

Antipsychotics prescribing patterns in schizophrenic patients with comorbid substance use

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Introduction

The concurrent use of two or more antipsychotic drugs, also called 'antipsychotic polypharmacy' (AP) is common in clinical practice but controversial. Although two meta-analyses suggested that AP may have superior efficacy compared to antipsychotic monotherapy (AM), results were ultimately inconclusive. In a recent meta-analysis of antipsychotic augmentation of clozapine, benefits were only apparent in open label studies. In another meta-analysis, the superiority of AP over AM was demonstrated only by individual trials which initiated antipsychotic co-treatment at the start of antipsychotic treatment rather than after non-response to antipsychotic monotherapy.

Substance use disorder in individuals with schizophrenia is very common (ranging from approximately 15 to 65%); it has become the most prevalent comorbid psychiatric condition associated with schizophrenia and contributes to an unfavorable disease course. Recommendations for antipsychotic pharmacotherapy in schizophrenia are based on studies that excluded patients with this dual diagnosis.

Objectives

To analyze the prescription pattern of antipsychotics in patients affected of schizophrenia or schizoaffective disorders fulfilling substances use disorder (SUD) criteria at the time of discharge of a brief dual diagnosis unit. More specifically we try to find distinguishing characteristics between those patients receiving antipsychotic monotherapy (AM) than those treated with antipsychotic polypharmacy regimen (AP).

Material and Methods

Data on demographic, family, and clinical factors were gathered among subjects admitted to our dual diagnosis unit between September 2007 and November 2012, all of them meeting DSM-IV criteria of schizophrenia or schizoaffective disorder and comorbid SUD. Statistical analysis was performed by using SPSS program.

Results

The total sample was comprised of 267 subjects (74 of AM group and 193 of AP group). Predominantly male (74,26%) with a mean age of 38,32±8,9 years and duration of admission of 25,99±27,9 days. Main drug of abuse was Alcohol (38,60%), closely followed by Cocaine (34,56%). Most frequent dual diagnosis were Psychotic disorder and Alcohol SUD (34,19%), Psychotic disorder and Cocaine SUD (27,57%), Psychotic disorder and Cannabis SUD (11,76%), Schizoaffective disorder and Cocaine SUD (6,62%) and Schizoaffective disorder and Alcohol SUD (3,68%). 11,40% of patients had comorbid personality disorders. Main reason for admittance were Hallucinations/delusions (59,19%), Conduct disorder (21,32%), Agitation/agressivity (6,25%), Suicide ideation/attempt (4,41%), Anxiety (3,68%), Depression (3,31%) and Mania (1,84%).

Compared with AM group, AP subjects were younger, more prevalence of parental mental illness background and higher prevalence of hallucinations/delusions at admission (Table 1). AP subjects had higher prevalence of cannabis SUD and no differences were seen in addictive family background. We couldn't also discern any difference on age of consumption of substance of abuse between both groups or comprehensive psychiatric severity scales (Table 2).

Referring to personality traits we could observed higher scores on Persistence dimension in AP subjects (50,4±12,2 vs. 38,6±7,4; p=0,01).

In respect to serology status we find out that AP subjects had higher prevalence of HIV-positive (77,0% vs. 89,1%; p=0,011) and comorbid HIV-HCV (78,4% vs. 89,6%; p=0,016).

Mean number of psychotropic drugs at release were higher on AP subjects (2,41±0,94 vs. 2,30±1,08; p<0,001). On treatment patterns at discharge we found lower prescription of antidepressants in AP group (13,0% vs. 28,4%; p=0,003) and higher prevalence of anticholinergic treatment (28,0% vs. 9,5%; p=0,001). AP subjects were prescribed clozapine more frequently (77,2% vs. 70,3%; p=0,034) and higher prevalence of prescription of first (42,0% vs. 1,4%; p<0,001) and second generation oral antipsychotics (98,4% vs. 89,2%; p=0,001), as well as first (13,0% vs. 2,7%; p=0,013) and second generation depot antipsychotic treatment (6,8% vs. 42,0%; p<0,001) at discharge.

Table 1. Demographic Characteristics of both groups

	Antipsychotic monotherapy (N=74; 28%)	Antipsychotic polytherapy (N=193; 72%)	P value
Sex, %			
Male	70,3%	77,2%	0,24
Female	29,7%	22,8%	
Age, years			
Mean (SD)	40,4 (8,0)	37,3 (9,0)	0,01*
Marital status, %			
Single	73,0%	64,2%	1,94
Married/Defacto	6,8%	10,4%	
Divorced/Separated/Widow	20,3%	25,4%	
Level of education, %			
No high school diploma	1,4%	1,0%	0,64
High school diploma	52,7%	59,1%	
Some college	45,9%	39,9%	
Employment, %			
Employed	9,5%	5,7%	0,27
Unemployed	90,5%	94,3%	
Legal background, %			
Yes	13,5%	11,9%	0,72
No	86,5%	88,1%	
Parental substance abuse background			
Yes	51,4%	43,0%	0,85
No	48,6%	57,0%	
Parental mental illness background			
Yes	40,5%	54,9%	0,035*
No	59,5%	45,1%	

*. The chi-square statistic is significant at level 0.05

Table 2. Clinical and Functional Variables at Admission in both groups

	Antipsychotic monotherapy (N=74; 28%)	Antipsychotic polytherapy (N=193; 72%)	P value
Length of admission	21,7	28,0	0,10
Clinical presentation	(15,2)	(31,5)	
	Mean (SD)		0,027*
Hallucinations/delusions	48,6%	64,2%	
Suicide attemp/suicide ideation	2,7%	31,1%	
Others	48,6%	31,1%	
Personality disorder			
Yes	2,7%	5,2%	0,38
No	97,3%	94,8%	
Main drug of abuse			
Stimulants	27,0%	42,0%	0,024*
Sedatives	73,0%	58,0%	
Cocaine SUD			
Yes	45,9%	52,3%	0,35
No	54,1%	47,7%	
Cannabis SUD			
Yes	29,7%	50,8%	0,002*
No	70,3%	49,2%	
Alcohol SUD			
Yes	54,1%	43,0%	0,10
No	45,9%	57,0%	
Opioid SUD			
Yes	27,0%	17,6%	0,09
No	73,0%	82,4%	
Sedatives SUD			
Yes	10,8%	10,9%	0,99
No	89,2%	89,1%	
Amphetamines SUD			
Yes	5,4%	6,2%	0,80
No	94,6%	93,8%	
Hallucinogens SUD			
Yes	1,4%	0,5%	0,48
No	98,6%	99,5%	
Volatil SUD			
Yes	0,0%	0,5%	0,21
No	100,0%	97,9%	
Polydrug abuse			
Yes	44,6%	54,4%	0,15
No	55,4%	45,6%	

*. The chi-square statistic is significant at level 0.05

Conclusions

Profile of dual schizophrenic patients that had prescribed antipsychotics polypharmacy is summarized as continues: parental mental illness background, worse organic status (higher prevalence of HIV-positive and comorbid HIV-HCV) and cannabis SUD. In terms of prescribed drugs AP group had lower prescription of antidepressants but higher of anticholinergic drugs.

References

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