

Outcome of physiotherapy as part of a multidisciplinary rehabilitation in an unselected polio population.

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PTU Rehabilitation Centre

The Danish Society of Polio- and Accident Victims



The Multidisciplinary team in PTU

- Doctors
- Physical therapists
- Technical aids therapists
- Social workers
- Physiotherapy assistants
- Psychologists
- Dietician
- Orthopedic technician



Aim of the study

First aim

- To describe the problems of patients with late effects of polio who were referred to the Rehabilitation Centre for the first time

Second aim

- To describe outcome of physiotherapy as part of a multidisciplinary rehabilitation and the results of the intervention after 3 months and at one year follow up



Methods

Design

- Prospective uncontrolled intervention study

Included patients

- 50 polio survivors who contacted our clinic for the first time were included and they were tested three times:
 - 1. test – Baseline – before treatment
 - 2. test – 3 months after start of treatment (47)
 - 3. test - 15 months after start of treatment (46)



Outcome measures

3 Questionnaires

- Short Form-36
- Multidimensional Fatigue Inventory-20
- Polio questionnaire

4 Functional Capacity Tests

- 6 min Walk Test
- Timed Stands Test
- Functional Reach test
- Stair Climbing Test



Registration of individual physiotherapy treatments



Description of the 50 participants

- **Gender** 30 Women 20 Men
- **Age** 58 years (24-82 years)
- **Native country** 40 Denmark
10 other countries
- **Occupation** 23 still working
27 retired
- **Year of polio onset** Between 1930-1985,
20 persons in 1952/53
- **BMI** 28 (20-60)
 - 18 persons – normal weight
 - 20 persons – obese
 - 11 persons – very obese



Major problems

- Outdoor walking
- Climbing stairs
- Fatigue
- Pain
- Anxiety for future
- Acceptance of new situation

Low values in:

- All functional capacity tests
- The first 5 dimensions in SF-36
- More fatigue



→ **The common treatment for polio patients at PTU**

- Exercising
- Reduction of pain
- Energy management
- Technical aids
- Counseling
- Polio Education
- Specialists



→ **Individual treatments used in the study**

Individual exercise	37 patients
Massage	36 patients
Stretching	33 patients
Pain treatment	21 patients
Home exercise programme	33 patients





Fitness centre - 42 patients





Group gymnastics - 2 patients





Warm water exercising - 22 patients



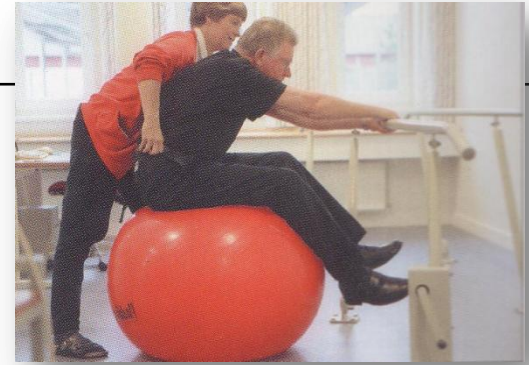


Polio education programme - 35 persons





Number of individual treatments



	Mean	Min.	Max.
Physiotherapy treatments	15 times	3 times	41 times
Number of weeks with physiotherapy	14 weeks	3 weeks	39 weeks



Continued exercising

	After finishing physiotherapy	After 15 months
Group gymnastics	2	0
Fitness centre	42	22
Warm water	22	12
Exercising elsewhere PTU		22
No exercise		8

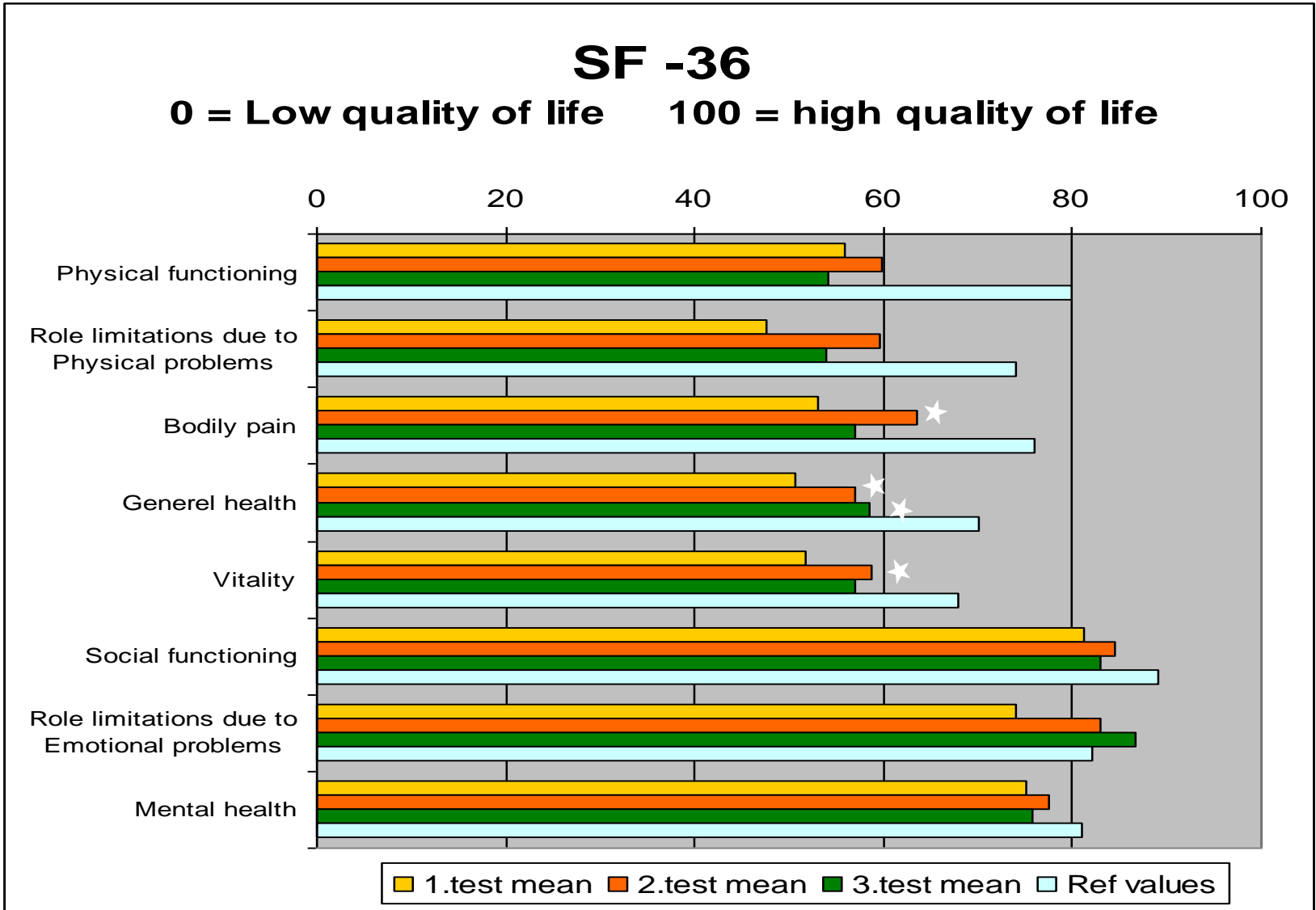


Contact with other professionals



Social worker	15
Psychologist	3
Technical aids therapist	20
Doctor – in addition to the first consultation	12
Dietician	8
Orthopedic technician	25

Results

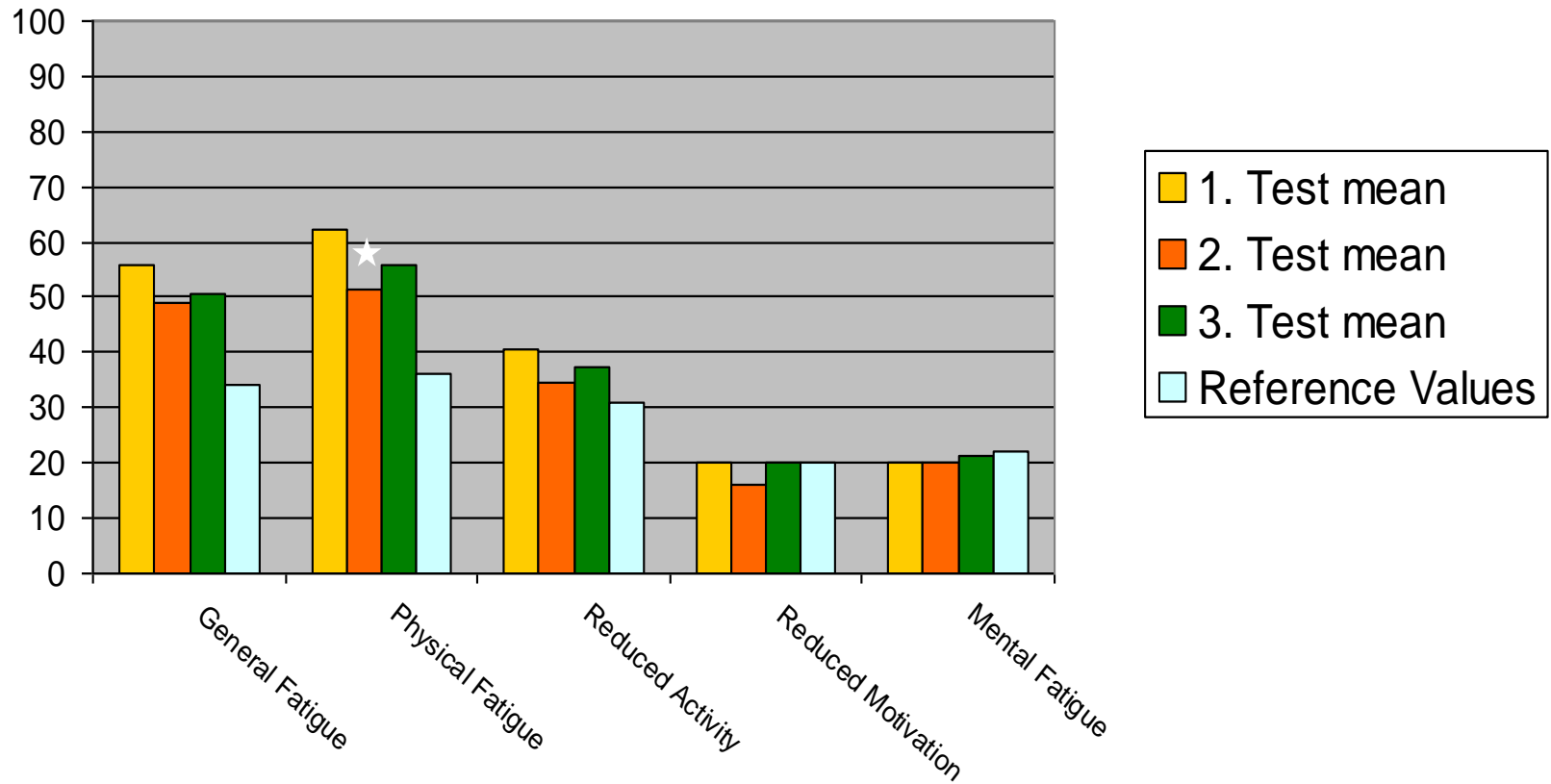


Results



MFI - 20 Fatigue

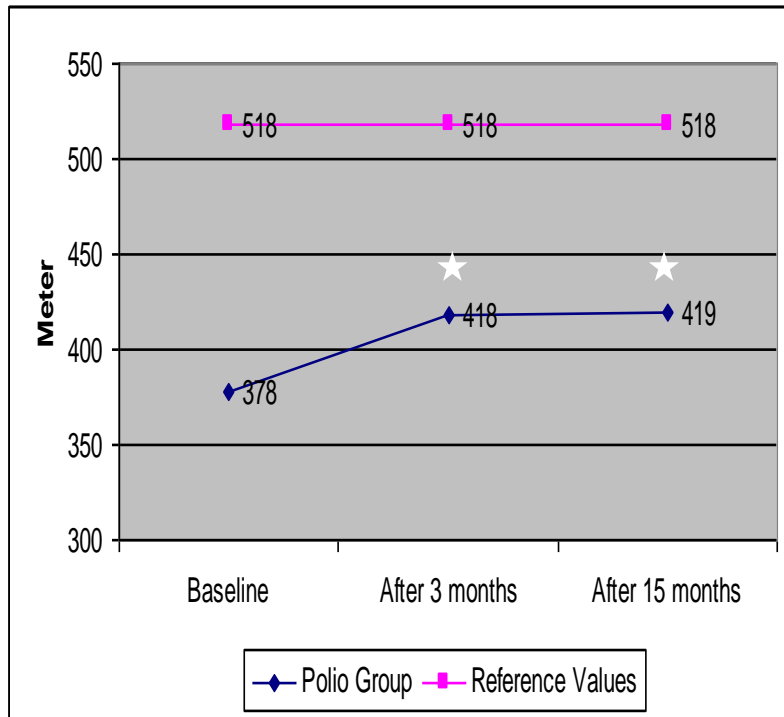
0 = Not tired 100 = Very tired



Results



6 min. Walk Test



Results

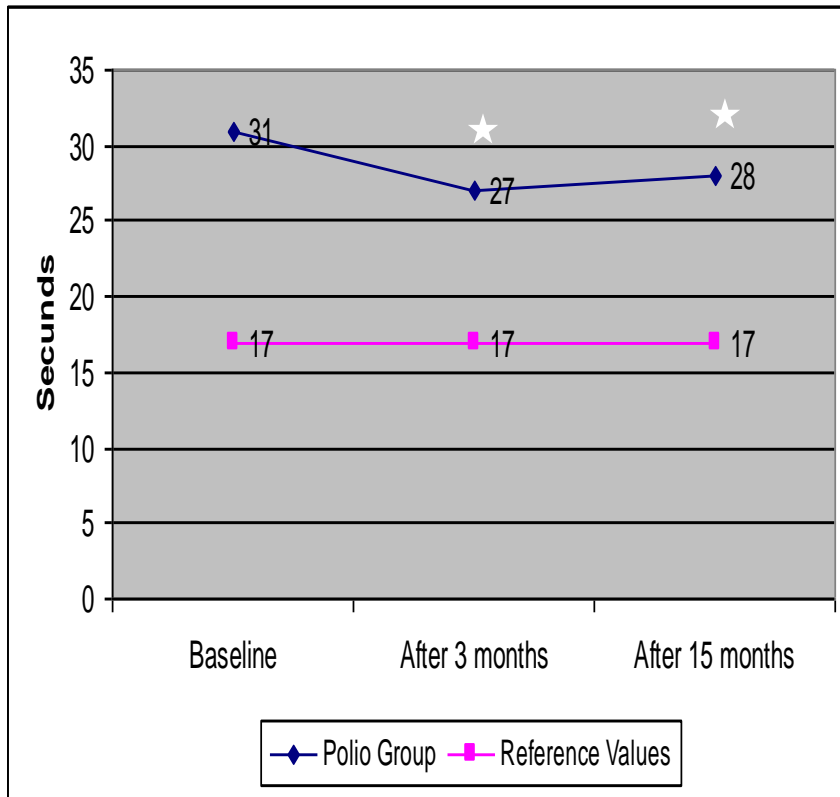
Technical aids - 12 persons



Results



Timed Stands test



→ Conclusion

First Aim

- The patients with late effects of polio had a lower level of functioning, experienced more fatigue and had more pain compared to values for the Danish population

Second Aim

- The patients, who experience a decline in physical capacity, can benefit from an individually planned multidisciplinary intervention with emphasis on physiotherapy
- The patients show better functional capacity on all measurements
- They experience improvement in general health
- They experience less pain and less physical fatigue
- The improvements in physical capacity and general health remains at the one year follow up



Thank you for
listening...