

Self-perceived HEALTH RELATED WITH QUALITY OF LIFE through AQUATIC THERAPY for AGEING ADULTS WITH DISABILITIES – an exploratory study

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Background & Motivation

“I regard universal health coverage as the single most powerful concept that public health has to offer. It is inclusive.

It unifies services and delivers them in a comprehensive and integrated way, based on primary health care.”

Dr Margaret Chan, WHO
Director-General

20/02/2013

We have place!



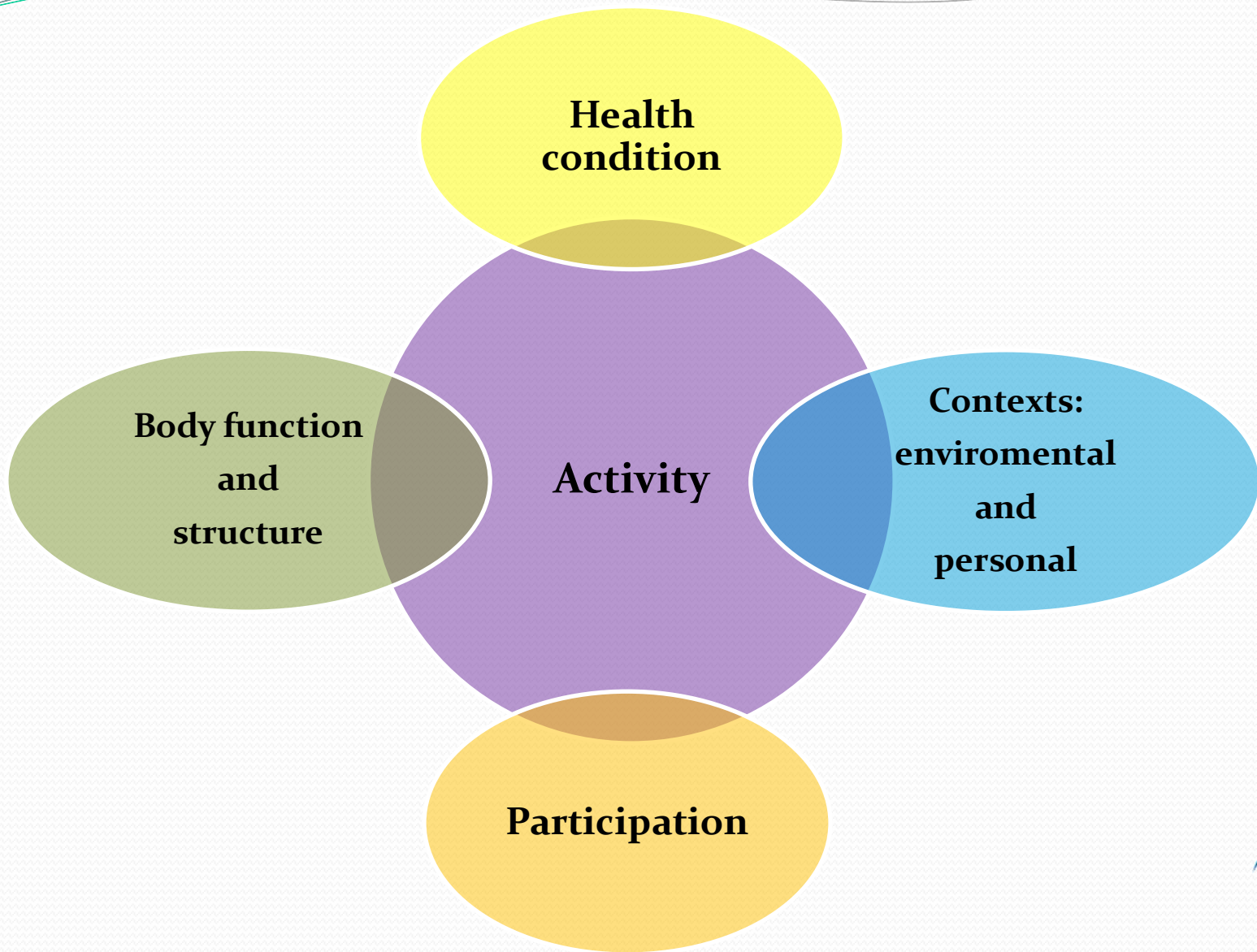
Background & Motivation

We can say that Halliwick is an inclusive concept. It has a special way to integrate patients in water therapy, looking for their disengagement and mental adjustment.

As professionals of Aquatic Therapy we have a comprehensive intervention focused on solving problems of daily life activities through movement, skills and motivation for the aqua-therapeutic aims.

Coping strategies are stimulated in several ways through the Aquatic Therapy Programs .





Background & Motivation

- Active ageing in society;
- Aquatic therapy programs and their participation need to be assessed;
- When the aim of the aquatic therapy intervention is to improve global body strength and motor control in daily life activities, the outcome measures should also assess the well-being and quality of life of participants and the relationship with preferences of type of exercises or resources (like music) through the Halliwick concept intervention.



Aims

- To describe self perceived health related quality of life;
- To assess the benefits and preferences that ageing adults with disabilities report after an aquatic therapy program.



Design

- An exploratory study using a self administered structured questionnaire and the Sf-36 of Health Survey.
- SPSS used to collect the results.



Settings

- Our study was conducted in two different swimming pools of Ovar city with aquatic therapy programs for ageing adults with disabilities.
- The physiotherapists had Advanced Education in Aquatic Therapy through the Halliwick Concept for Neuro-Musculoskeletal dysfunctions.



Participants

Variable	Male <i>n</i> (%)	Female <i>n</i> (%)	TOTAL <i>n</i> (%)
Participants	8 (14,3)	48 (85,7)	56 (100)
Age			
40 - 46	1 (1,8)	5 (8,9)	6 (10,7)
46 - 55	3 (5,4)	13 (23,2)	16 (28,6)
56 - 65	1 (1,8)	16 (28,6)	17 (30,4)
66 - 75	3 (5,4)	12 (21,4)	15 (26,8)
76 - 80	0	2 (3,6)	2 (3,6)

Patologies

Variable	Male <i>n</i> (%)	Female <i>n</i> (%)	TOTAL <i>n</i> (%)
OP Lower Limbs	5 (8,9)	15 (26,8)	20 (35,7)
OP Arms	2 (3,6)	7 (12,5)	9 (16,1)
OP Lumbar	5 (8,9)	20 (35,7)	25 (44,6)
OP Cervical	2 (3,6)	16 (28,6)	18 (32,1)
DH Lumbar	3 (5,4)	11 (19,6)	14 (25)
DH Cervical	2 (3,6)	7 (12,5)	9 (16,2)
DH Dorsal	2 (3,6)	2 (3,6)	4 (7,2)
Others	0	16 (28,6)	16 (28,6)
Number of Pathologies			
Less than 3	3 (5,4)	23 (41,1)	26 (46,4)
3 or more	5 (8,9)	25 (44,6)	30 (53,6)

Time in therapy

Variable	Frequency	Percent
Less then 1 year	17	30,4
Between 2 and 4 years	21	37,5
More then 4 years	18	32,1

69,7% participants repeating

Results

- We checked for differences from the results of SF-36 Scale between our sample and that of the MOS. The expected results were found:
 - Only the domain *Energy / fatigue*, and *Social Functioning* showed no significant statistical differences ($p > 0.05$)

WARE, J.E.; SHERBOURNE, C.D. The MOS 36-Item Short-Form Health Survey (SF-36): I. Conceptual Framework and item Selection. «Medical Care». 30:6 (1992) pp. 473-483.



Table 3 - Relation between SF - 36 domains and perceived improvements in body functions with type of exercise, initiation time of hydrotherapy and number of pathologies.

	Stretching	<i>n</i>	<i>p</i>
Muscular strength	always	38	0,029
	some times	18	
	Use of music	<i>n</i>	<i>p</i>
Muscular strength	always	24	0,003
	some times	31	
	Initiation time	<i>n</i>	<i>p</i>
Muscular strength	≥ 4years	18	0,032
	< 4 years	38	
	Number of pathologies	<i>n</i>	<i>p</i>
Physical functioning	≥ 2	30	0,023
	1	26	
Role limitations due to physical health	≥ 2	30	0,034
	1	26	
Pain	≥ 2	30	0,039
	1	26	

Discussion

- Evidence has proven that Aquatic Therapy methods (Ai-chi and aquatic exercise programs) can offer a better quality of life for specific populations (frail elderly, osteoarthritic patients). (Cadamus et al, 2009; Cunha et al, 2010; Daisuke et al, 2007)
- We researched the relationship between a program based on the Halliwick Concept (combined exercises of strength, stretching, mobilization and stabilization with challenges through motivation, songs and obstacles) and the quality of life from returning clients.



Discussion

- We believe there's a chance to build a better control of movement if aquatic therapy can continue for a long period of time specially working with a disabled population.



Conclusions

- This study shows the growing interest in aquatic therapy programs for ageing adults with disabilities by participating repeatedly.
- We have as study limitation: assessment was done only one time
- Also the need of more comprehensive assessment for the impact on health related quality of life in users of aquatic therapy programs between different moments in relation to different components of the Halliwick Concept.



THANK YOU...



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