

## PO25. UNDERNUTRITION RISK AND NUTRITIONAL SCREENING IMPLEMENTATION IN PORTUGUESE HOSPITALS: BARRIERS AND TIME TRENDS (2019-2020)

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**INTRODUCTION:** Nutritional screening is the starting point for high-quality nutrition care. In Portugal, the systematic nutritional risk assessment became mandatory in 2019 for every inpatient in National Health System.

**OBJECTIVES:** This study aimed to report the national nutritional risk prevalence in hospitalized patients, and also to describe the time trends, barriers, and facilitators of the implementation of nutritional screening.

**METHODOLOGY:** This research was carried out in public hospitals (n=49) from January 2019 to December 2020 and included data from health information systems and from an online survey. The Nutritional Risk Screening 2002 was applied to adult patients and the STRONGkids to paediatric patients.

**RESULTS:** In 2020, 25.5% of the screened patients were nutritionally at risk. There was a significant increase in the proportion of patients screened, from the pre-adaptation period of the electronic health records (10.6 ± 1.9%) to the post-adaptation period: 23.3 ± 4.8 % in July-December 2019, and of 25.4 ± 2.2% in January-June 2020 (p <0.001). Concerning the online survey, data from 41 Hospital Units (84%) were obtained. The major barriers identified were the lack of human resources (89.7%) and equipment (41.0%), as well as insufficient knowledge about the role of nutritional screening (35.9%). The most reported facilitators were the adaptation of electronic health records to nutritional screening and good multidisciplinary articulation (36.1%).

**CONCLUSIONS:** Although these data do not comprise the whole population, the high prevalence of nutritional risk identified in those units which are carrying out the screening justifies the mandatory nutritional screening, which leads to the improvement of the quality of hospital nutrition care. Local, and national efforts are warranted to adapt nutritional screening policies to hospital conditions and to increase and improve its implementation.

**INTRODUCTION:** Increased body adiposity has been associated with a higher risk for cardiometabolic diseases, which have important health-related consequences, especially in older adults. The dual-energy X-ray absorptiometry (DXA) is a reference method for assessing body composition. However, due to its high cost, this tool is not usually available. As an alternative, there are many approaches based on anthropometric measurements to estimate and classify body adiposity.

**OBJECTIVES:** To compare body fat percentage in older adults obtained by DXA (BF\_DXA) with different methods to assess body adiposity.

**METHODOLOGY:** The study included 166 older adults from the 2015 Health Survey of São Paulo, Brazil. Adiposity was assessed and classified considering cut-off points that indicates excess adiposity and elevated risk for cardiometabolic consequences: waist circumference (≥94 cm for men and ≥80 cm for woman); waist-to-hip ratio – WHR (≥1.0 for men and ≥0.85 for woman); body adiposity index – BAI (≥25% for men and ≥33% for women); and conicity index (≥1.25 for men and ≥1.18 for woman). Correlation coefficients, kappa statistics, and sensitivity analysis were used to test the association and the agreement of each method in classifying excess adiposity in comparison to BF\_DXA.

**RESULTS:** A very strong (r=0.8312, p-value<0.001), a moderate (r=0.5263, p-value<0.001), and a weak (r=0.3053, p-value=0.001) significant correlation were found between BF\_DXA and BAI, waist circumference, and conicity index, respectively. There was no significant correlation between BF\_DXA and WHR. The highest agreement with BF\_DXA was obtained by waist circumference (k=0.433) and the lowest by WHR (k=0.163). Table 1 shows that waist circumference had also the highest performance in sensitivity analysis for classifying excess adiposity (AUC=0.761).

**CONCLUSIONS:** In the absence of DXA, a valid method should be chosen to estimate and categorize excess adiposity. In this sample, waist circumference was the method with the best performance classifying body adiposity in older adults.

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## PO26. COMPARISON OF DIFFERENT METHODS TO CLASSIFY ADIPOSITY AS A CARDIOMETABOLIC RISK FACTOR IN OLDER ADULTS

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TABLE 1

Performance of methods to estimate and classify body adiposity in comparison to body fat percentage obtained by DXA in older adults. Brazil, 2015. (n=166)

METHOD	ADIPOSITY (n=166)		RHO	P-VALUE	KAPPA COEFFICIENT	P-VALUE†	SENSITIVITY (%)	SPECIFICITY (%)	PPV (%)	NPV (%)	AUC
	ADEQUATE (n)	OVERFAT (n)									
Body fat DXA (%)	19	147	-	-	-						
Waist circumference	28	138	0.5263	0.000	0.433	0.000	0.891	0.632	0.949	0.429	0.761
Waist-to-hip ratio	59	107	-0.0601	0.442	0.163	0.007	0.680	0.632	0.935	0.203	0.656
Body Adiposity Index	46	120	0.8312	0.000	0.284	0.002	0.776	0.684	0.950	0.283	0.730
Conicity Index	9	157	0.3053	0.001	0.306	0.000	0.973	0.263	0.911	0.556	0.618

rho: Pearson correlation coefficient; p-value: p-value for rho  
PPV: Positive Predictive Value. NPV: Negative Predictive Value  
AUC: Area under the receiving operator characteristic curve  
†: p-value for kappa coefficient