


Impact of the Level of Dependence on Functionality and Health of Institutionalized Older Adults

Lydia Martín-Martín , Mario Lozano-Lozano , Noelia Galiano-Castillo , Irene Cantarero-Villanueva , Angélica Ariza-García , Lourdes Díaz-Rodríguez

Corresponding author: Lydia Martín-Martín

1. Health Science Department, University of Granada 2. Department of Physiotherapy, University of Granada 3. Physiotherapy Department, University of Jaén 4. Health Science Department, University of Granada 5. Physiotherapy Department, Hospital Clínico San Cecilio, Granada 6. Nursery Department, University of Granada

Categories: Physical Medicine & Rehabilitation

Keywords: aging, institutionalization, level of dependence, functionality, quality of life

How to cite this poster

Martín-martín L, Lozano-lozano M, Galiano-castillo N, et al. (2015) Impact of the Level of Dependence on Functionality and Health of Institutionalized Older Adults . Cureus 7(9): e.

Abstract

Background. The population ageing can be considered both a medical success and a challenge to our society. According to the World Health Organization, people aged 60 or more will reach to 2,000 million in 2050, this is, 22% of the world population. Therefore, it is expected an increased amount of institutionalized elderly in the coming years.

Objectives: our study was aimed to assess and describe the functionality, health, and quality of life of institutionalized older adults as well as to analyze the influence of their dependence level on these variables.

Methods. A cross-sectional study was carried out. Institutionalized older adults over 60 years were included. The study variables were the level of dependence (Barthel index), the level of functionality (TUG), the state of balance and gait (Tinetti), the level of physical activity (IFIS), quality of life (SF questionnaire 36), sleep quality index (Pittsburgh) and the level of anxiety and depression (HADS).

Results. 35 older adults were included. The results showed that those who had a better dependence level also exhibited better functionality, balance and gait, level of physical activity and quality of life, and lower anxiety and depression levels.

Conclusions. Institutionalized older adults with total or severe dependence had significantly worse levels of functionality and health.

Open Access

Published 09/10/2015

Copyright

© Copyright 2015

Martín-Martín et al. This is an open access article distributed under the terms of the Creative Commons Attribution License CC-BY 3.0., which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Distributed under

Creative Commons CC-BY 3.0

Impact of the Level of Dependence on Functionality and Health of Institutionalized Older Adults

#IOBMC2015



Lydia M Martín-Martín*, Mario Lozano-Lozano*, Noelia Galiano-Castillo**, Irene Cantarero-Villanueva*, Angélica Ariza-García***, Lourdes Díaz-Rodríguez****

*Physiotherapy Department, University of Granada; ** Physiotherapy Department, University of Jaén; *** Physiotherapy Department, Hospital Clínico San Cecilio; ****Nursery Department, University of Granada

BACKGROUND

The population ageing can be considered both a medical success and a challenge to our society. According to the World Health Organization, people aged 60 or more will reach to 2,000 million in 2050, this is, 22% of the world population. Therefore, it is expected an increased amount of institutionalized elderly in the coming years.

OBJECTIVES

Our study was aimed to assess and describe the functionality, health, and quality of life of institutionalized older adults as well as to analyze the influence of their dependence level on these variables.

METHODS

A cross-sectional study was carried out. Institutionalized older adults over 60 years were included. The study variables were the level of dependence (Barthel index), the level of functionality (TUG), the state of balance and gait (Tinetti), the level of physical activity (IFIS), quality of life (SF-36), sleep quality index (Pittsburgh) and the level of anxiety and depression (HADS).

RESULTS

35 older adults were included. The results showed that those who had a better dependence level also exhibited better functionality, balance and gait, level of physical activity and quality of life, and lower anxiety and depression levels.

VARIABLE	MEAN (SD)	TOTAL/SEVERE DEPENDENCE Mean (SD), N=12	MILD DEPENDENCE Mean (SD), N=14	SLIGHT DEPENDENCE/INDEPENDENCE Mean (SD), N=9	p
Age (years)	80,02 (9,57)	82,5 (10,24)	80,43 (7,36)	76,11 (11,43)	0,321
Sex (%)					
Woman	77,1	66,7	92,9	66,7	0,195
Man	22,9	33,3	7,1	33,3	
BMI	27,23 (4,58)	26,21 (4,02)	27,85 (4,78)	27,64 (5,25)	0,641
Study level (%)					
No education/Primary studies	85,7	83,3	100	66,6	0,142
High school/job training	5,7	0,0	0,0	22,2	
University	8,6	16,7	0,0	11,1	
Estado Civil (%)					
Married	14,3	16,7	14,3	11,1	0,721
Single	22,9	8,3	28,5	33,3	
Widowed	62,9	75,0	57,1	55,6	

	TOTAL/SEVERE DEPENDENCE Mean (SD), (CI) N=12	MILD DEPENDENCE Mean (SD), (CI) N=14	SLIGHT DEPENDENCE/INDEPENDENCE Mean (SD), (CI) N=9	p
TUG (sg)	52,55 (50,24), (20,62- 84,48)	17,22 (5,71), (13,92-20,52)	15,36 (5,22), (11,34-19,37)	0,007
Tinetti				
March	5,08 (3,52), (2,84-7,32)	9,21 (2,22), (7,93-10,50)	10,89 (1,26), (9,91-11,86)	<0,001
Equilibrio	6,00 (4,65), (3,04-9,96)	12,07 (2,23), (10,78-13,36)	13,89 (1,26), (12,91-14,86)	
Total	11,08 (7,92), (6,05-16,12)	21,21 (4,15), (18,82-23,61)	24,78 (2,43), (22,90-26,65)	
IFIS	13,92 (3,63), (11,61-16,22)	15,64 (4,27), (13,18-18,11)	18,56 (1,59), (17,33-19,78)	0,020
SF-36				
Physical Functioning	17,08 (14,99), (7,58-26,61)	45,71 (26,22), (30,57-60,86)	74,44 (10,73), (66,19-82,70)	<0,001
Role Physical	29,17 (33,42), (7,93-50,41)	48,21 (31,72), (29,90-66,53)	86,11 (18,16), (72,15-100,07)	0,001
Bodily pain	31,42 (21,58), (17,70-45,13)	51,64 (31,57), (33,41-69,88)	69,88 (21,97), (65,89-99,67)	<0,001
General Health	34,67 (20,16), (21,86-47,48)	59,14 (20,61), (47,24-71,05)	63,44 (19,55), (48,41-78,48)	0,004
Vitality	38,58 (25,80), (23,19-55,98)	52,50 (22,59), (39,45-65,55)	61,11 (18,63), (46,63-75,59)	0,109
Social Functioning	68,75 (28,94), (50,36-87,14)	75,32 (34,73), (52,27-92,37)	80,56 (26,59), (60,11-101,00)	0,684
Role Emotional	41,67 (37,93), (17,56-65,77)	69,05 (33,24), (49,85-88,24)	70,37 (45,47), (35,42-105,32)	0,138
Mental Health	43,33 (23,12), (28,64-58,03)	58,57 (25,37), (43,92-73,22)	64,44 (18,80), (49,59-79,90)	0,102
Physical Component	29,49 (4,70), (26,51-32,45)	38,17 (9,20), (32,96-43,46)	50,64 (6,92), (45,32-55,96)	<0,001
Mental Component	40,57 (10,23), (34,06-47,07)	45,86 (13,14), (38,27-53,45)	43,55 (16,70), (30,71-56,39)	0,603
Pittsburgh	10,25 (4,41), (7,45-13,05)	10,14 (5,00), (7,25-13,03)	6,78 (2,43), (4,90-8,65)	0,136
HADS				
Anxiety	13,67 (5,66), (10,07-17,26)	9,93 (7,60), (5,54-14,32)	7,89 (7,20), (2,35-13,42)	0,159
Depression	13,58 (6,76), (9,29-17,88)	9,57 (7,04), (5,50-13,64)	6,11 (3,75), (3,22-9,00)	0,035



Resource: UED Mirador de Canes, Granada

CONCLUSIONS

Institutionalized older adults with total or severe dependence had significantly worse levels of functionality and health.

