

The Cardiac Rehabilitation & Quality of Life Study

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Funded by the Irish Heart Foundation's
Noel Hickey Research Bursary 2010



Aim of the study

1. Measure the self reported quality of life (QoL) of cardiac surgery patients before and after surgery using the SF36.
2. Compare the quality of life of those who complete cardiac rehabilitation (CR), with those who where invited but chose not to attend.



SF36 survey

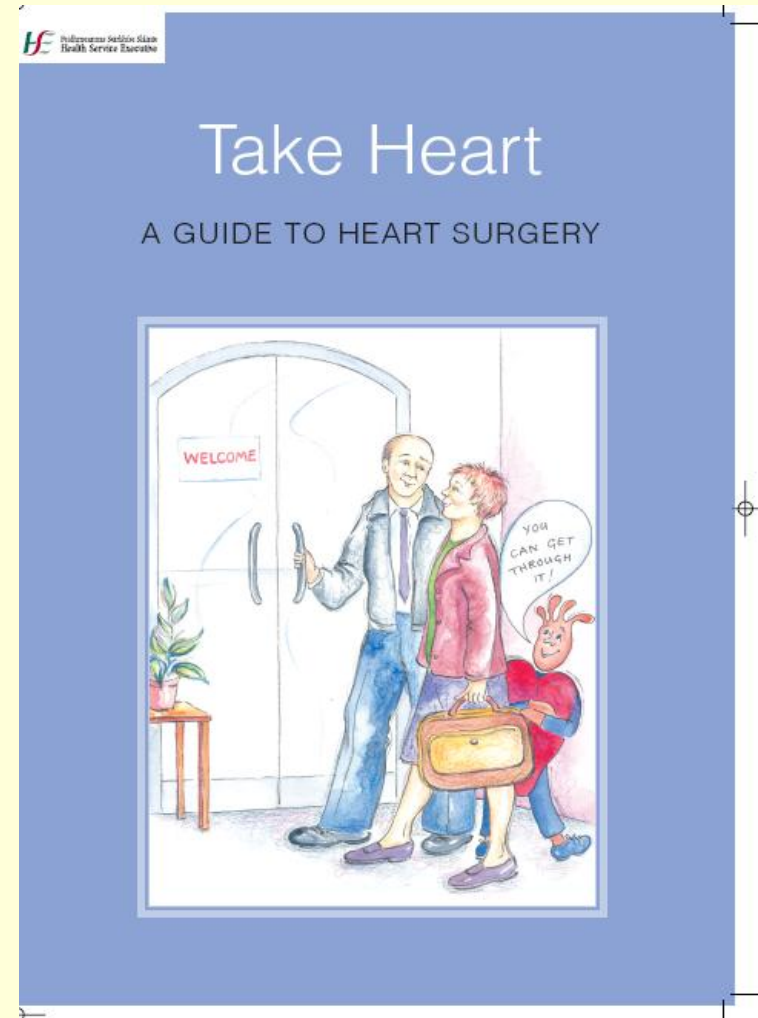
Provides 8 summary scales

1. Physical functioning
2. Role-Physical
3. Bodily Pain
4. General Health
5. Vitality
6. Social Functioning
7. Role Emotional
8. Mental Health



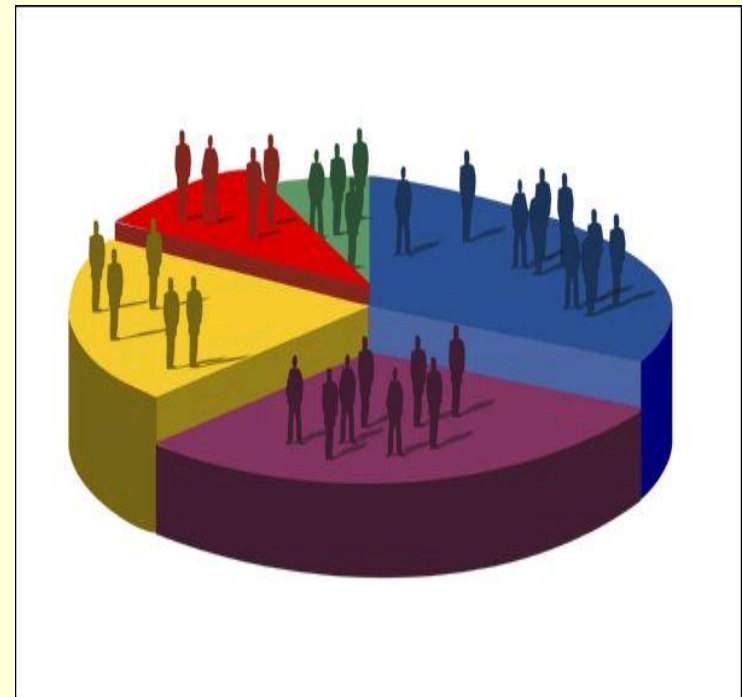
Study Population

- Ethical approval was given by CUH to approach elective cardiac surgery patients attending CUH in 2008-2009.
- SF36 Q1 pre-op questionnaire (n = 250)
- Consented & completed Q1 (n=127)
- **SF36 Q2 post-op (n= 88)**
- Patients lost to follow up (n=39)

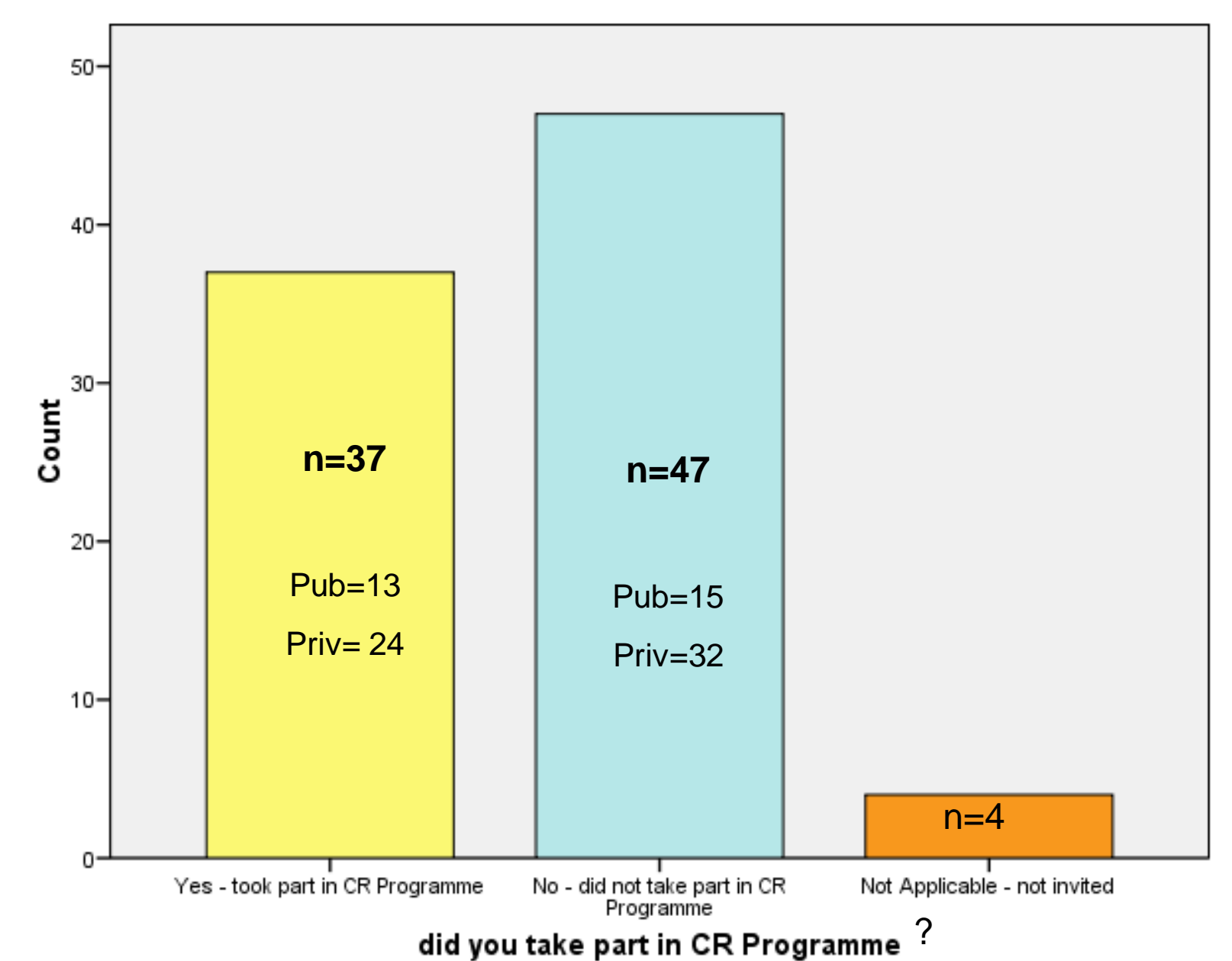


Demographics n=88

- 82% Men
- 70% in 60-79 age group
- 71% married
- 32% Public V 68% Private
- 34% Working v 42% retired
- 52% Social welfare payments
- 95% Non-smokers



Participation in Cardiac Rehab (phase 3) Programme



Timing of invitation and participation

How long after surgery invited to CR?	Yes - took part in CR	No - did not take part in CR
0-2 months post op	4	17
2-4 months post op	16	12
4-6 months post op	12	3
6 + months post op	5	2

•Public & Private patients showed no difference in length of time for invitation to CR

Research Findings

SF36 (n=88)	Pre Op	Post Op	P value
Physical Functioning	59	80	<0.001
Role-Physical	20	67	<0.001
Bodily Pain	63	87	<0.001
General Health	65	79	0.001
Vitality	51	71	<0.001
Social Functioning	68	90	<0.001
Role-Emotional	63	90	0.025
Mental Health	75	86	<0.001

Average Irish Quality of Life Scores

<u>Quality of Life Variable</u>	<u>Pre Op</u>	<u>Post Op</u>	<u>Irish Norms</u>
Physical Functioning	59	80	83.20
Role-Physical	20	67	80.50
Bodily Pain	63	87	77.57
General Health	65	79	73.82
Vitality	51	71	64.77
Social Functioning	68	90	84.08
Role-Emotional	63	90	83.22
Mental Health	75	86	77.84

No significant difference in QoL scores between CR attendees and non-attendees

	Statistical Test	P value
Physical Functioning	Mann-Whitney	0.687
Role-Physical	Mann-Whitney	0.337
Bodily Pain	Independent T-test	0.99
General Health	Independent T-test	0.844
Vitality	Mann-Whitney	0.377
Social Functioning	Mann-Whitney	0.892
Role Emotional	Mann-Whitney	0.345
Mental Health	Independent T-test	0.931

- **Significance requires $p < 0.05$**

Why these results?



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Reasons for non attendance at CR programme

Reason	N	%
Returned to Work	14	28
Couldn't Get Time Off	1	2
Distance to Travel	9	18
No Transport	4	8
Timing did not Suit	9	18
Family Commitments	2	4
I Feel Active Enough	23	46
Prospect of Group Sessions	5	10
Not Interested	5	10
Other Illness	2	4

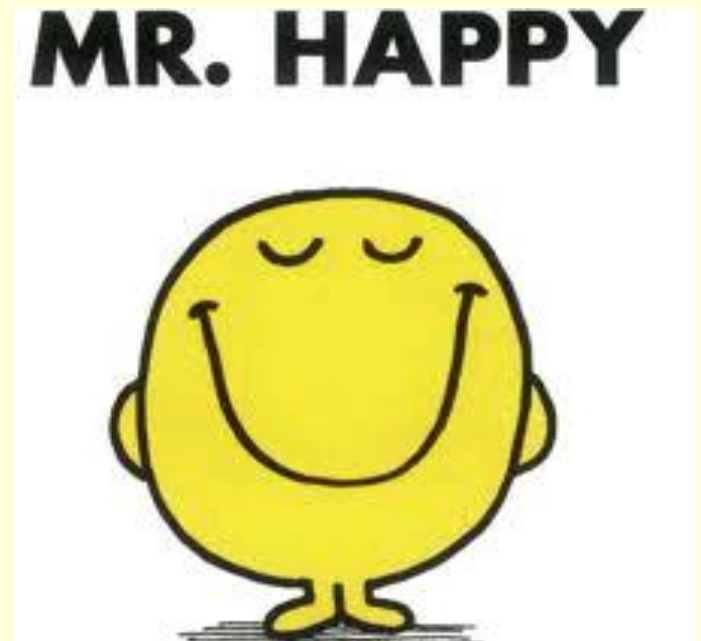
Confidence in making lifestyle changes & CR attendance

	Very Confident	Moderately Confident	Little Confidence
CR Yes	18 42.9%	19 42.2%	0 0%
CR No	24 57.1%	26 57.8%	1 100%

No relationship was found between the patients confidence and whether they took part in the CR programme ($P=0.952$). Chi-square test

Most useful post op recovery resources

1. Consultants' advice
2. GP advice
3. The *Take Heart* Book



Study limitations



- ✓ Small sample size
- ✓ Relies on self report data
- ✓ Biased in favor of men
- ✓ QoL is complex and unique to each person.
- ✓ SF36 provides useful indicators but not the whole picture

Implications for practice

- Is phase 3 in its current form the way forward?
- Look at the structure and timing of our programmes. Resources.



Acknowledgments to CR coordinators

- Valerie O'Sullivan - CUH
- Valerie Collinder - SIVUH
- Ann Deasy - MUH
- Kay Karim - Tralee
- Mairead Lehane -Mallow
- Cait Morrissey - Waterford
- Mary O'Connor and Louise Crowley -Bon Secours Cork
- Declan Spellman - South Tipperary General hospital

Thanks also to Ms Noelette Maguire, CUH for help with patient details.

Thank you for your attention!



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