Outcome Improvement After Psychosocial Rehabilitation

Alexandre Pértega-Gomes¹, Cristina Fragoeiro², João José Silva², Joaquim Ramos²

1 – Centro Hospitalar Universitário do Algarve
2 – Hospital Magalhães Lemos

Introduction

Psychosocial rehabilitation programmes play a central role in the recovery process of patients with severe mental disorders, promoting autonomy, community inclusion, and personal growth of patients formerly destined to institutionalisation. Despite their fundamental role in our current paradigm of Psychiatry, outcome measurement and validation of efficacy are ongoing challenges for many rehabilitation services, struggling with investment policies based on cost-effectiveness. Having worked in one of Portugal's first main psychosocial rehabilitation services, the authors conducted a retrospective cohort study of the patients admitted to Hospital Magalhães Lemos' Psychosocial Rehabilitation Service (PRS) from 2007 to 2016.

Descriptive analysis

	Men		Women		Total	
	n	(% Sex)	n	(% Sex)	n	(%)
CIVIL STATUS						
Single	287	(70,0%)	128	(33,4%)	415	(52,5%)
Married or cohabitation	75	(18,3%)	152	(39,7%)	227	(28,6%)
Divorced	42	(10,2%)	76	(19,8%)	118	(14,9%)
Widowed	6	(1,5%)	27	(7,0%)	33	(4,2%)
No information	5		2		7	
EDUCATION						
Primary school or less	36	(23,4%)	22	(20,5%)	58	(20,5%)
Middle school	62	(40,3%)	46	(38,2%)	108	(38,2%)
Secondary school	40	(26,0%)	34	(26,1%)	74	(26,1%)
Superior education	16	(10,4%)	27	(20,9%)	43	(15,2%)
No information	261		256		517	

TABLE 1. Sociodemographic characteristics of the patient cohort admitted to the PRS between January 2009 and December 2016.

GRAPH1. Population pyramid of patients by age and sex.

	Age at diagnosis		Age at admission		Time until referral	
	Median	(Range)	Median	(Range)	Median	(Range)
Adjustment and depressive disorders	49	41-56	54	45-60	4	1-8
Anxiety disorders and Obsessive-compulsive disorder	44	39-54	48	44-57	3	2,5-5,5
Bipolar disorder	48	39-54	53	47-59	5	2-8
Schizoaffective disorder	37	30-45	44	36-51	6	1-10
Schizophrenia, delusional disorder, and other psychotic disorders	33	26-42	39	32-47	7,5	2-10
Addictive disorders	43	26-51	49	27-51	4	1-8
Personality disorders	41	32-46	46	38-53	5	1-9
Dementia and organic diseases	38	23-55	41	28-55	2	1-5
Intellectual disability	28	21-34	37	28-44	1	0,5-3

TABLE 2. Average age at diagnosis and at PRS admission for each group of diagnoses.

GRAPH 2. Number and sex distribution of diagnoses in larger diagnostic groups.

Statistical analysis

		No. hospitalisations/year			Number of days hospitalised/100		
		Median before	Median after	PWIL-coxon	Median before	Median after	PWIL-coxon
GLOBAL		0,40	0,00	<0,001	0,44	0,00	<0,001
BY DIAGNOSTIC GROUP							
	Dementia and organic diseases	0,00	0,00	0,496	0,55	0,24	0,500
	Addictive disorders	2,00	0,00	0,629	0,26	0,00	0,182
	Schizophrenia, delusional disorder, and other psychotic disorders	0,60	0,00	<0,001	0,55	0,00	<0,001
	Intellectual disability	0,10	0,00	0,255	0,48	0,00	0,028
	Bipolar disorder	0,50	0,00	<0,001	0,42	0,00	<0,001
	Schizoaffective disorder	0,40	0,20	0,100	0,48	0,00	0,003
	Personality disorders	0,30	0,00	0,002	0,38	0,00	<0,001
	Anxiety disorders and obsessive-compulsive disorder	0,00	0,00	0,026	0,26	0,00	0,028
	Adjustment and depressive disorders	0,00	0,00	<0,001	0,29	0,00	<0,001
By SEX							
	Male	0,40	0,00	<0,001	0,44	0,00	<0,001
	Female	0,30	0,00	<0,001	0,44	0,00	<0,001
By EDUCATION							
	Primary school or less	0,50	0,16	0,004	0,39	0,00	0,002
	Middle school	0,80	0,21	<0,001	0,55	0,00	<0,001
	Secondary school	0,65	0,00	<0,001	0,47	0,00	<0,001
	Superior education	1,00	0,00	0,003	0,59	0,00	<0,001
	No information	0,20	0,00	<0,001	0,38	0,00	<0,001
By CIVIL STATUS							
	Single	0,50	0,00	<0,001	0,51	0,00	<0,001
	With marital/cohabitation history	0,30	0,00	<0,001	0,38	0,00	<0,001

TABLE 3. Comparison of number of hospitalisations per year and number of days hospitalised divided by 100 before and after admission to the Psychosocial Rehabilitation Service.

	B	p
Diagnostic group		
Schizophrenia, delusional disorder, and other psychotic disorders	-0,005	0,006
No. hospitalisations/year before PRS admission	-2,080	<0,001
Nagelkerke R ² = 0,411		

TABLE 4. Part of the bivariate logistic regression model considering number of hospitalisations after PRS admission as the dependent variable and larger diagnostic groups, age at PRS admission and number of hospitalisations per year before PRS admission as independent variables.

We conducted a bivariate logistic regression model considering the number of hospitalisations after PRS admission as the dependent variable (inferior versus superior) and larger diagnostic groups, age at PRS admission and number of hospitalisations per year before PRS admission as independent variables. Part of the results are shown in table 4. Fewer hospitalisations previous to PRS admittance and the diagnoses of schizophrenia, delusional disorder or other psychotic disorders are predictors of better PRS outcome in terms of number of hospitalisations after PRS admission.

Conclusions

We provide a brief summary of the results we obtained during data analysis. A total of 800 patients were admitted to the PRS between 2007 and 2016. A statistically significant reduction in number of hospitalisations per year, after stratifying for sex, age and civil status, was observed. By larger diagnostic groups, there was a statistically significant correlation with schizophrenia, delusional disorder, and other psychotic disorders, bipolar disorder, personality disorders, anxiety disorders, adjustment and depressive disorders. Though the number of hospitalisations was not significantly decreased, the duration of hospitalisations was in schizoaffective disorder and intellectual disability. These effects on hospitalisation outcomes are clear indirect measures of psychopathological stabilization. Fewer hospitalisations previous to PRS admittance and the diagnoses of schizophrenia, delusional disorder or other psychotic disorders are predictors of better PRS outcome in terms of number of hospitalisations after PRS admission. We hope to further develop and understand the PRS's outcomes, and intend to focus also on direct measures of social integration in the future.

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