

Factors of non-adherence to therapy in chronic patients with pathologies covered by the Exceptional Participation Regimen in Portugal

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Introduction

Medication adherence is a multidimensional phenomenon determined by the interaction of factors of diverse nature. The World Health Organization classified in five groups the reasons for non-adherence to therapy, related to, patient, disease, therapy, health system and socioeconomic factors [1].

Aim

To identify the most prevalent reasons for non-adherence to therapy and to verify the existing differences taking into account the socioeconomic variables.

Methods

A random probabilistic sample of 141 outpatient suffering from pathologies covered by the Exceptional Participation Regimen (EPR), with dispensing medicines at the hospital pharmacy, treated at the Local Health Unit of the Northeast in Portugal, was selected. To collect the data, was applied a questionnaire, by interview, that included socioeconomic variables and a list of non-adhesion factors adapted from Cabral and Silva [2], between July 2017 and April 2018. The list of factors for non-adherence to the therapy consisted of 35 factors that were later aggregated into three dimensions. The first dimension "extrinsic motives", consisted of 11 reasons that could lead patients not to follow completely the indications recommended by the doctor. The second dimension "intrinsic motives" was constituted by 20 factors related to the characteristics of the medicines and the therapeutics. Finally, the third dimension "doctor-patient relationship" included 4 items describing aspects of the doctor-patient relationship that could contribute to non-adherence to the therapy. The SPSS 24.0 software was used to analyse the data. The internal consistency was analysed through Alpha Cronbach. For the comparison of groups, the non-parametric Mann-Whitney test was used at a significance level of 5%.

Results

Chronic patients were aged between 20 and 95 years old, with a mean age of 65.3 years (SD = 19.39) (Table 1). Most were female (51.8%) (Figure 1), married or lived in marital cohabitation (62.4%) (Figure 2), retired (55.3%) (Figure 3), and had up to the 3rd cycle of schooling (61%) (Table 2) and an income up to € 1,000 (62.5%) (Figure 4). These patients suffered from Chronic Renal Insufficiency (CRI) (63.1%), Rheumatoid Arthritis (RA) and Psoriatic Arthritis (PA) (20.6%), Multiple Sclerosis (MS) (10.6%), Amyotrophic Lateral Sclerosis (ALS) (2.1%), Hepatitis C Virus (HCV) (2.1%), Hepatic disease (HD) (0.7%) and Gaucher Syndrome (GS) (0.7%) (Figure 5). The internal consistency recorded for the 35 reasons was 0.944. For the three dimensions, the Alpha Cronbach ranged from 0.807 to 0.895 showing all dimensions high internal consistency (Table 3).

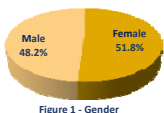


Table 1 - Measures of central tendency and dispersion related to years old

Years old	Value
N	141
Média	65.3
Mediana	69
Moda	81
DP	19,39
Mínimo	20
Máximo	95

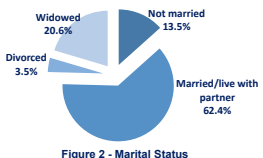


Table 2 - Literacy abilities

Can not read or write	5,7
Can read and write	13,5
1st Cycle	34
2nd Cycle	3,5
3rd Cycle	3,5
High school or equivalent	20,6
Higher education	18,4
Missing	0,7

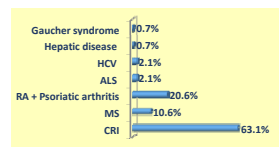
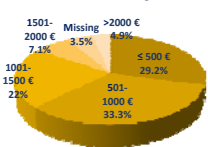
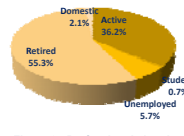


Table 3 - Factors of non-adherence to therapy in chronic patients

Extrinsic motives	%	Intrinsic motives	%	Doctor-patient relationship	%
Forgetfulness	17.7	Side Effects	2.1	I do not understand what doctors say	17.7
Fall asleep before taking medication	9.9	Concern about long-term medication	1.7	I am afraid to ask for clarification and ask questions	18.4
Do not like being sick	31.9	Having too many medicines to take	26.2	Lack of trust in doctors	7.1
Dislike taking medication	37.6	Medications are difficult to take	29.8	Doctors prescribe more medicines	35
Having difficulty shaping routine to treatment	29.8	Time of taking the medication	36.9		
I do not worry if I do not take the medication	5.6	Do not want to mix medicines with alcohol and other substances	9.9		
Lack of family / emotional support	16.3	Doubt of medication self-efficacy	11.3		
I not like to have the trips to go to consultations	39	Not realizing what to take and how	12.8		
I not want to take the medication	3.5	Do not take the medication because you feel better	3.5		
Being too lazy to take the medicines	2.8	Drowsiness	9.9		
Feeling depressed	9.9	Confusion / loss of medication	8.5		
		Unable to read the labels	8.5		
		Sold out at the pharmacy	14.9		
		Changes the timing of shots when it suits you	7.1		
		Stops taking medication	2.1		
		For the medication to see how you feel	2.1		
		Do not take the medication because you feel worse	20.6		
		Need help with medication preparation	9.9		
		Not having symptoms (pain, ..)	29.1		
		Duration of treatment is too long			

(n=11; α=0.828) (n=20; α=0.895) (n=4; α=0.807)

As shown the Tables 3 and 4, in the "extrinsic motives" dimension, the three most prevalent factors were "patient does not like to have the trips to go to consultations" (39%), "patient does not like to take medications" (37.6%) and "patient does not like to think he is ill" (31.9%). It was the female patients with the lowest level of education and the lowest income who were most likely to leave the treatment. The "intrinsic motives" that stand out were: "The time of taking the medication" (36.9%), "medicines were difficult to take" (29.8%) and "treatment duration was long" (29, 1%). It was women, aged 65 years old or more, without professional occupation, with lower levels of income and schooling who were less compliant with medical indications. Finally, taking into account the "medical-patient relationship", "doctors prescribe more medicines" (35%); "I am afraid to ask for clarification and ask questions" (18.4%) and "I do not understand what doctors say" (17.7%) stand out. It was the elderly, retired, and married patients who most often experienced less cooperative situations with their physician.

Table 4 - Results of the Mann-Whitney test for non-adherence of the three most prevalent factors to therapeutic dimension

Groups	Patient does not like to have the trips to go to consultations		Patient does not like to take medications		Patient does not like to think he is ill		The time of taking the medication		Medications are difficult to take		Treatment duration was long		Doctors prescribe more medicines		I am afraid to ask for clarification and ask questions		I do not understand what doctors say	
	Mean Rank	P	Mean Rank	P	Mean Rank	P	Mean Rank	P	Mean Rank	P	Mean Rank	P	Mean Rank	P	Mean Rank	P	Mean Rank	P
Female	55.35	.210	55.50	.168	54.94	.243	58.73	.243	60.38	.168	54.92	.025*	53.75	.495	53.88	.459	53.37	.589
Male	48.45		48.19		48.88		44.87		43.12		47.94		50.15		50.01		50.55	
<65 years old	42.50	.003*	41.40	.001*	45.37	.031*	39.76	.000*	43.00	.006	43.48	.013*	43.58	.007*	47.66	.017*	45.94	.049*
≥ 65	58.81		59.60		56.75		60.78		58.45		57.12		58.03		54.26		56.34	
Married/cohabitation	54.40	.264	51.70	.887	54.08	.305	53.38	.515	54.22	.305	55.53	.053	53.99	.332	57.23	.010*	56.40	.031*
Not married	48.06		52.49		48.59		49.73		48.36		44.71		47.73		43.42		44.78	
≤ 12 years of schooling	54.48	.058	55.07	.016*	54.10	0.089	55.81	.007*	54.81	.033	53.62	.091	53.60	.203	54.36	.057	54.60	.036*
>12 anos	41.03		38.45		42.71		36.50		39.58		41.61		44.95		41.55		40.53	
Active	41.38	.004*	42.24	.006*	45.81	.074	40.27	.001*	46.41	.131	43.58	.031*	44.47	.032*	44.69	.036*	45.59	.066
Not active	57.95		57.47		55.47		58.58		55.14		55.82		56.22		56.10		55.59	
≤ 1000 €	55.78	.004*	56.63	.001*	53.48	.066	56.55	.001*	54.88	.015	50.87	.488	54.16	.028*	51.80	.338	52.22	.242
> 1000 €	39.43		43.64		43.64		38.00		41.07		47.03		42.39		46.71		45.94	

*There are statistically significant differences for level of significance of 5%

Conclusion

The socioeconomic variables are differentiated from the (non) compliance by the medical indications.

References

1. World Health Organization. Adherence to long-term therapies: Evidence for action. Geneva: World Health Organization; 2003. (Access date may 2017). Available from: http://www.who.int/chp/knowledge/publications/adherence_report/en/

2. Cabral, M., Silva, P. A adesão à terapêutica em Portugal: Atitudes e comportamentos da população portuguesa perante as prescrições médicas. APB&BMA, 2010.

Acknowledgment

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