for pediatric patients with AKI, CKD or ESRD, discuss prognosis, potential complications, and quality of life with the patient, parents, and/or legal guardian.

#### Resolving Conflicts about What Dialysis Decisions to Make

#### Recommendation No. 4

Establish a systematic due process approach for conflict resolution if disagreements occur about dialysis decisions. Use conflict resolution interventions when family members disagree with one another, when children disagree with their parents, when families disagree with the health

#### **Facilitating Advance Care Planning**

#### Recommendation No. 5

Institute family-centered advance care planning for children and adolescents with AKI, CKD, and ESRD. The plan should establish treatment goals based on a child's medical condition and prognosis.

#### Making a Decision to Not Initiate or to Discontinue Dialysis

#### Recommendation No. 6

Forgo dialysis if initiating or continuing dialysis is deemed to be harmful, of no benefit, or merely prolongs a child's dying process. The decision to forgo dialysis must be made in consultation with the child's parents. Give children and adolescents the opportunity to participate in the decision to forgo dialysis to the extent that their developmental abilities and health status allow.

#### Recommendation No. 7

Consider forgoing dialysis in a patient with a terminal illness whose longterm prognosis is poor if the patient and the family are in agreement with the physician that dialysis would not be of benefit or the burdens would outweigh the benefit.

#### Recommendation No. 8

Consider the use of a time-limited trial of dialysis in neonates, infants, children, and adolescents with AKI or ESRD to allow for the assessment of extent of recovery from an underlying disorder.

#### Providing Effective Palliative Care

#### Recommendation No. 9

Develop a palliative care plan for all pediatric patients with ESRD from the time of diagnosis and for children with AKI who forgo dialysis. The development of a palliative care plan is a continuation of the process of advance care planning and should be family-centered.

## **Burden of Disease**



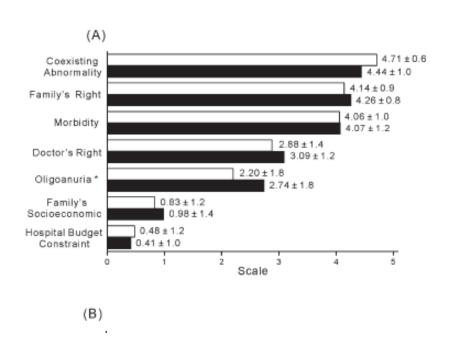
Dialysis

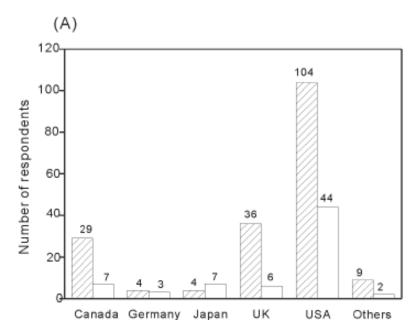
Transplantation



#### ATTITUDES OF CAREGIVERS TO MANAGEMENT OF END-STAGE RENAL DISEASE IN INFANTS

Jun Chuan Teh, Michelle L. Frieling, Julianna L. Sienna, and Denis F. Geary

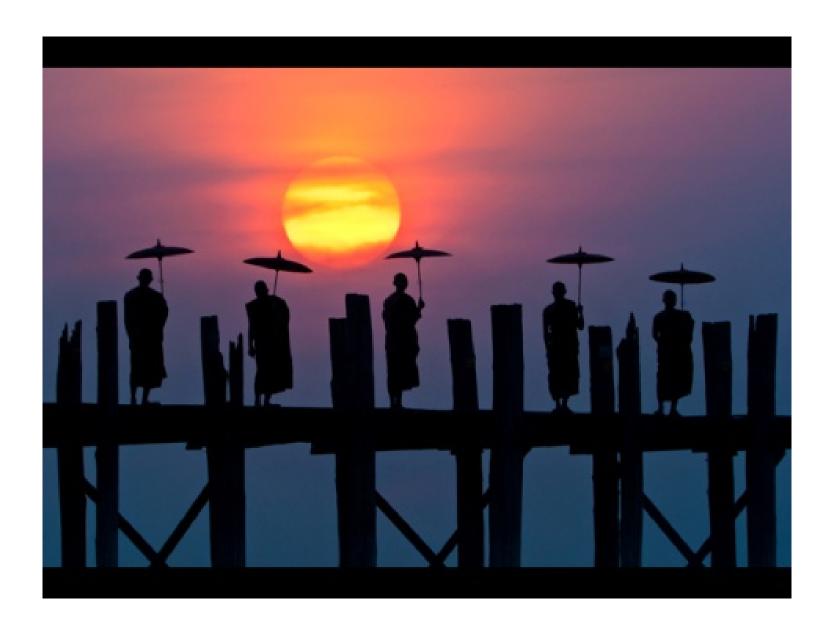




Usually Acceptable
Never Acceptable

## At Westmead

- Discussion about renal failure
- Therapies: information risk
- Role of the parent in representing the child
- Often second opinion
- Often a gradual decision making process
- Providing information
- Getting to know the family
- Helping parents to make a decision together
- Empowering the parents
- Aiming to be culturally aware
- Active decision not to proceed with care





## Framework for Discussion

- Parents central
- Child is informed
- Etiquette for dying children
- Active Listening
- Areas of commonality
- Shared values of parents
- Strengths of the child



### **Team**

- A variety of people who play a role:
- Religious
- Social Work
- Family
- Community
- Nursing
- Paediatrician/GP



# If Dialysis is not Taken Up

- In children receiving palliative treatment
- What does the family want.
- Home
- Hospital
- Bear Cottage
- Involvement of palliative care team.



## How to plan

- Need for a plan (written)
- Death expected but sudden
- Death unexpected ICU
- Death outside the hospital
  - Transplants risk taking behaviour.
  - Malignancy
  - Infection



## Follow up

- Family
  - -PM
  - Genetic
  - ICU review
- Team









