

QUALITY OF LIFE AND DISEASE ACCEPTANCE IN ADULT PATIENTS WITH ESRD TREATED WITH RRT SINCE CHILDHOOD



Dominika Adamczuk, Maria Roszkowska -Blaim

**Department of Pediatric Nephrology
Medical University of Warsaw, Warsaw, Poland**

„Life satisfaction is an overall assessment of feelings and attitudes about one’s life at a particular point in time. It is one of three major indicators of well – being: life satisfaction, positive affect, negative affect”

*Diener E., J Pers Soc Psychol,
Vol 47(5), Nov 1984, 1105-1117*

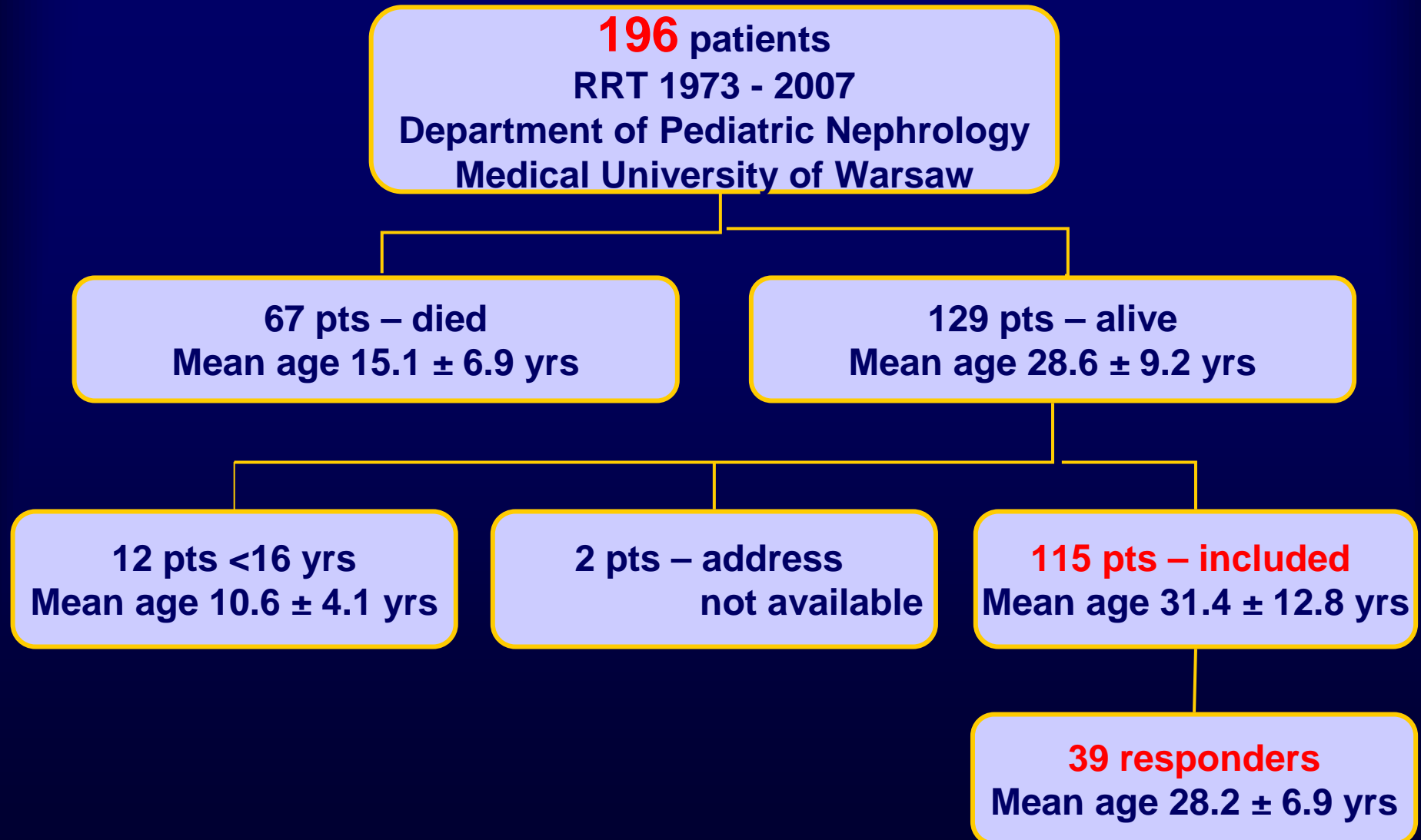
„General and health – related satisfaction with life of adult patients with ESRD was reduced compared to that of the general population.”

*Rosenkranz J. et al.
Pediatr Nephrol (2005)20: 1288-1294*

Aim

To assess the acceptance of chronic disease and satisfaction with life in patients with ESRD since childhood

Patients



Study design

Retrospective study

Cross – sectional study

Self – constructed
sociodemographic
questionnaire

AIS
Acceptance of Illness Scale

SWLS
Satisfaction with Life Scale

Retrospective part

- **age at the diagnosis of kidney disease**
- **etiology of ESRD**
- **age at the initiation of RRT**
- **duration of RRT**
- **RRT modalities**

Self – constructed questionnaire

- *sociodemographic data* •

- employment
- marital status
- offspring
- actual treatment
- methods of RRT after transfer to adult units

AIS - Acceptance of Illness Scale

B. J. Felton, polish adaptation – Z. Juczyński

8 statements

- **Difficulties in adjusting to the limitations of illness**
- **Inability to do what patient would like to do**
- **A feeling of being unnecessary**
- **Dependency on others**
- **A feeling of being a burden for the family and friends**
- **Reduced self – esteem**
- **Lack of independence**
- **Feeling of embarrassing people accompanying the patient due to his/her disease**

AIS scores

score 1 - Complete agreement = **poor disease acceptance**

score 5 - Complete disagreement = **good disease acceptance**

TOTAL SCORES: 8 – 40 points

**AIS
scores**

3 groups = 3 clusters

(k – means method)

SWLS (Satisfacion With Life Scale)

E. Diener et al./polish adapt. Z.Juczyński

- 1. In most ways my life is close to my ideal**
- 2. The conditions of my life are excellent**
- 3. I am satisfied with my life**
- 4. So far I have gotten the important things I want in my life**
- 5. If I could live my life over, I would change almost nothing**

SWLS score

Total Scores: 5 – 35 points

1 = strongly disagree

2 = disagree

3 = slightly disagree

4 = neither agree nor disagree

5 = slightly agree

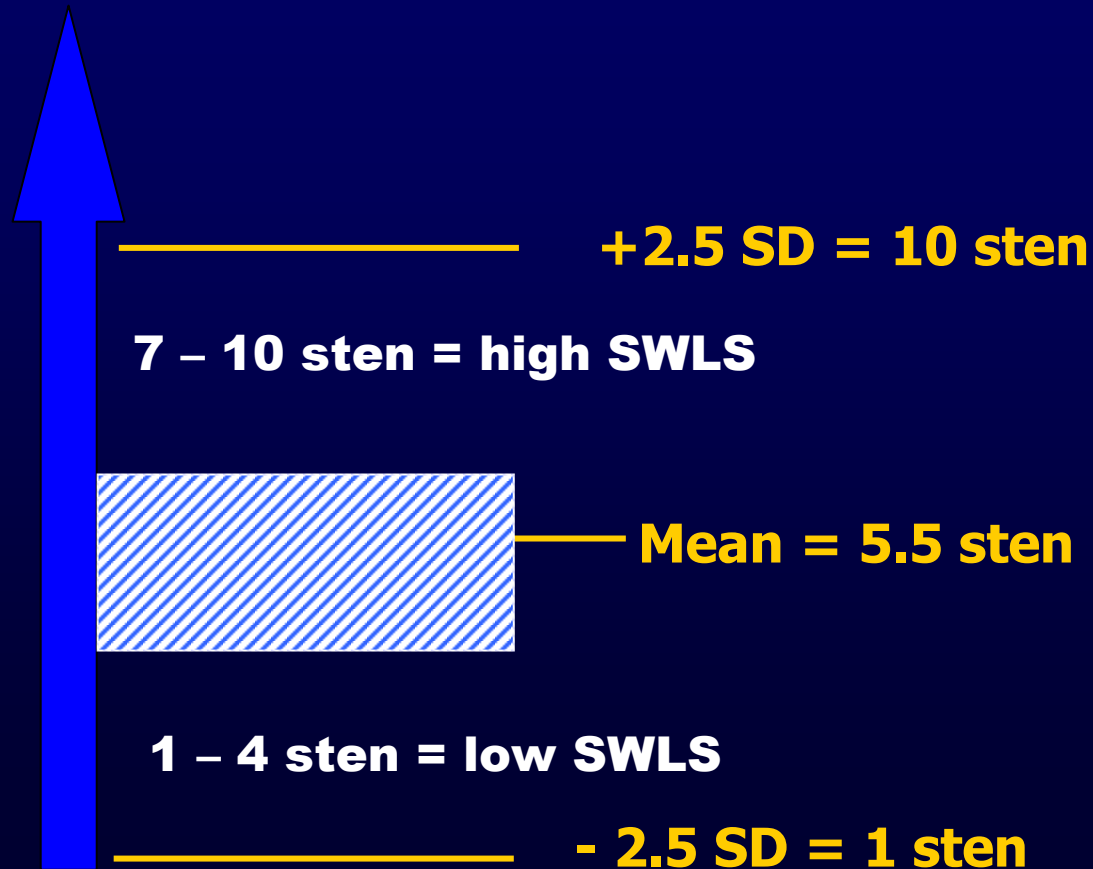
6 = agree

7 = strongly agree

SWLS – sten scale

„Standard ten” scale = sten scale

1 - 10 (SD: -2.5 to +2.5)



Statistical analysis

- ANOVA and Kruskal – Wallis tests
- Student *t* test
- linear regression analysis
- $p < 0.05$

Permission – Bioethics Committee of the Medical University of Warsaw

Results

39 responders (34%)

- Age 28.2 ± 6.9 yrs
- Illness duration 21.8 ± 7.8 yrs
- Time of RRT 16.4 ± 6.75 yrs
- Age at start of RRT 11.7 ± 4.0 yrs

n=19 ♀

- Age 26.4 ± 6.3 yrs
- Illness duration 19.2 ± 7.7 yrs
- Age at start of RRT 11.3 ± 4.4 yrs
- Time of RRT 15.1 ± 6.4 yrs

n=20 ♂



- Age 28.9 ± 6.6 years
- Illness duration 23.3 ± 8.1
- Time of RRT 16.8 ± 6.6
- Age at start of RRT 12.0 ± 4.6

NS



Causes of ESRD

I	Glomerulonephritis	13 (33.3%)
II	Pyelonephritis	11 (28.2%)
III	Polycystic kidney disease	1 (2.5%)
IV	Hypoplastic/dysplastic kidneys	8 (20.5%)
V	Hemolytic uremic syndrome	1 (2.5%)
VI	Cystinosis	1 (2.5%)
VII	Others	3 (8.0%)
	(1- amyloidosis, 1 – interstitial nephritis, 1- Wegener granulomatosis)	
VIII	Unknown	1 (2.5%)

Characteristics of patients (1)

	TOTAL						
	n=39	(%)	n=19	(%)	n=20	(%)	
FIRST RRT							
HD	26	67	12	63	14	70	
PD	13	33	7	37	6	30	
NUMBER OF TRANSPLANTATIONS							
1	37	24	61.6	14	35,9	10	25,6
2		11	28.2	3	15,8	8	40
3		2	5.1	1	5,3	1	5
ACTUAL RRT							
Kidney tx	31	79.5	13	68,4	18	90	
HD	7	17.9	5	26,3	2	10	
Recovery of kidney function	1	2.6	1	5.3	-	-	

Characteristics of patients (2)

	TOTAL					
	n=39	(%)	n=19	(%)	n=20	(%)
EDUCATIONAL LEVEL						
High	7	18	6	32	1	5
Middle	25	64	11	58	14	70
Low	7	18	2	10	5	25
SOURCE OF INCOME						
Active work	20	51	9	47	11	55
Social support	15	39	5	26	10	50
FAMILY						
Married	7	18	7	37	0	0
Children	2	5	2	11	0	0

AIS – Acceptance of Illness Scale



AIS clusters	n	AIS score	Actual age (yrs)	Age at onset of CKD (yrs)	Duration of CKD (yrs)	Duration of RRT (yrs)
Mean ± SD						
1	11	22.1±3.7	30.4±7.2	4.1±4.6	26.1±7.6	18.1±6.2
2	7	24.6±5.9	26.3±6.6	4.7±4.0	21.6±6.9	14.7±5.4
3	21	36.1±2.7	27.7±7.0	7.4±5.5	19.3±7.5	16.1±7.5
Total	39	30.1±7.5	28.2±7.0	5.9±5.1	21.6±7.8	16.4±6.8
F test		61.9 p<0.001	0.86 NS	1.79 NS	2.4 p=0.07	0.58 NS

SWLS – Satisfaction with Life Scale

SWLS sten scale	N (%)	SWLS score	Actual age (yrs) ²	Age at onset of CKD (yrs) ²	Duration of CKD (yrs) ²	Age at start of RRT (yrs) ²	Duration of RRT (yrs) ¹
1 – 4	19 (49)	14.3 ±2.7	29.6 ±8.3	5.7 ±4.5	22.9 ±8.7	11.3 ±3.8	18.3 ±7.9
5 – 6	8 (20)	20.1 ±1.8	29.0 ±6.0	5.8 ±6.1	22.9 ±7.3	11.5 ±5.4	17.6 ±4.2
7 – 10	12 (31)	25.1 ±5.4	25.4 ±4.3	6.5 ±5.8	18.8 ±6.4	12.5 ±3.5	12.7 ±4.6
total	39	18.8 ±5.9	28.2 ±6.9	5.9 ±5.1	21.6 ±7.8	11.7 ±4.0	11.7 ±4.0

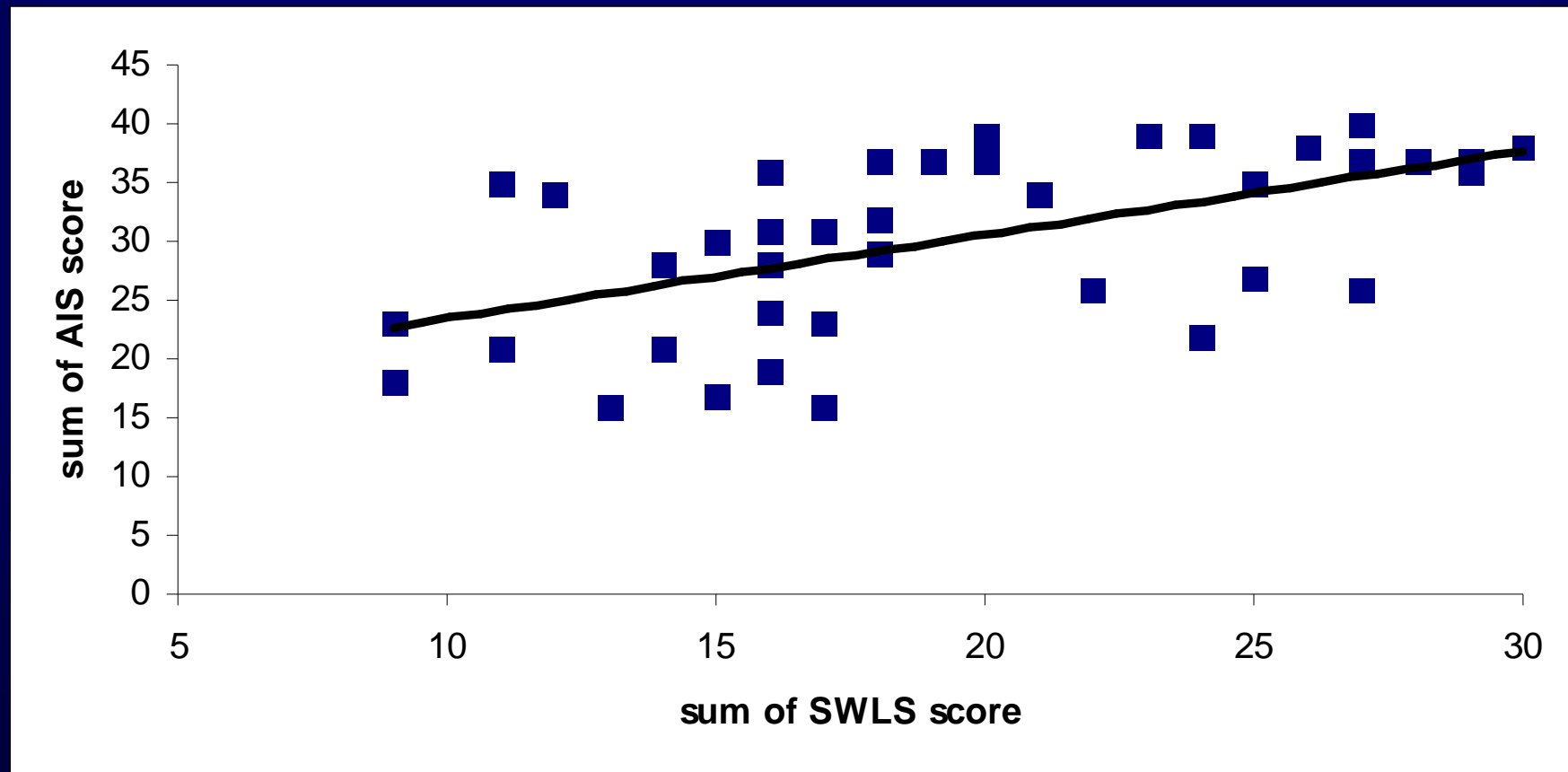
Kruskal – Wallis test: ¹ – p<0.05; ² – NS

General satisfaction with life measured by SWLS compared with general population

Statements	Total n = 39	General population ³	 n=19	 n=20
▪ In most ways my life is close to my ideal	3.4 ±1.7	3.7 ±1.4	3.42 ±1.9	3.4 ±1.6
▪ The conditions of my life are excellent	4.18 ±1.5	3.9 ±1.4	3.73 ¹ ±0.3	4.6 ¹ ±1.4
▪ I am satisfied with my life	4.74 ±1.5	5.14 ±1.2	4.68 ±1.6	4.8 ±1.4
▪ So far I have gotten the important things I want in life	3.66 ±1.6	3.9 ±1.5	4.05 ±1.7	3.3 ±1,6
▪ If I could live my life over, I would change almost nothing	3.33 ±1.9	3.8 ±1.6	3.9 ² ±1.8	2.8 ² ±1.9

¹p = 0,07; ²p<0,05; ³ – Juczynski Z., Narzędzia pomiaru w promocji i psychologii zdrowia, ²⁰Warsaw 2001, s. 134-138

SWLS vs AIS scores



Linear regression analysis: $r = 0,56$ Test F 17,05 $p < 0,0001$
SWLS score = $6,0 + 0,443 \times$ AIS score

Conclusions

- ✓ **Disease acceptance and satisfaction with life in adult patients treated with RRT since childhood are affected by the duration of RRT.**
- ✓ **Disease acceptance significantly correlates with general satisfaction with life.**

Kiitos



Thank you



Dziękuję