

CHANGES IN QUALITY OF LIFE OF PICU SURVIVORS

**F Cunha¹, A Marques², L Almeida Santos¹,
F Neves³, C Tavares⁴, A Costa Pereira⁴, DAIP-CIP***

1 - Unidade de Cuidados Intensivos Pediátricos, H. S. João, Porto, Portugal

2 - Unidade de Cuidados Intensivos Pediátricos, H. D. Estefânia, Lisboa, Portugal

3 -Unidade de Cuidados Intensivos Pediátricos, H. Pediátrico Coimbra, Coimbra, Portugal

4 -Serviço Bioestatística e Informática Médica, Faculdade de Medicina da Universidade do Porto, Portugal

*** Development and assessment of optimal risk scores for outcomes in paediatric intensive care (<http://daipcip.med.up.pt>)**

INTRODUCTION

- **Progressive decrease PICU mortality rates**
- **More attention directed to evaluate survivors**
 - ◆ **Morbidity**
 - ◆ **Health related quality of life (HRQOL)**

OBJECTIVES

- ↘ Evaluate changes in HRQOL
- ↘ Children submitted to PIC
- ↘ 3 Portuguese PICUs
 - ◆ H. Pediátrico Coimbra (Coimbra)
 - ◆ H. D. Estefânia (Lisbon)
 - ◆ H. S. João (Oporto)

METHODS - I

- **Admissions from 01/May/2002 – 30/Apr/2004, aged ≥ 6 years**
- **HRQOL questionnaire – HUI3**
 - ◆ 40 items
 - ◆ 8 attributes (Vision, Hearing, Speech, Ambulation, Dexterity, Emotion, Cognition, Pain)
 - ◆ varies between -0.36 and 1.00
 - ◆ Health status “previous week”

METHODS - II

- **Proxy interview:**
 - ◆ **At admission by medical staff**
 - ◆ **At 6 months by phone (research assistant)**

- **Changes between questionnaires**
 - ◆ **>0.05 - “Improved”,**
 - ◆ **$[-0.05 \text{ and } 0.05]$ - “No change”**
 - ◆ **<-0.05 - “Worsened”**

RESULTS - I

↘ Number of admissions

Total: 1279

- ◆ **Excluded: 1004**
 - Age limits: 841
 - Death in PICU: 44
 - Other reasons: 119

↘ Study cases

Total: 275

- ◆ **Excluded: 107**
 - Less 6 months follow-up: 62
 - Death after discharge PICU: 1
 - Other reasons : 44

n = 168 (79% eligible cases)

RESULTS - II

- ↘ Gender: Male - 45%
- ↘ Age: median - 131 months [72-206]

- ↘ HUI3 global median
 - At admission – 0,85
 - At 6 months – 0,79

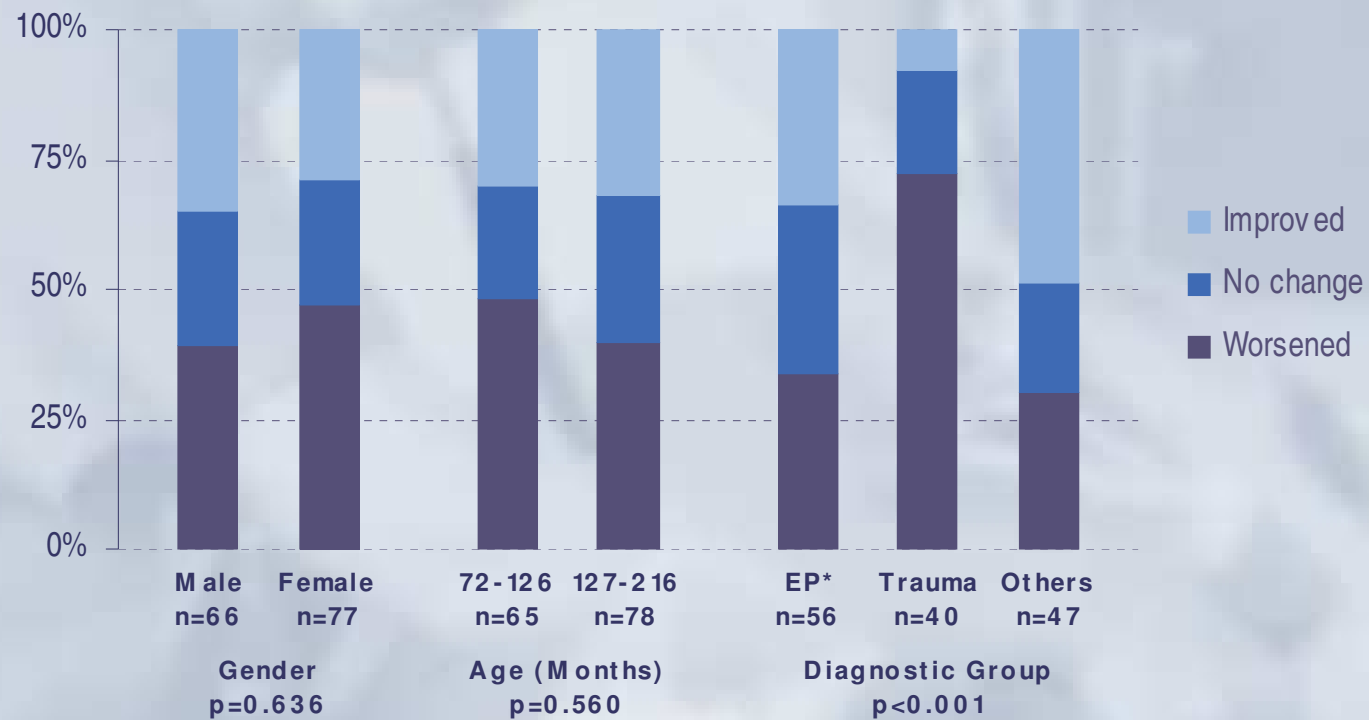
(p=0.106)*

*Wilcoxon Test

Attributes and Global distribution

	Improved (%)	No change (%)	Worsened (%)
Vision (n=159)	3	88	9
Hearing (n=158)	0	98	2
Speech (n=166)	3	86	11
Ambulation (n=166)	9	84	7
Dexterity (n=167)	6	84	10
Emotion (n=160)	23	45	32
Cogniton (n=161)	14	51	35
Pain (n=165)	28	53	19
Global (n=143)	31	25	44

RESULTS



Pearson Qui-Square Test
(*) EP - Elective Postoperative

Attributes vs Diagnostic group

	Elective postoperative (%)	Trauma (%)	Others (%)	<i>p</i> (*)
Emotion				0.003
Worsened	25	44	29	
No change	51	51	35	
Improved	24	5	36	
Cognition				0.013
Worsened	27	56	27	
No change	58	35	55	
Improved	15	9	18	
Pain				<0.001
Worsened	20	24	13	
No change	55	70	37	
Improved	25	6	50	

(*) – Kruskal-Wallis test

CONCLUSIONS

- **Only \cong 20% PICU population eligible**
- **No differences HUI3 global: admission vs 6 months**
- **Changes more frequent in attributes: Pain, Cognition and Emotion**
- **Most children admitted to PICU maintain or improve their HRQOL**