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Quality of Life in Portugal – what factors can determine the QoL in people with Intellectual Disabilities and a great need of supports?

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Background
In Portugal, the Quality of Life (QoL) concept has become increasingly relevant, leaving aside a vision that only focus on the person's limitations to one that emphasizes the quality of interactions between personal characteristics and environmental demands, within a socioecological model. This new paradigm changes the approach to evaluation and planning individualized supports, regarding adults with Intellectual and Developmental Disability (IDD). Research shows an emerging interest in analysing what personal and environmental factors have impact in QoL of persons with IDD. Therefore, our main goal is to analyse how individual characteristics influence QoL of people with intellectual disability with greater need of supports.
Methods
The Portuguese version of the Escala San Martín, that focus on 8 QoL domains: Self-determination, Emotional Well-Being, Physical Well-Being, Material Well-Being, Rights, Personal Development, Social Inclusion and Interpersonal Relations was applied to 293 individuals with intellectual disabilities, over 18 years-old (32.31 ± 8.29), 128 females and 165 males. All participants were institutionalized. The dependent variables were the domains/QoL total scores and the independent variables were gender, diagnosis, age, comorbidities and tacking medication. A comparative study was carried out using either independent samples t-tests or the one-way analyses of variance (ANOVA).
Results
When comparing gender, age and medication consumption, no significant differences were found, with all groups presenting similar mean QoL scores. Regarding comorbidities, significant differences were found when comparing physical well-being ($p < 0.001$), rights ($p < 0.001$) and social inclusion ($p = 0.001$) domains, with higher mean QoL scores to those without comorbidities. Significant differences were also found regarding diagnosis, in all domains except for the material well-being. Higher mean scores were found in individuals with a mild intellectual disability diagnosis, when compared to those with severe or profound ID diagnosis.
Conclusions
The information about personal factors with impact in QoL will help to meet challenges and will allow a more adjusted person-centred planning. Discussion and implications for practice will be presented.
Keywords
Individualized supports, Intellectual and Developmental Disability, Quality of Life, Escala San Martín.

O15

Relationship between the levels of functional capacity and family functionality and depression in the elderly

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Background
Depression is one of the most prevalent mental health problems among the elderly [1]. Functional limitations and changes in family dynamics characterize important risk factors for the onset of depression [1,2].
Objective
To analyse the relation between levels of functional capacity and family functionality and depression in the elderly.
Methods
A cross-sectional study was conducted including one hundred and thirty-eight (138) elderly individuals. The presence of depression, the levels of capacity to perform Basic Activities of Daily Living (BADL) and Instrumental Activities of Daily Living (IADL) and family functionality were assessed, respectively, by the Geriatric Depression Scale (GDS), Katz Index of Independence in Activities of Daily Living, Lawton Scale and family APGAR. The Statistical Package for Social Sciences (SPSS) version 18.0 was used to enter and analyse data ($p < 0.05$). The present study was approved by the Research Ethics Committee of UNISUL.
Results
The most prevalent characteristics were the age between 60 and 69 years (62.3%), the female gender (52.9%), the white ethnicity (87.0%), having accomplished up to 8 years of schooling (75.8%), and being retired (80.4%). 67.4% of the elderly did not have a spouse, and 14.5% lived alone. Depression presented a prevalence in 43.5% of the participants, of whom 88.3% were mildly depressive and 11.7% were severely depressive. There was a high frequency of hypertension (64.5%), Diabetes Mellitus (37.7%), osteoarthritis (39.1%), heart failure (28.3%), chronic obstructive pulmonary disease (15.9%) and asthma (9.4%). When evaluating functional capacity, 1.4% and 12.3% of the participants were classified as dependent to perform BADL and IADL, respectively. Family dysfunction was observed in 12.3% of the elderly (5.1% moderate dysfunction and 7.2% high dysfunction). When testing associations between depression and sociodemographic characteristics, the results showed statistical differences when comparing gender and marital status. Women were 1,538 times more likely to have depression than men ($p = 0.031$), and individuals who had a spouse were 1,580 times more likely to suffer from the disease ($p = 0.018$). When associating depression with other comorbidities, arterial hypertension was 1.652 times more prevalent ($p = 0.024$). Statistical differences were also identified with heart failure ($PR = 1.941$, $p = 0.001$) and asthma ($PR = 1.923$, $p = 0.012$). The functional capacity for BADL and IADL did not differ statistically. Family dysfunction was significantly associated with depression, which was 1,969 times more frequent in dysfunctional families ($p = 0.003$).
Conclusions
Depression in the elderly is associated with the female gender, having a spouse, cardiovascular and respiratory morbidities and family dysfunction.

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Keywords
Depression in the elderly, Functional capacity, Family functionality.

O16

Microbiological evaluation of hotel units swimming pools

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Background
Swimming pools are currently operated by public and private entities for the development of sports, recreational and therapeutic activities [1]. For this reason, it is essential to guarantee the chemical and microbiological quality of the pool water, since they may be the origin of several pathologies [2].
Objective
The present research aimed to analyse data from the microbiological evaluation of indoor and outdoor swimming pool waters of Hotel Units of Mainland Portugal and Madeira in the year 2016, in order to verify the water quality.
Methods
A cross-sectional descriptive study was performed using database records from a northern laboratory. The microbiological parameters studied to characterize the indoor and outdoor swimming pool waters included CFU/mL of viable microorganisms at 37ºC/24h, CFU/100mL of total coliforms, CFU/100mL of *Escherichia coli*, CFU/100mL of *Enterococcus spp*., CFU/100mL of *Pseudomonas aeruginosa*, CFU/100mL of total *Staphylococcus* and CFU/100mL of coagulase producers *Staphylococcus*. The samples were characterized as conforming and non-conforming according to the reference intervals indicated in Regulatory Circular nº 14/DA of 21/08/2009 of Direção Geral de Saúde [1].
Results
Of the total of indoor pools (n = 610) analysed, 25.09% (n = 153) were classified as non-conforming, being the microorganisms viable at 37 ºC the most frequent cause of nonconformities (n = 105), followed by total coliforms and total *Staphylococcus* (n = 42 each). For the outdoor pools (n = 1982), 29.92% (n = 593) were also classified as non-conforming, once more being microorganisms viable at 37 ºC the most frequent cause of nonconformities (n = 420), followed by total coliforms (n = 154).
Conclusions
Indoor swimming pools have a lower frequency of nonconformities compared to outdoor swimming pools. The ambient temperature and the presence of soils around the pool influence the microbiological quality of the water [2]. These results also suggest that water treatment is not effective, indicating water pollution, being hygienic care other factor that influence the microbiological quality of the water [3]. The determination of these parameters is useful when microbiological monitoring is carried out constantly.

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Keywords
Microbiological evaluation, Microbiological quality, Swimming pool waters, Fecal contamination indicators.

O17

Normative values of functionality and quality of life of the portuguese healthy older people

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Background
The older population is increasing worldwide [1]. Since the average life expectancy is currently 71.4 years at birth and the healthy life expectancy is only 63.1 years, there is a need to enhance the focus on public health to promote health and healthy ageing [2, 3]. Measures of functionality and health-related quality of life (HRQoL) have been identified as predictors of healthy aging [4-6]. However, to interpret results from those measures, and compare them within a population or across populations, normative data are necessary [7-9].
Objective
To establish age and gender-related normative values for the Five Times Sit to Stand Test (5 STS), 10 Meter Walk Test (10MWT), and World Health Organization Quality of Life-Bref (WHOQoL-Bref) for Portuguese healthy older people.
Methods
An exploratory cross-sectional study was conducted. Participants were recruited from the community. Functionality was assessed with the 5STS [4, 10] and 10MWT [5, 11] and Health-related Quality of Life (HRQoL) with the WHOQoL-Bref (scores: 0-20 and 0-100) [6]. Descriptive statistics was used to determine normative scores by age decades (60-69; 70-79; 80-89 years) and gender. Differences between age and gender were explored with multiple comparison tests using the Bonferroni correction.
Results
118 older people (76.2 ± 8.9yrs; n = 79, 66.9% female) participated in this study. Mean scores of 5STS (9.4 ± 3.5s; 13.0 ± 4.9s; 16.7 ± 6.7s), 10MWT (5.4 ± 2.1s; 6.5 ± 3.1s; 12.4 ± 5.9s) increased with age. Mean scores of the different domains of the WHOQoL-Bref 0-20 scale: physical health (15.9 ± 2.6; 15.1 ± 2.2; 13.6 ± 2.3), psychological (15.6 ± 2.6; 15.0 ± 2.3; 13.9 ± 1.9), social relationships (15.8 ± 2.8; 14.6 ± 2.4; 13.5 ± 2.4), environment (16.4 ± 2.3; 16.0 ± 2.3; 15.1 ± 1.6) decreased with age. Similar findings were observed in the WHOQoL-Bref 0-100 scale: physical health (74.6 ± 16.4; 69.3 ± 13.5; 60.4 ± 14.2), psychological (72.6 ± 16.4; 68.4 ± 14.5; 61.8 ± 12.1), social relationships (73.6 ± 17.6; 66.4 ± 15.2; 59.6 ± 15.2) and environment (77.6 ± 2.3; 74.9 ± 14.6; 69.4 ± 10.2). Females showed worst results in all measures. Mean scores of most measures were significantly different among age decades and gender ($p < 0.05$).
Conclusions
This study provided normative values of 5STS, 10MWT and WHOQoL-Bref for the Portuguese healthy older people. These data may improve the utility of these measures for health professionals to screen people and develop tailored interventions to improve functionality and HRQoL in this population. Normative values of WHOQoL-Bref will also allow identifying vulnerable groups and describing the profile of HRQoL in Portuguese healthy older people living in the community.

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