Research article

Depressive symptoms in involuntary hospitalized patients in Cyprus: Socio-demographic and psychopathological characteristics

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ABSTRACT

The severity and variation of depressive symptoms (DS), among psychotic individuals under involuntary hospitalization is unclear. We investigated the socio-demographic and clinical characteristics of psychotic adults with DS, involuntarily hospitalized for compulsory treatment in Cyprus. We also evaluated the psychometric properties (internal consistency reliability, known-group and discriminant validity) of the HDRS-17 and HAM-A for the assessment of depressive and anxiety symptoms, respectively. A descriptive correlational study with cross-sectional comparisons was applied. Data on demographics, cognitive functioning (MoCA scale), depressive (HDRS-17 scale), anxiety (HAM-A scale) and psychotic (PANSS scale) symptoms were collected (December 2016–February 2018). Following informed consent, the sample included 406 patients. Among them, 21 males and 23 females reported DS (HDRS-17 total score ≥8). The majority were Greek-Cypriots (61.4%), 45-65 years old (38.6%), single (77.3%), unemployed (72.7%), admitted due to aggressiveness towards others (47.7%), and diagnosed with a bipolar disorder (59.1%). The mean score (M) in the HDRS-17 was 30.72 (scale range: 8-50; Standard Deviation [SD]: 10.42). The highest mean score (M) per item was in the variables "Suicidal behavior" (M:3.09; SD:1.09) and "Depressive mood" (M=2.95; SD=1.07). The DS group (HDRS-17 score≥8) reported higher PANSS positive symptoms subscale score (t-test, p=0.003) and HAM-A total score (t-test, p=0.05) compared to the non-DS group (HDRS-17 score<8). In multivariable logistic regression analysis only female sex [OR (95%CI) = 3.28 (1.33–8.04), p=0.01)] and a mood disorder diagnosis [OR95% CI: 15.22 (4.13–56.14), p<0.0001)] retained a statistically significant association with DS. Cronbach's alpha was 0.827 for the HDRS, and 0.763 for the HAM-A. The present findings partially support the known-group validity of the HDRS-17 and the HAM-A, and the discriminant validity of the HDRS-17 in psychotic patients under involuntary hospitalization. Additionally, the most frequent diagnosis in the DS group was a bipolar disorder, and the most frequent admission cause was aggressiveness towards others; it is possible that the majority of the DS group participants were patients with a bipolar disorder in episodes with mixed features, presenting simultaneously depressive symptoms and aggressiveness. Further studies on relapse prevention regarding this clinical group are proposed, as well as studies on specificity and sensitivity of the HDRS-17 and HAM-A.

KEYWORDS: Depressive symptoms, compulsory admission, demographic characteristics, HAM-A, HDRS-17.

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Introduction

Although evidence shows that the incidence of severe mental disorders in the general population is increasing globally,[1] data regarding the factors associated with serious mental disturbances leading to compulsory treatment have not been described adequately in Southern European and Mediterranean countries.[2,3] Involuntary or compulsory psychiatric treatment is applied to individuals with mental disturbances lacking their consent, when the severity of the symptoms is jeopardizing personal or social safety.[4] Suicide behavior is one of the most common reasons for involuntary psychiatric treatment, most of the times present in people with depressive symptomatology (DS).[5] Similarly, the socio-demographic and clinical characteristics of those involuntary hospitalized with DS in Mediterranean and Southern European countries, including Cyprus, have been understudied.[6–8]

It is worth noting that a significant proportion of individuals facing DS are reluctant to seek help from formal mental health services because of either social stigma associated with mental illness, or due to mental health illiteracy.[9] Subsequently, DS may be deteriorated, leading many of these people to involuntary hospitalization for compulsory treatment.[10] Identification of the demographic and clinical profile of patients with DS, who (a) receive formal mental health services for the first time via involuntary hospitalization, and (b) are involuntarily readmitted for compulsory treatment may be relevant in formulating preventive targeted interventions.[11] Nevertheless, interventions in clinical populations aiming to empower ill health self-management skills and prevent relapse, need to be culturally relevant, also taking into account the clinical and socio-demographic profile of these populations.[12]

The context of the Republic of Cyprus

The Psychiatric Compulsory Hospitalization Act of the Republic of Cyprus entitles involuntary hospitalization as one's admission in a special psychiatric unit for care and treatment following a judicial decree; this decree is based on the assessment of one psychiatrist lacking the consent of the patient [on Psychiatric Hospitalization Act of 1997].[13] Thus, for an involuntary hospitalization to take place all the following need to be contented: (a) a mental disorder diagnosis, (b) incapacity of judgment regarding one's own health, (c) receiving no treatment may either severely affect one's safety and/or recovery, or pose a high risk for violence against one's own self or others. According to this legislation, involuntary hospitalization for compulsory treatment under a judicial decree is provided only in high security settings within psychiatric hospitals. Specifically, the Athalassa Psychiatric Hospital is the reference center for compulsory treatment in the Republic of Cyprus. The duration of involuntary hospitalization may range from 1 to 28 days, based on the judicial decree, and it may be verified by the assigned psychiatrist at the clinical setting in which the patient is hospitalized.[13]

Since there is no epidemiological data in people who are involuntarily hospitalized for compulsory treatment in the Republic of Cyprus, to the best of our knowledge, it would be useful to report on the socio-demographics and clinical characteristics of this group of patients including individuals with DS. Relevant data may form a national database and will also support comparisons with international data. Moreover, relevant data may support the development of health policy not only nationally, but internationally as well.

The aim of the present study was to investigate in those involuntary admitted with DS: (a) their socio-demographic and clinical characteristics, and the association of these variables with the degree of DS, (b) the socio-demographic and clinical predictors of DS, and (c) the metric properties of the Hamilton Depressive Rating Scale (HDRS-17) and Hamilton Anxiety Scale (HAM-A). The psychometric properties of the HDRS-17 and HAM-A have not been studied before in patients with psychosis under involuntary hospitalization.

Material and Method

Participants

A descriptive, cross-sectional and correlational study design was applied. The study environment was the Athalassa Psychiatric Hospital (APH) accessible to approximately 875,900 citizens based on the Republic of Cyprus;[14] its capacity includes 132 beds, distributed to one admission unit for females (19 beds), one admission unit for males (19 beds), a high safety ward (2 beds) and three rehabilitation wards (92 beds). Approximately, 395 individuals are involuntary hospitalized per year in the APH.[14]

Data were collected via a census sampling method (December 2016–February 2018). The study participants were adults who were involuntarily admitted to the APH with psychotic, mood or substance use-induced symptoms and diagnosed with one or more of the following diagnoses: schizophrenia, psychotic disorder of the spectrum of schizophrenia, mood disorder, substance/medication-induced disorder (DSM-5 classification).[15] The inclusion criteria were (a) age: 18 to 65 years; (b) signed informed consent for participation in the study; (c) longer than 3 days hospitalization.

Patients with one or more of the following diagnoses were excluded: (a) neuro-cognitive disorder, (b) developmental disorder, (c) intellectual disability, (d) personality disorder. The latter were not included since their hospitalization is 24 hours in most of the cases. Nevertheless, patients with a personality disorder and prominent psychotic or substance use-related symptoms who were hospitalized for more than 72 hours were included in the study.

A total of 761 admissions were recorded in the APH. Nine patients were younger than 18 years and 13 patients were older than 65 years, while 152 were diagnosed with a personality disorders (less than 24 hours of hospitalization) and 21 patients were diagnosed with an intellectual disability. Moreover, 43 patients were excluded because informed consent was not completed due to inadequate degree of insight during discharge, and 43 patients were excluded because the researcher did not manage to have a meeting with them to discuss informed consent process. Two patients passed away during hospitalization. The sample encompassed 406 individuals (figure 1).

Procedures

The data collection interview, independently conducted by two members of the research team (EB, KK), took place within the first 72 hours after admission. The duration was approximately 15–20 minutes. Each data sheet was saved into the medical file of the responder until signed informed consent was given for inclusion in the present study. Attainment of signed informed consent took place at the day of discharge, since by then it was expected from the responders to have achieved the ability to fully understand the information provided in the research protocol. When informed consent was given data were anonymized and included in

the study. This information was given both printed and orally, since the primary researcher (KK) explained the objectives and procedures of the study, confidentiality issues as well as the fact that participation in the study was voluntary and irrelevant to the clinical outcome or therapy issues. In those cases where the native language of patients was neither English nor Greek (4.3%), a translator supported the process of data collection and informed consent.

Data collection sheet encompassed socio-demographic (age, sex, nationality, mother language, marital status, place of residence, occupational status and receiving financial reimbursement, educational level) clinical data, and structured assessment tools for the measurement of the severity of symptomatology. The following clinical variables were recorded: personal history of mental health problems (first diagnosed mental health disorder, serious mental health problems prior to current hospitalization), family history of mental illness, current psychiatric diagnosis, main relapse symptomatology, involuntary admission history. Additionally, BMI and personal history of substance use (type, number and frequency) were recorded. Data on substance use included current and past use, with focus on the period just before the onset of relapse symptoms. Data discriminating heavy (heroin, cocaine, ecstasy, cannabis, magic mushrooms, etc.) from light (alcohol) substances were also recorded. As for relapse symptoms, the most prominent, according to the phenomenology of the symptoms and the medical record, was recorded. Regarding admission diagnosis the following grouping was applied for data analysis: (a) Schizophrenia, (b) Other psychotic disorder of the spectrum of schizophrenia (including substance/medication-induced psychotic disorder), (c) Mood disorders (including substance/medication-induced bipolar or depressive disorder), (d) Other (psychotic disorders due to medical condition, anxiety disorders).

The study protocol was approved by the Cyprus National Bioethics Committee (EEBK/EP/2014/08).

Measures

The following tools were used for the measurement of the severity of admission symptomatology: the Hamilton Depressive Rating Scale[16,17] (HDRS-17) (17 items/symptom groups, rated 0–2 or 0–4; Scale Range [SR]: 0-50; unidimensional scale; values equal or above 8 indicate clinical DS); the Montreal Cognitive Assessment[18] scale (MoCA)(30 items; SR: 1-30; unidimensional scale), the Positive and Negative Syndrome Scale[19] (PANSS)(30 items/groups of symptoms, rated 1-7; SR: 7-210; including three subscales: positive symp-
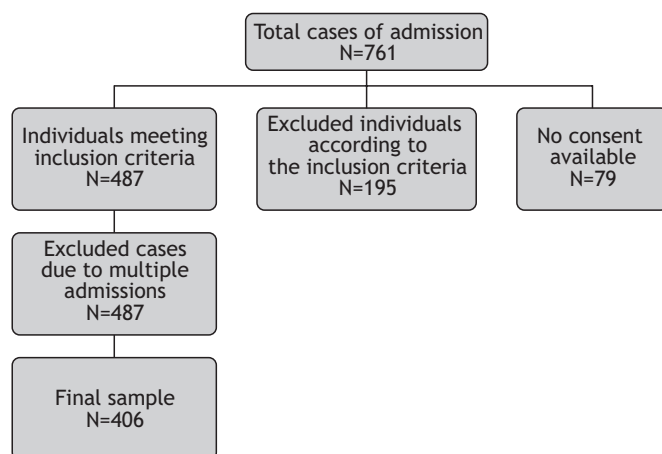

Figure 1. Flowchart of the sample included in the present analysis.

toms subscale [7 items], negative symptoms subscale [7 items], general symptoms subscale [16 items]), and the Hamilton Anxiety Rating Scale[20] (HAM-A) (14 items rated 0-4; SR: 0-56; unidimensional) for the assessment of DS severity, cognitive functioning, psychotic symptoms severity and anxiety symptoms severity, respectively. The MoCA was used to allow an assessment of possible differences in terms of cognitive functioning between the main groups of interest, and further control this factor for potential confounding effect regarding the predictors of DS severity.

Statistical analysis

Confirming normal distribution of all variables in normality test, t-test and ANOVA were applied to examine the differences between the DC group (HDRS-17 total score ≥8) and the non-DC group (HDRS-17 total score <8)[16,17] regarding HAM-A, MoCA, PANSS scores. Forward stepwise multivariable logistic regression models were used to select the final set of variables (among a large number) associated with manifestation of DS (dependent variable), controlling for the potential confounding effect of the rest of the variables in the final model, according to established guidelines.[21] Scores in the MoCA [total scale/ "Speech fluency"; "Visuo-constructional Skills (Cube); "Visuo-constructional Skills (Clock)" items] were measured in order to control their possible confounding effect regarding the predictors of DS severity.

For all statistical tests, p values of 0.05 or lower were considered statistically significant. Data were analyzed through the Statistical Package for Social Sciences (SPSS, Inc, Chicago, IL version 20.00).[22]

Internal consistency reliability score via Cronbach's alpha value was assessed for the HDRS-17 and the HAM-A tool, respectively. Scores in the PANSS scale/subscales were used to assess the known-group and discriminant validity of the HDRS-17 and HAM-A tools.

Results
Socio-demographic and clinical characteristics

A total of 44 individuals out of 406 reported DS. The sociodemographic and clinical characteristics of both DC group and non-DC group are presented in table 1. Table 1 also presents statistically significant differences between these two groups in socio-demographic and clinical variables.

Clinical characteristics in the DC group

The main causes of admission were aggressive behaviour towards others (47.7%), suicidal behaviour (29.5%), disorganized behaviour along with non-adherence to pharmacotherapy (15.9%), disorganized behaviour and substance use (6.8%). Approximately, 75% were involuntary admitted for the first time, and 59.1% reported a positive history of mental disorders. The mean duration of illness was 4.36 years [minimum: 0 (first episode)-maximun: 40 years]. Approximately 13.6% reported more than 11 years of illness duration and 22.7% reported 1 to 10 years of illness duration; 38.6% reported substance use, and 29% of them reported more than one substance used. The main substances used were alcohol (52.9%) and cannabis (41.2%). Approximately 25% were prescribed with antipsychotic and anxiolytic agents, 20.45% with a combination of antidepressants and anxiolytics, 11.36% with a combination of antidepressants, mood stabilizers and anxiolytics, 11.36% with antipsychotics, 9.09% with a combination of antidepressants and mood stabilizers, 6.82% with antidepressants, 6.82% with a combination of antidepressants and antipsychotics, 2.27% with mood stabilizers and anxiolytics, 2.27 with anxiolytics only, while 4.55% were not prescribed any pharmacotherapy.

The mean score in the HDRS-17 was 30.72 (range: 8–50, SD: 10.42). The highest values [M(SD)] per item were recorded in the variables "Suicidal behaviour" [3.09(1.09)], "Depressive mood" [2.95(1.07)], "Work and interests" [2.79(1.3)], Psychiatric anxiety [2.25(1.2)] "Guilt" [2.22(1.3)] and "Somatic anxiety" [2.00(1.0)]. The majority (81.9%) reported a total HDRS-17 score 22–50, 4.6% a score between 15 and 18, and 6.9% between 19 and 21. Cronbach' s alpha score was 0.82 for the HDRS, and 0.76 for the HAM-A, both indicating adequate internal consistency.

Association of DS with socio-demographic and clinical measures

Table 2 presents mean differences between DS group and non-DS group in PANSS total score, PANSS subscales scores, HAM-A and MoCA. There were no statistically significant differences between these two groups in MoCA total score, the "Speech fluency", "Visuo-constructional Skills (Cube)" and "Visuo-constructional Skills (Clock)" items of the MoCA scale, PANSS total score, PANSS general symptoms subscale score and PANSS negative symptoms subscale score. These results denote that both groups have comparable cognitive functioning. Since no association was reported between DS, and negative psychotic symptoms, one may argue that HDRS-17 actually measures a construct different than negative psychotic symptoms, partially supporting the discriminant validity of the HDRS-17.

Table 1. Socio-demographic and clinical characteristics of the sample: Comparisons between the group with clinical depressive symptoms and the group with non-clinical depressive symptoms.

	Group with clinical depressive symptoms (HDRS-17 total score ≥8) (n=44)	Group with non-clinical depressive symptoms (HDRS-17 total score <8) (n=362)	x^2	p
	% (n)	% (n)		
Sex				
Male	45.5 (21)	66.6 (241)	6.08	0.014
Female	54.5 (23)	33.4 (121)		
Age group years				
20-24	6.8 (3)	13.8 (50)		
25-34	36.4 (16)	31.2 (113)	2.62	0.453
35-44	18.2 (8)	22.7 (82)		
45-65	38.6 (17)	32.3 (17)		
Ethnicity				
Greek-Cypriot	61.4 (27)	74.0 (268)	4.38	0.036
Other	38.6 (17)	26.0 (94)		
Spoken language				
Greek	65.9 (29)	84.0 (304)	8.68	0.003
Other	34.1 (15)	16.0 (58)		
Religion				
Christian Orthodox	75.0 (33)	82.0 (297)	1.27	0.258
Other	25.0 (11)	18.0 (65)		
Marital Status				
Married	77.3 (34)	12.7 (46)	3.31	0.069
Single	22.7 (10)	87.3 (316)		
Residence				
Nicosia	40.9 (18)	38.1 (138)		
Limassol	29.5 (3)	26.5 (96)		
Larnaca	22.7 (10)	18.8 (68)	3.59	0.464
Pachos	2.3 (1)	11.0 (40)		
Famagusta	4.5 (2)	5.5 (20)		
Educational level				
Primary school	18.2 (8)	14.4 (52)		
Lower secondary school	13.6 (6)	21.3 (77)	3.60	0.307
Higher secondary school	34.1 (15)	23.8 (86)		
Tertiary education	34.1 (15)	40.6 (147)		
Vocational status				
Employed	27.3 (12)	21.8 (79)	0.67	0.413
Unemployed	72.7 (32)	78.2 (283)		
Financial reimbursement				
Yes	45.5 (20)	50.0 (181)	0.32	0.569
No	54.5 (24)	50.0 (181)		

Table 1. (*Continued*).

	Group with clinical depressive symptoms (HDRS-17 total score ≥8) (n=44)		Group with non-clinical depressive symptoms (HDRS-17 total score <8) (n=362)		x^2	p
	% (n)		% (n)			
BMI						
Underweight (<18.5 kg/m^2)	12.8	(5)	4.9	(16)		
Normal (18.5–25 kg/m^2)	59.0	(23)	45.1	(147)	1.58	0.662
Overweight (25–30.5 kg/m^2)	15.4	(6)	30.1	(98)		
Obese (>30.5 kg/m^2)	12.1	(5)	19.9	(65)		
Psychiatric diagnosis						
Schizophrenia	6.8	(3)	52.5	(190)		
Schizoaffective disorder	18.2	(8)	26.0	(94)	57.30	<0.001
Mood disorder	59.1	(26)	19.9	(72)		
Other	6.9	(3)	1.7	(6)		
Main symptomatology led to the current involuntary hospitalization						
Disorganized behavior not otherwise specified	0	(0)	5.5	(20)		
Non-adherence to pharmacotherapy & disorganized behavior	15.9	(7)	58.3	(211)		
Disorganized behavior along with substance use	6.8	(3)	23.8	(86)	114.77	<0.001
Suicidal/Self-harming behavior	29.5	(13)	7.5	(27)		
Aggressive behavior towards others	47.7	(21)	5.0	(18)		
Personal history of involuntary hospitalization						
First admission	75.0	(33)	44.8	(162)	14.38	<0.001
Readmission	25.0	(11)	55.2	(200)		
Personal history of mental health problems						
1st episode of a mental health problem	40.9	(18)	27.9	(101)	3.20	0.073
Positive history of mental health problems	59.1	(26)	72.1	(261)		
Psychiatric family history						
Positive	54.5	(24)	45.3	(164)		
Negative	29.5	(13)	40.6	(147)	4.13	0.126
Unknown	14.3	(7)	14.1	(51)		
Diagnosis of psychiatric family history						
Schizophrenia and/or other related psychotic disorder	16.7	(4)	47.3	(70)		
Mood disorder	54.2	(13)	29.1	(43)		
Schizophrenia or other psychotic disorder and Mood disorder	8.3	(2)	8.1	(12)	10.88	0.059
Other	20.8	(5)	15.5	(23)		
Personal history of substance use						
Yes	38.6	(17)	43.4	(157)	0.35	0.549
No	61.4	(27)	56.6	(205)		
Time of year of the admission						
Winter	40.9	(8)	30.9	(112)		
Spring	22.7	(10)	21.3	(77)	3.05	0.383
Summer	22.7	(10)	24.0	(87)		
Autumn	13.6	(6)	23.8	(86)		

Table 2. Comparisons between the participants with clinical depressive symptoms (HAMD score ≥8) and the participants with non-clinical depressive symptoms (HAMD score <8) regarding cognitive functioning.

		Mean (SD)	t	df	p (2-tailed)	S.E. Difference	95% CI Lower	95% CI Upper
Hamilton Anxiety Scale score	Clinical depressive symptoms	21.66 (8.9)	1.9	404	0.05	1.35	−0.05	5.26
	Non-clinical depressive symptoms	19.01 (8.4)						
PANSS sub-scale of positive symptoms score	Clinical depressive symptoms	24.27 (6.4)	−3.0	296	0.003	−6.99	2.33	−11.57
	Non-clinical depressive symptoms	31.26 (7.6)						
PANSS sub-scale of negative symptoms score	Clinical depressive symptoms	25.54 (8.0)	0.54	295	0.586	2.69	−3.83	6.76
	Non-clinical depressive symptoms	24.07 (8.8)						
PANSS sub-scale of general symptoms score	Clinical depressive symptoms	55.18 (12.1)	0.49	294	0.618	3.84	−5.64	9.47
	Non-clinical depressive symptoms	53.27 (12.5)						
PANSS total score	Clinical depressive symptoms	105.0 (21.9)	−0.49	293	0.621	7.49	−18.45	11.03
	Non-clinical depressive symptoms	108.7 (24.5)						
MoCA score for the item "Verbal Fluency"	Clinical depressive symptoms	0.41 (0.5)	0.98	258	0.326	0.98	−0.09	0.29
	Non-clinical depressive symptoms	0.51 (0.5)						
MoCA score for the item "Visuoconstructional Skills (Cube)"	Clinical depressive symptoms	0.55 (0.5)	-0.63	258	0.52	0.09	−0.25	0.13
	Non-clinical depressive symptoms	0.49 (0.5)						
MoCA score of the item "Visuoconstructional Skills (Clock)"	Clinical depressive symptoms	2.55 (0.7)	−0.75	258	0.45	0.16	−0.46	0.20
	Non-clinical depressive symptoms	2.42 (0.8)						
MoCA total score	Clinical depressive symptoms	22.92 (4.1)	1.03	255	0.30	1.07	−1.00	3.22
	Non-clinical depressive symptoms	21.81 (5.4)						

In contrast, the DS group reported statistically significantly lower mean score in PANSS positive symptoms subscale (p=0.003) and statistically significantly higher mean score in the HAM-A (p=0.05) (table 2). These results support the known-group validity of the HDRS-17 scale.

Females reported more frequently DS compared to males (52.3% vs. 47.7%, respectively, p=0.014), as did those with (a) a negative personal history of involuntary readmissions for compulsory treatments compared to those with a positive history (75.0% vs. 25.0%, respectively, p<0.001), (b) Greek-Cypriot ethnicity compared to foreigners (59.1% vs. 40.9%, respectively, p=0.0036), (c) a mood disorder diagnosis compared to those with a diagnosis of Schizophrenia, other psychotic disorder of the spectrum of schizophrenia, or any other psychiatric diagnosis (70.5% vs. 6.8%, 20.5%, 2.3%, respectively, p<0.001), and d) aggressive behaviour towards others as the main admission cause, compared to those with suicidal behaviour, disorganized behaviour and substance use or non-adherence to pharmacotherapy or not otherwise specified (47.7% vs. 29.5%, 6.8%, 15.9%, 0%, respectively, p<0.001).

Predictors of clinical depressive symptoms

In forward stepwise multivariable logistic regression analysis in which the dependent variable was "Depressive symptoms" and predictors the variables presented in table 1, only female sex and a mood disorder diagnosis retained a statistically significant association with DS. Specifically, it was shown that females were more than three times more likely to manifest DS during involuntary admission for compulsory treatment compared to males, while those with a mood disorder were more than 15 times more likely to describe DS during involuntary admitted compared to those with a diagnosis of schizophrenia (table 3). These results support the known-group validity of the HDRS-17 scale. Moreover, MoCA scale/individual items did not show any association with DS in the multivariable model, as expected, since there were no relevant statistically significant associations in the univariable model (table 2).

Table 3. Predictors of clinical depressive symptoms in the sample (N=406).

	B	S.E.	Wald	df	p	Exp(B)	95% CI	
							Lower	Upper
Sex								
Male								
Female	1.18	0.45	6.70	1	0.01	3.28	1.33	8.04
Psychiatric diagnosis								
Schizophrenia			16.72					
Mood disorder	2.72	0.67		1	0.000	15.22	4.13	56.14
Constant	-23.14	8529.7	0.00	1	0.99	0.00		

Discussion

The present study identified, for the first time, predictors of DS in patients with psychosis involuntarily hospitalized for compulsory treatment in Cyprus, i.e., female sex and a mood disorder diagnosis, and the metric properties of the HDRS-17 and HAM-A in this clinical population. The findings showing female sex and a mood disorder diagnosis as predictors of DS confirm previous studies in clinical populations,[23] but most importantly support these evidence for those involuntarily hospitalized.[24] Additionally, these findings may partially support the known-group validity of the HDRS-17, along with the observed lower total score in the PANSS subscale of positive symptoms in the DS group, compared to the non-DS group. Moreover, the reported lack of association between DS and negative psychotic symptoms may partially support the discriminant validity of the HDRS-17 in involuntarily hospitalized patients. Additionally, the observed higher total score in the HAM-A scale in the DS group compared to the non-DS group may partially support the known-group validity of the HAM-A in this clinical group. The internal consistency reliability of both scales was adequate herein, supporting data from culturally diverse samples;[25] yet for the first time in a sample of involuntarily hospitalized patients. Further studies regarding the specificity and sensitivity of the HAM-A and HDRS-17 are needed. The present data could not support such measurements due to the relatively small group of the responders with DS, compared to those with no DS.

Nevertheless, the differential diagnosis of DS and negative psychotic symptoms remains demanding; especially in clinical environments of acute care, and particularly during involuntary admission. At the same time, data from family history and psychomotor development history to distinguish the neurodevelopmental, neurodegenerative or acute nature of relevant symptoms are often vague or inadequate. Therefore, it seems that there is a need for clinical methods with high specificity for the evaluation of DS in those under compulsory treatment.

The present data also showed that the most common psychiatric diagnosis in the DS group was a bipolar disorder, while the most frequent admission cause was aggressive behaviour towards others. Thus, it is possible that the majority of the DS group participants were patients with schizoaffective disorder or bipolar disorder in mixed episodes presenting both symptoms of depression and aggressive behaviour. Further studies on relapse prevention strategies regarding patients with bipolar disorder with mixed episodes are proposed.

The finding showing aggressive behaviour as the most frequent admission cause is in contrast with previous studies showing that suicidal behaviour is the leading cause for compulsory treatment in people with severe DS.[24] This difference may be attributed to the finding that the most frequent diagnosis in the present DS group was bipolar disease instead of unipolar depression. Indeed, individuals with a bipolar disorder have an increased incidence of both violent behaviour and suicide attempts,[26,27] compared to patients diagnosed with unipolar depression who seem to be more frequently involuntarily hospitalized due to suicidal behavior.[24] Overall, it seems that people with severe DS who do not manifest aggressive behaviour are less frequently involuntarily admitted for compulsory hospitalization in Cyprus. Indeed, this clinical population probably seeks help voluntarily from the community mental health services, or they are voluntarily hospitalised in psychiatric clinics during relapse. The increased rate of aggressive behavior leading to involuntary hospitalization in those with severe DS herein may be also explained by the higher frequency of substance use in them, probably triggering aggression towards others. Specifically, more than one out of three in the DS group reported substance use, most frequently alcohol and cannabis. There is lack of previous data regarding

comorbid of DS and substance use in those involuntarily admitted for treatment. Most of the studies in patients under compulsory treatment focus on samples with psychotic or manic symptoms.[2,28] Nevertheless, these studies report a link between positive history of substance use and aggressiveness in involuntarily admitted clinical groups.[2,28]

Furthermore, one out of three in the entire sample and approximately half of the participants in the DS group reported that the present involuntary hospitalization was their first documented episode of mental disorder. This may reflect the fact that a significant number of people with serious mental health problems remain in the community without receiving care until symptoms worsen to the extent that compulsory treatment is required. Compulsory hospitalisation is a traumatic experience for patients and families, and a key factor for social stigma.[29] Most importantly, data show that the vast majority of young patients under involuntary hospitalization report a negative impact of compulsory treatment on their willingness to disclose suicidal thoughts and intentions.[30] Thus, the need for interventions to prevent involuntary admission is of paramount importance. Interventions towards this aim may include mental health literacy strategies for the public integrated into community mental health services, as well as revision of the educational interventions provided to clinical populations and their families.

The most common pharmacotherapy in the group with DS was a combination of antipsychotic and anxiolytic agent. Bearing in mind that the most pronounced symptom in this group was aggressive behaviour, this finding is in line with previous data showing that the most frequent therapy for aggression and impulse control in acute psychiatric compulsory treatment is combination of anti-psychotics and benzodiazepines.[31] Additionally, other studies show that patients in mania or mixed episodes under involuntary admission are less likely to be prescribed with anticonvulsants or lithium.[28]

The second most common therapeutic schema reported herein included a combination of antidepressants and benzodiazepines. Although antidepressants are not included in published clinical guidelines for antipsychotic treatment, this seems to be a standard clinical practice in Cypriot state mental health services, while the high frequency of benzodiazepine prescribing may be due to the clinical finding that patients under benzodiazepines exhibit better adherence to antipsychotic treatment.[31]

In conclusion, the present data on the metric properties of HDRS-17 and HAM-A are the first to be reported in patients with psychosis under involuntary hospitalization. Further studies on specificity and sensitivity of the HAM-A and HDRS-17 in this group of patients are suggested. Additional studies to assess the implementation of clinical guidelines regarding DS relapse prevention and involuntary hospitalization are also proposed with focus on females and individuals diagnosed with bipolar disease with mixed episodes. Enhancement of mental health literacy and implementation of educational programs regarding DS self-management skills are also proposed.

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Ερευνητική εργασία

Καταθλιπτικά συμπτώματα σε ακούσια νοσηλευόμενους στην Κύπρο: Κοινωνικο-δημογραφικά χαρακτηριστικά και υποκείμενη ψυχοπαθολογία

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ΠΕΡΙΛΗΨΗ

Ασαφής παραμένει η έκταση στην οποία διαφοροποιείται η ένταση των συμπτωμάτων κατάθλιψης (ΣΚ) μεταξύ ατόμων με διαταραχές διάθεσης, σχιζοφρένεια, ή άλλες συναφείς ψυχωτικές διαταραχές υπό συνθήκες υποχρεωτικής νοσηλείας. Διερευνήθηκαν η σχέση ΣΚ με τα δημογραφικά και κλινικά χαρακτηριστικά ενηλίκων ακουσίως νοσηλευόμενων στο Ψυχιατρικό Νοσοκομείο Αθαλάσσας (ΨΝΑ) Κύπρου, καθώς και μετρικές ιδιότητες (αξιοπιστία εσωτερικής συνοχής, εγκυρότητα γνωστών ομάδων, εγκυρότητα διάκρισης) των εργαλείων αξιολόγησης ΣΚ και άγχους, HDRS-17 και HAM-A, αντίστοιχα. Εφαρμόστηκε περιγραφική, συγχρονική μελέτη σε απογραφικό δείγμα 406 ατόμων (Δεκέμβριος 2016–Φεβρουάριος 2018). Το δομημένο ερωτηματολόγιο συλλογής δεδομένων περιλάμβανε: (α) δημογραφικά και κλινικά χαρακτηριστικά, (β) τις κλίμακες HDRS-17, MoCA, PANSS και HAM-A για την αξιολόγηση βαρύτητας ΣΚ, επάρκειας νοητικών λειτουργιών, βαρύτητας ψυχωτικών συμπτωμάτων και συμπτωμάτων άγχους, αντίστοιχα. Συμπτώματα κατάθλιψης (HDRS-17 ≥8) καταγράφηκαν στα 44 από τα 406 άτομα (21 άνδρες, 23 γυναίκες), τα οποία συχνότερα ήταν Ελληνοκύπριοι (61,4), ηλικίας 45-65 ετών (38,6%), άγαμοι (77,3%) και άνεργοι (72,7%). Η συχνότερη κλινική διάγνωση και αιτία εισαγωγής μεταξύ τους ήταν η διπολική διαταραχή (59,1%) και η ετεροκαταστροφική συμπεριφορά (47,7%), αντίστοιχα. Υψηλότερες μέσες τιμές (ΜΤ) στο HDRS-17 σημειώθηκαν στις μεταβλητές «συμπεριφορά αυτοκτονίας» [ΜΤ=3,09, Τυπική Απόκλιση (ΤΑ)=1,09], και «καταθλιπτική διάθεση» (ΜΤ=2,95, ΤΑ=1,07). Τα άτομα με ΣΚ είχαν χαμηλότερες τιμές στην υποκλίμακα θετικών συμπτωμάτων PANSS (t-test, p=0.003), και υψηλότερη συνολική τιμή στην κλίμακα HAM-A (t-test, p=0,05) συγκριτικά με το υπόλοιπο δείγμα. Επίσης, στην πολυπαραγοντική ανάλυση λογιστικής παλινδρόμησης, στατιστικά σημαντική σχέση παρέμεινε μεταξύ ΣΚ και (α) γυναικείου φύλου [OR95%CI:3,28 (1,33–8,04), p=0,01], και (β) διάγνωσης διαταραχής διάθεσης [OR95%CI:15,22 (4,13–56,14), p<0,0001]]. Ο δείκτης Cronbach's alpha για την κλίμακα HDRS-17 ήταν 0,827, και για την κλίμακα HAM-A ήταν 0,763. Τα παρόντα αποτελέσματα υποστηρίζουν μερικώς την εγκυρότητα γνωστών ομάδων των κλιμάκων HDRS-17 και HAM-A, και την εγκυρότητα διάκρισης της HDRS-17 σε ακουσίως νοσηλευόμενους. Δεδομένου ότι στην ομάδα με ΣΚ η συχνότερη διάγνωση ήταν η διπολική διαταραχή και η συχνότερη αιτία εισαγωγής ήταν η επιθετική συμπεριφορά προς τους άλλους, φαίνεται ότι τα άτομα αυτά στην πλειοψηφία τους ήταν πάσχοντες από διπολική διαταραχή σε μικτά επεισόδια. Προτείνονται περαιτέρω μελέτες για την αποτελεσματική αντιμετώπιση των πασχόντων αυτών στην κοινότητα, καθώς και για τη διερεύνηση της ευαισθησίας και της ειδικότητας των κλιμάκων HDRS-17 και HAM-A στα άτομα υπό ακούσια νοσηλεία.

ΛΕΞΕΙΣ ΕΥΡΕΤΗΡΙΟΥ: Καταθλιπτική συμπτωματολογία, ακούσια νοσηλεία, δημογραφικά χαρακτηριστικά, HAM-A, HDRS-17.

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