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PSYCHIATRY IN THE EMERGENCY ROOM: ONE YEAR PERIOD OF CLINICAL EXPERIENCE

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SUMMARY

Objective: *We examined the psychiatric consultations carried out over one year at the Emergency Room (ER) of the hospital of Perugia, with the aim of describing the epidemiologic characteristics of patients with any psychiatric illness and their management. We also assessed the distribution of psychiatric emergencies over this year of observation.*

Method: *We recruited patients admitted to the ER, between July 2011 and June 2012, for which a psychiatric consultation was required. We used the t-test for continuous variables. Categorical variables were analyzed with the chi-squared test and the Fisher exact test. We considered significant test results with $p<0.05$. The post-hoc analyses were carried out with Bonferroni or Sidak correction. Statistical analyses were performed using STATA 12.0.*

Results: *Neurotic, stress-related and somatoform disorders were the most represented. The most frequent approach to patients with psychiatric complaints did not imply the use of psychopharmacological treatments or coercive interventions. No particular seasonality of psychopathology was observed.*

Conclusions: *One of the fundamental aspects of the psychiatric intervention is empathy along with the attempt to enter into a relationship with the patient, in order to share, where possible, the therapeutic project, particularly in the case the of patients with acute and severe psychiatric illnesses.*

Key words: *psychiatric emergencies - consultation-liaison psychiatry - emergency room*

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INTRODUCTION

Patients with psychiatric illnesses represent a significant and increasing proportion of emergency department (ED) patients (Douglass et al. 2011, Larkin et al. 2009, Larkin et al. 2005). The emergency rooms (ERs) of the EDs have proven to be a relevant entry point for a variety of psychiatric patients as well as a link between general hospitals (GHs) and community mental health services (Biancosino et al. 2009).

Several studies have been carried out to evaluate the socio-demographic and clinical characteristics of patients referred to the ED for specific mental health disorders and to examine the decision making process regarding admission to psychiatric or medical wards (Douglass et al. 2011, Larkin et al. 2005, Biancosino et al. 2009, Wu et al. 2012, Choi et al. 2012, Castilla-Puentes et al. 2011, Pompili et al. 2011, Penagaluri et al. 2010, Pandya et al. 2009, Larkin et al. 2001, Boudreaux et al. 2006) but few have assessed the epidemiology of the use of the ED for all mental illnesses in adults (Hazlett et al. 2004).

In the ER psychiatrists are constantly faced with various types of psychiatric problems. On the one hand the real emergencies, which by definition indicate an acute disturbance of thought, mood, behavior or social relationship that requires an immediate intervention because of the potential to rapidly determine a catastrophic outcome. Beside these, there are the urgent situations, namely those with a slower evolution and where the dangerous outcome is not imminent and attention can be shortly delayed (Villari et al. 2007). On the other hand psychiatrists in the ER are involved in less pressing situations related to the fact that often people with mental health problems, rather than to the community mental health services, turn to the ERs, which are easy to reach and always available (Mavrogiorgou et al. 2011).

The ER is therefore a place where, alongside the management of psychiatric emergencies/urgencies, there occurs the so-called consultation-liaison (C-L) psychiatry, which has two separate modes of application in the clinical setting that is, on the one hand, the actual consultation, which essentially concerns the diagnosis and the treatment (Fulcheri et al. 2001), and, on the other, the link or liaison, which is a more complex and continuous intervention which leads to a more extensive cooperation with the treating team, as well as a mediation and a connection between this, the patient, his/her family members and the staff in charge of assistance (Mayou 1988).

The reason for the request for psychiatric consultation in ER does not always depend depends on the severity of the symptoms, often it is sufficient that the patient has a psychiatric history or receives a psychopharmacological treatment to be identified as a "psychiatric patient", therefore requiring a specialist

evaluation. When patients arrive in the ER, given the need for clarity and speed, there is the tendency to attribute operational definitions, on the basis of the specific problems that in that specific moment must be primarily considered. Patients are defined as "surgical", "cardiology", or "psychiatric", but, in the latter case, there is an additional underlying meaning that must be taken into account (Villari et al. 2007). The psychiatric patient is a person who is often seen in a different way compared with "organic" patients for several reasons: the presence of psychiatric history, the unusual appearance or behavior, as well as subjective symptoms reported by the patient him/herself or his/her family members (Villari et al. 2007), such as bizarre ideation or altered perceptions. This is why this kind of patient is often totally entrusted to the psychiatrist (Villari et al. 2007), even if in that particular moment his/her main problem is organic.

In addition, psychiatrists often have to deal more with social issues than with purely psychopathological conditions, as well as with situations pertaining to public safety. Along with the attempt to intervene in urgent mental health crises, emergency psychiatric clinicians must also simultaneously interact with police, advocates of patients' rights, legal issues, community desires, family wishes (Wilson & Zeller 2012) and basic needs.

Given the huge complexity of the psychiatric intervention in the ER, in this study we examined the psychiatric consultations carried out at the ER of the Santa Maria della Misericordia Hospital in Perugia, between July 2011 and June 2012, with the aim of describing the epidemiologic characteristics of patients referred to the ER for any psychiatric condition and their management and examine the several aspects of the psychiatric intervention in this clinical setting. Moreover, since it is widely believed that holidays are associated with an increased incidence of psychopathology (Sansone & Sansone 2011), we also assessed the distribution of psychiatric emergencies over this year of observation.

SUBJECTS AND METHODS

We recruited 675 consecutive patients admitted to the ER between July the 1st 2011 and June the 30th 2012, for which a psychiatric consultation was required.

The service, based at the psychiatric ward of the Santa Maria della Misericordia Hospital in Perugia, is available 24 hours a day, 365 days a year and is carried out by one attending psychiatrist and one resident. It receives requests for urgent or planned consultations, by all departments of the hospital. In the ED consultations are always provided under emergency/urgency.

Activities are divided into diagnostic, therapeutic and planning after discharge. The diagnostic activity makes use of the clinical interview and, where necessary, of psychometric tests or request for further laboratory and instrumental evaluations to either clarify or rule out any organic causality.

Therapeutic interventions and connection within the ED are:

- setting up or re-evaluation of psychopharmacological therapy;
- taking care of the patient, referring him/her to outpatient services or to hospitalization;
- transferring the patient to internal medicine wards for observation, evaluations or interventions that are a priority over psychiatric problems;
- counselling of family members, or caregivers, particularly for patients with chronic and disabling diseases;
- awareness of the host team in order to create optimal conditions for the management of the most frequent psychopathological problems associated with medical conditions;
- contact with community mental health services and with general practitioners (GPs).

The plan after discharge results in:

- ensuring continuity of care by referring the patient to our outpatient service;
- connection with specific professionals based on individual therapeutic projects agreed with the patient and the service that is intended to (re)welcome him/her: GPs, Community Mental Health Services, Drug or Alcohol Addiction Services, Social Services or private psychiatrists who have already been in charge of the patient;
- admission to psychiatric, internal medicine or surgical wards or in the Residential Services of the Umbrian region.

The present study was carried out with the approval of the local Ethics Committee.

Data was collected by the means of a survey form derived from the Patient Registration Form (PRF)20 and subdivided in 8 sections:

- Demographic data:
- Administrative data about the length of stay and the number of consultations carried out;
- Data related to modality of request and provision of consultation;
- Presence of psychiatric history;
- Current psychiatric diagnosis;
- Medical diagnosis;
- Consultancy services and links provided;
- Long-range plan after discharge.

Statistical analysis

For the comparison between the means we used the t-test for continuous variables. Categorical variables were analyzed with the chi-squared test and the Fisher exact test. We considered significant test results with $p<0.05$. The post-hoc analyses were carried out taking into account Bonferroni or Sidak correction to correct the level of significance, considering that we were carrying out multiple comparisons. Statistical analyses were performed using the STATA 12.0.

RESULTS

In the study period, a total of 1507 consultations have been carried out in the Santa Maria della Misericordia Hospital in Perugia, of which 675 (44.8%) requested by the ER. Three patients were excluded because of insufficient data.

Socio-demographic characteristics of the sample are shown in Table 1. There were 278 men (41.19%) and 397 women (58.81%), with a mean age of 41.72±16.52 SD (range 14-94).

Table 1. Socio-demographic characteristics of the sample

	Mean 41.72 (Range 14-94) N	SD* 16.52 %
Age		
<20	44	6.50
20-29	117	17.30
30-39	174	25.80
40-49	148	21.90
50-59	89	13.20
60+	96	14.20
Gender		
Male	278	41.19
Female	397	58.81
Conjugal status		
Unmarried	349	51.70
Married	185	27.41
Divorced/separated	54	8.00
Widowed	36	5.33
Unknown	51	7.56
Environment		
Family of origin	201	29.78
Conjugal family	187	27.70
Alone	119	17.63
Institution	37	5.48
Other	93	13.78
Unknown	38	5.63
Occupation		
Employed	170	25.19
Unemployed	166	24.59
Retired/disabled	96	14.22
Student	57	8.44
Self-employed	25	3.70
Housewife	21	3.11
Freelance professional, manager	14	2.07
Other	36	5.33
Unknown	90	13.33
Country of Origin		
Italy	531	78.67
Rest of Europe	75	11.11
Africa	36	5.33
South and Central America	8	1.19
Middle East	8	1.19
Asia	7	1.04
USA	1	0.15
Stateless	4	0.59
Unknown	5	0.74

*SD Standard deviation

Clinical characteristics of the sample are presented in Table 2. Most frequent ICD-10 diagnosis were: neurotic, stress-related and somatoform disorders (N=184; 27.3%), mood disorders (N=126; 18.7%) and schizophrenia, schizotypal and delusional disorders (N=109; 16.1%).

Table 2. Clinical characteristics of the sample
A. Primary reason of referral from ED to C-L Psychiatry

	N	%
Anxiety	199	29.5
Agitation	136	20.1
Suicide attempt/suicide risk	104	15.4
Delusions/hallucinations	42	6.2
Depression	39	5.8
Other	38	5.6
Confusion	20	3.0
Unexplained physical symptoms	17	2.5
Alcoholism	16	2.4
Difficult management and compliance problems	15	2.2
Psychiatric hystory	14	2.1
Re-evaluation of pharmacological therapy	10	1.5
Aggressive behavior	10	1.5
Request from the patient	9	1.3
Insomnia	4	0.6
Undefined	2	0.3

Table 2B. Psychiatric diagnosis

	N	%
Neurotic, stress-related and somatoform disorders	184	27.3
Mood (affective) disorders	126	18.7
Schizophrenia, schizotypal and delusional disorders	109	16.1
Unspecified mental disorder	102	15.1
Disorders of adult personality and behavior	55	8.1
Mental and behavioural disorders due to psychoactive substance use	38	5.6
None	28	4.1
Organic, including symptomatic, mental disorders	11	1.6
Behavioural syndromes associated with physiological disturbances and physical factors	9	1.3
Mental Retardation	7	1.0
Behavioural and emotional disorders with onset usually occurring in childhood and adolescence	3	0.4
Dementia in other diseases classified elsewhere	3	0.4

Table 2C. Psychiatric assistance in the last 5 years

	N	%
Community mental health services	310	45.9
None	201	29.8
Private Psychiatrist	77	11.4
Unknown	39	5.8
General practitioner	33	4.9
Other	15	2.2

Table 2D. Psychiatric assistance in the last 6 months

	N	%
Community mental health services	317	47.0
None	162	24.0
Private Psychiatrist	87	12.9
General practitioner	57	8.4
Unknown	28	4.1
Other	24	3.6

Table 2E. Psychopharmacological treatments at home

	N	%
None	216	32.0
BDZ1	79	11.7
BDZ+AD2	71	10.5
BDZ+NL3	58	8.6
NL	51	7.6
BDZ+AD+NL	46	6.8
BDZ+NL+MS4	34	5.0
AD	27	4.0
AD+BDZ+NL+MS	25	3.7
NL+MS	16	2.4
AD+BDZ+MS	13	1.9
MS	12	1.8
BDZ+MS	8	1.2
AD+NL	6	0.9
AD+NL+MS	4	0.6
AD+MS	4	0.6
Methadone	4	0.6
Disulfiram	1	0.1

Table 2F. Psychopharmacological treatments in the ER

	N	%
None	424	62.8
BDZ	174	25.8
BDZ+NL	37	5.5
BDZ+AD	4	0.6
BDZ+AD+NL	3	0.4
Anticholinergics	3	0.4
BDZ+NL+MS	2	0.3
AD+NL	2	0.3
Flumazenil	1	0.1

Table 2G. Medical comorbidity

	N	%
Yes	165	24.4
No	510	75.6

Table 2H. Postdischarge plan

	N	%
Community mental health services	250	37.0
Voluntary Hospitalization	113	16.7
None	61	9.0
Our outpatient psychiatric service	49	7.3
Admission to internal medicine wards	44	6.5
General practitioner	42	6.2
Private psychiatrist	38	5.6
Involuntary Hospitalization	31	4.6
Other	30	4.4
Community drug addiction service	9	1.3
Social assistance	8	1.2

1 BDZ = Benzodiazepines; 2 AD = Antidepressants;
3 NL = Neuroleptics; 4 = Mood stabilizers

The number of consultations by month is shown in Table 3. The higher number of consultations was carried out in December (N=67; 10.2%).

The different reasons of requests from the ER by month are shown in Table 4.

Table 3. Distribution of consultations for the 12 months

Month	N	%
January	67	9.9
February	46	6.8
March	58	8.6
April	64	9.5
May	67	9.9
June	50	7.4
July	46	6.8
August	64	9.5
September	47	7.0
October	47	7.0
November	50	7.4
December	69	10.2

Table 4. Distribution of reasons for the admission to the ER for the 12 months

Month	Suicide attempt/ Suicide risk	Anxiety	Depression	Agitation	Delusions/ hallucinations
January	14 (2.07%)	23 (3.41%)	3 (0.44%)	9 (1.33%)	4 (0.59%)
February	5 (0.74%)	8 (1.19%)	6 (0.89%)	12 (1.78%)	3 (0.44%)
March	9 (1.33%)	19 (2.81%)	2 (0.30%)	15 (2.22%)	3 (0.44%)
April	12 (1.78%)	17 (2.52%)	3 (0.44%)	15 (2.22%)	2 (0.30%)
May	11 (1.63%)	18 (2.67%)	4 (0.59%)	15 (2.22%)	5 (0.74%)
June	8 (1.19%)	17 (2.52%)	4 (0.59%)	9 (1.33%)	2 (0.30%)
July	5 (0.74%)	14 (2.07%)	4 (0.59%)	7 (1.04%)	1 (0.15%)
August	12 (1.78%)	11 (1.63%)	6 (0.89%)	19 (2.81%)	5 (0.74%)
September	9 (1.33%)	13 (1.93%)	4 (0.59%)	4 (0.59%)	2 (0.30%)
October	6 (0.89%)	19 (2.81%)	1 (0.15%)	10 (1.48%)	1 (0.15%)
November	4 (0.59%)	19 (2.81%)	1 (0.15%)	8 (1.19%)	4 (0.59%)
December	9 (1.33%)	21 (3.11%)	1 (0.15%)	13 (1.93%)	10 (1.48%)

The associations between the reasons of requests and demographic characteristics are shown in Table 5. Worthy of note, males were significantly more prone to agitation than to suicide attempts/suicide risk and anxiety, while for females results were the opposite ($p<0.000$); patients under the age of 30 years were significantly more anxious and patients aged between 30 and 39 years were significantly more prone to suicide attempts/suicide risk and anxiety than to agitation; patients aged 40-49 years were significantly more susceptible to delusions/hallucinations than to other illnesses, while patients in the age group 50-59 were significantly more prone to suicide attempts/suicide risk ($p<0.000$); divorced/separated patients were more prone to suicide attempts/suicide risk ($p<0.019$); patients from countries outside Europe were significantly more prone to delusions/hallucinations ($p<0.033$); agitated patients were more often retired/disabled or unemployed and students were significantly more prone to anxiety ($p<0.000$).

The associations between psychiatric diagnoses and demographic characteristics are presented in Table 6. Noteworthily, males were significantly more prone to schizophrenia, schizotypal and delusional disorders and mental and behavioural disorders due to psychoactive substance use than to neurotic, stress-related and somatoform disorders and affective disorders, while the results for females were the opposite ($p<0.000$).

Table 5. Association between reasons for the admission and demographic characteristics

	Suicide attempt/ Suicide risk (1)	Anxiety (2)	Depression (3)	Agitation (4)	Delusion/ hallucination (5)	p-value	Post-hoc analyses
Gender						0	
Male	15.66	31.82	6.57	36.87	9.09		(4)>(1),(2)
Female	22.67	42.24	8.07	19.57	7.45		(1),(2)>(4)
Age group						0	
<20	20	57.14	5.71	11.43	5.71		(2)>(4)
20-29	20.45	47.73	4.55	25	2.27		(2)>(5)
30-39	10.94	36.72	9.38	38.28	4.69		(1),(2)>(4), (4)>(5)
40-49	23.53	32.77	5.88	21.01	16.81		(5)>(1),(2),(3),(4)
50-59	35.38	30.77	10.77	18.46	4.62		(1)>(2),(4),(5)
60+	14.49	34.78	7.25	31.88	11.59		-
Marital status						0.019	
Unmarried	17.24	38.31	6.51	31.42	6.51		(4)>(1)
Married	22.37	42.76	9.21	17.11	8.55		(2)>(4)
Divorced/separated	36.84	28.95	10.53	15.79	7.89		(1)>(2),(4)
Widowed	13.33	36.67	3.33	30	16.67		-
Country of origin						0.033	
Italy	21.12	37.38	8.01	27.18	6.31		(1),(3),(4)>(5)
Rest of Europe	15.79	47.37	7.02	19.3	10.53		-
Other	14.58	33.33	4.17	27.08	20.83		(5)>(1),(2),(3),(4)
Occupation						0	
Freelance professional/manager	25	50	16.67	8.33	0		-
Self-employed	15	50	15	20	0		-
Employed	26.53	44.90	5.44	15.65	7.48		(1)>(3),(4),(2)>(4)
Housewife	5.88	52.94	17.65	23.53	0		-
Retired/disabled	12.86	27.14	5.71	40	14.29		(4)>(1),(2), (5)>(2)
Student	7.14	71.43	7.14	14.29	0		(2)>(1),(4), (5)
Unemployed	17.36	28.10	9.92	36.36	8.26		(4)>(2)
Other	22.73	22.73	0	31.82	22.73		(5)>(2),(3)
Environment						0.002	
Alone	20.45	37.50	7.95	22.73	11.36		-
Family of origin	16.67	41.03	5.13	32.69	4.49		(4)>(1),(5)
Conjugal family	23.18	42.38	9.93	15.23	9.27		(1),(2),(3)>(4)
Institution	33.33	4.76	9.52	52.38	0		(1),(4)>(2)
Other	20.55	38.36	5.48	21.92	13.70		-

Table 6. Association between psychiatric diagnoses and demographic characteristics

	Neurotic, stress-related and somatoform disorders (1)	Mood (affective) disorders (2)	Schizophrenia, schizotypal and delusional disorders (3)	Disorders of adult personality and behavior (4)	Mental and behavioural disorders due to psychoactive substance use (5)	p-value	Post-hoc analyses
Gender						0	
Male	28.85	19.71	30.77	10.1	10.58		(3)>(1),(2), (5)>(1),(2)
Female	40.79	27.96	14.8	11.18	5.26		(1)>(3),(5), (2)>(3),(5)
Age group						0	
<20	62.07	3.45	24.14	10.34	0		(1)>(2)
20-29	37.36	17.58	18.68	18.68	7.69		(4)>(2),(3)
30-39	32.52	26.02	16.26	12.2	13.01		(5)>(1),(3)
40-49	29.66	33.9	27.12	4.24	5.08		(2)>(1),(4), (3)>(4)
50-59	30.67	28	17.33	14.67	9.33		-
60+	46.67	20	28.33	1.67	3.33		(1),(3)>(4)
Marital status						0	
Unmarried	29.48	23.51	25.75	14.18	7.09		(3)>(1),(2), (4)>(1),(2)
Married	47.30	24.32	14.86	7.43	6.08		(1)>(3),(4)
Divorced/separated	25.64	51.28	12.82	7.69	2.56		(2)>(1),(3)
Widowed	52.38	19.05	19.05	0	9.52		-
Country of origin						0	
Italy	36.09	25.56	20.3	12.28	5.76		(2)>(5), (4)>(5)
Rest of Europe	40.32	25.81	12.9	6.45	14.52		(5)>(3)
Other	29.17	12.5	41.67	4.17	12.5		(3)>(1),(2),(4)
Occupation						0	
Freelance professional/manager	53.85	23.08	0	23.08	0		-
Self-employed	47.62	33.33	0	14.29	4.76		-
Employed	46.32	31.62	10.29	8.82	2.94		(1)>(3),(5) (2)>(3),(5)
Housewife	47.06	29.41	11.76	5.88	5.88		-
Retired/disabled	36.51	25.4	31.75	4.76	1.59		(3)>(4),(5)
Student	61.54	15.38	7.69	12.82	2.56		(1)>(2),(3)
Unemployed	19.26	20.74	27.41	15.56	17.04		(3)>(1), (4)>(1), (5)>(1),(2),(3),(4)
Other	8	16	68	8	0		(3)>(1),(2),(4),(5)
Environment						0.002	
Alone	31.87	29.67	23.08	9.89	5.49		-
Family of origin	32.69	25.64	23.72	12.82	5.13		-
Conjugal family	47.68	21.85	15.23	7.28	7.95		(1)>(2),(3),(4)
Institution	8.70	13.04	39.13	30.43	8.70		(3)>(1), (4)>(1).(2)
Other	30.77	29.23	23.08	6.15	10.77		-

Table 7 shows the associations between plans after discharge and demographic characteristics and main psychiatric diagnoses. Patients aged 40-49 years significantly more often underwent voluntary/involuntary hospitalization. Unmarried patients significantly more often underwent voluntary hospitalization or were referred to community mental health services. Unmarried patients, patients from countries outside Europe, living alone or in institutions and suffering from psychotic disorders more often underwent involuntary hospitalization.

Patients suffering from neurotic, stress-related and somatoform disorders or mood disorders were significantly more often referred to community mental health services or to our outpatient service. Patients suffering from mood disorders were significantly more often transferred to internal medicine wards. Patients diagnosed as having schizophrenia, schizotypal or delusional disorders were significantly more often admitted to the psychiatric ward and more frequently underwent involuntary hospitalization.

Table 7. Association between plans after discharge and demographic characteristics and diagnoses

	Community Mental Health Services (1)	Our Out-patient Service (2)	Involuntary hospi-talization (3)	Voluntary hospi-talization (4)	Internal medicin wards (5)	p-value	Post-hoc analyses
Gender						0.046	
Male	47.29	7.88	7.88	29.06	7.88		-
Female	54.23	11.62	5.28	19.01	9.86		-
Age group						0.006	
<20	58.97	12.82	7.69	12.82	7.69		-
20-29	52.63	11.84	5.26	22.37	7.89		-
30-39	57.66	5.41	4.5	27.03	5.41		-
40-49	46.85	5.41	10.81	29.73	7.21		(3)>(2)
50-59	48	10.67	4	24	13.33		-
60+	46.55	22.41	5.17	8.62	17.24		(2)>(1),(4), (5)>(4)
Marital status						0.047	
Unmarried	54.07	7.41	7.41	25.56	5.56		(1)>(5), (4)>(5)
Married	53.17	14.29	5.56	14.29	12.7		-
Divorced/separated	40	7.5	5	35	12.5		-
Widowed	45.45	13.64	4.55	22.73	13.64		-
Country of origin						0.586	
Italy	49.74	11.08	5.93	24.23	9.02		-
Rest of Europe	54.9	5.88	5.88	21.57	11.76		-
Other	60	6.67	11.11	15.56	6.67		-
Occupation						0	
Freelance professional/manager	41.67	25	0	0	33.33		(5)>(3),(4)
Self-employed	38.89	33.33	0	22.22	5.56		(2)>(3)
Employed	49.51	8.74	6.8	24.27	10.68		-
Housewife	52.94	23.53	5.88	11.76	5.88		-
Retired/disabled	55.07	14.49	4.35	14.49	11.59		-
Student	57.5	17.5	2.5	17.5	5		-
Unemployed	55.47	4.38	4.38	29.2	6.57		(1)>(2), (4)>(2)
Other	42.42	0	21.21	33.33	3.03		(3)>(1),(2),(4),(5)
Environment						0.023	
Alone	53.85	7.69	8.79	19.78	9.89		-
Family of origin	56.25	9.38	6.88	23.75	3.75		(1)>(5)
Conjugal family	53.85	13.85	4.62	15.38	12.31		-
Institution	37.5	0	8.33	45.83	8.33		-
Other	41.67	8.33	5	33.33	11.67		-
Main psychiatric diagnosis						0	
Neurotic, stress-related and somatoform disorders	71.55	18.97	0.86	6.9	1.72		(2)>(3),(4),(5), (1)>(3),(4),(5)
Mood (affective) disorders	47.27	6.36	4.55	28.18	13.64		(5)>(1),(2),(3)
Schizophrenia, schizotypal and delusional disorders	40.4	4.04	17.17	36.36	2.02		(3)>(1),(2),(4),(5), (4)>(1),(2),(5)
Disorders of adult personality and behavior	56.52	0	2.17	28.26	13.04		(5)>(2)
Mental and behavioural disorders due to psychoactive substance use	44.44	16.67	5.56	16.67	16.67		-

DISCUSSION

It is hard to find reliable data on the frequency of psychiatric emergencies in the ERs, as well as in the general practice. The prevalence rate of psychiatric emergencies reported in different studies shows a wide variation, from 10% to 60%, probably due to the different methods adopted. Moreover the differences in health care systems from one country to another may limit the generalization of findings (Mavrogiorgou et al. 2011).

In line with previous studies concerning psychiatric consultations carried out both in general hospitals (Huyse et al. 2011, Piselli et al. 2011) and in the ER (Biancosino et al. 2009, Hazlett et al. 2004), in our sample there were a greater proportion of female patients, mainly young adults and, in contrast with data deriving from general hospital consultations (Huyse et al. 2001, Piselli et al. 2011), but in line with those carried out in the ER (Biancosino et al. 2009), mostly unmarried.

In comparison with the results of Biancosino et al. 2009, in a study carried out over a 3 year period about psychiatric consultations in the general hospital and in the ER, our patients more frequently had a job, there were more students, fewer housewives and retired/ disabled patients. This could be linked with the fact that employed and younger patients turn to the ER maybe because of the fear of stigmatization associated with community mental health services.

In line with Biancosino et al. 2009 our study shows that main primary reasons for referring from ERs were anxiety, psychotic symptoms and psychomotor agitation. As previously observed by Mavrogiorgou et al. 2011 in Germany, suicidality and self-destructive behaviour accounted for 15% of psychiatric emergencies in our study too. This result is in contrast with what Biancosino et al. 2009 observed and our higher percentage of suicidal patients is probably due to the fact that, in our ER, psychiatric consultations are always requested for attempted suicide (ascertained or suspected) and carried out before any further medical interventions, when clinically possible. We observed that females were more likely to be admitted to the ER for suicide attempt/suicide risk and anxiety, while males, mainly disabled/retired or unemployed and more frequently living in an institution, proved to be more prone to psychomotor agitation; young people (< 30 years old), mainly students, were characterized by a greater disposition to experience anxiety while the main reason for the admission to the ER in people aged between 40 and 49 years was the presence of psychotic symptoms.

Regarding the distribution of primary psychiatric diagnosis, we found that neurotic, stress-related and somatoform disorders were by far the most represented, followed by affective disorders and schizophrenia, schizotypal and delusional disorders. These results are comparable with those obtained by Biancosino et al. 2009 and Larkin et al. 2005 in ERs and by Piselli et al. 2011 and Gala et al. 1999 in general hospitals. Our study showed that females, mostly young in age, were more likely to be diagnosed with neurotic, stress-related and somatoform disorders and with mood disorders while males proved to be more prone to schizophrenia, schizotypal and delusional disorders and to mental and behavioural disorders due to psychoactive substance use.

In line with the results of the study carried out by Biancosino et al. 2009 but in contrast with those of Larkin et al. 2005 and Larkin et al. 2009, our low percentage of patients with mental illnesses due to psychoactive drugs might be due to the fact that, according to the health system in Italy, these patients must be referred to internal medicine wards and for them a consultation with the service for Drug or Alcohol Addiction, separated from the GH, is routinely requested .

In contrast with the results of Piselli et al. 2011 in the same general hospital, in the ER we found a lower percentage of mental disorders related to organic conditions, including dementing diseases, as a cause of agitation and abnormal behaviour, as previously observed by Mavrogiorgou et al. 2011.

In any case it should be noted that, due to the use of different psychiatric diagnosis systems used in other studies, an appropriate comparison of diagnostic groups was not always possible.

In line with Villari et al. 2007, in the case of psychiatric emergencies it is firstly necessary to intervene in order to manage the patient's agitation and violence, using the least coercive and aggressive intervention possible, we found that the most frequent approach to patients with psychiatric complaints in the ER does not necessarily imply the use of psychopharmacological treatments. In fact the first line intervention, based on the fact that the physician-patient relationship is the most important long-term goal which critically influences the treatment and the course of illness (Villari et al. 2007), is the so-called "talking down" (Villari et al. 2007, Mavrogiorgou et al. 2011) technique. It consists in the attempt to sooth the patient with a friendly verbal approach, using an even tone and maintaining conversational contact. This is a crucial element of the initial treatment which will allow further therapeutic steps afterwards (Villari et al. 2007; Mavrogiorgou et al. 2011). It is essential to look for a non-invasive approach that reassures the patient and provides a space for communication where it is possible to interact with him/her before resorting to more coercive and aggressive interventions often needed since acutely mentally ill persons frequently have limited insight into their illness and inadequate capability to cooperate with the treating team (Mavrogiorgou et al. 2011).

The only coercive intervention in case the patient became excessively aggressive or even dangerous for him/herself or other people, or in case he/she arbitrarily refused to take medications in the ER was the

involuntary hospitalization according to Law 180 (the so-called "Legge Basaglia") which also permits the administration of involuntary treatment. There are no other compulsory interventions to be taken in the ER, such as physical restraint or seclusion, described in literature (Villari et al. 2007).

In our study we found that only 4.6% of the sample underwent involuntary hospitalization. In line with what Montemagni et al. 2011 observed in a study about predictors of compulsory admission in schizophrenia-spectrum patients, this coercive intervention was significantly more often needed in the case of patients whose primary reason for referral was the presence of psychotic symptoms. Socio-demographic-characteristics explored in the above mentioned study did not influence the difference between patients who underwent an involuntary hospitalization from voluntary ones. In our study patients who underwent an involuntary hospitalization proved to be more often middle aged (40-49 years old), males, unmarried, from countries outside Europe and living alone or in an institution.

On the other hand patients who had received a diagnosis of neurotic, stress-related and somatoform disorder were significantly more often referred to community mental health services or to our outpatient service, while patients suffering from mood disorders were more often transferred to internal medicine wards, mainly because of the need of observation after the ingestion of drugs related to suicidal intent or for further evaluation in patients with significant organic comorbidity.

In line with Mavrogiorgou et al. 2011, in our study suicidality accounted for up to 15.4% of psychiatric emergencies. In our sample patients aged 30-39 or 50-59 and divorced/separated more significantly often attempted suicide. This was more common in women and did not show significant differences in terms of season of occurrence.

Regarding psychopharmacological treatment, our study showed that one third of the sample did not receive any pharmacological treatment at home, while benzodiazepines were by far the most administered drugs, alone, or in association with antidepressants, neuroleptics and mood stabilizers. In the ER as well, benzodiazepines were by far the most administered drugs, alone or in association with neuroleptics and/or antidepressants. This is in line with the results of other authors (Villari et al. 2007, Piselli et al. 2011, Gala et al. 1999) and correlates with the fact that anxiety, agitation, psychotic symptoms and depression are the most frequent reasons for the admission to the ER.

In our study we examined the distribution of the consultations over one year, looking for a possible seasonality of psychopathology. In Italy, as a predominantly Christian country, the two most significant religious holidays are Christmas and Easter (in 2012 Easter fell on April 8th), but we must also consider summer, in particular August, when the majority of people go on holiday.

In line with several studies (Wilson & Zeller 2012, Sansone & Sansone 2011, Lobo et al. 1996, Huyse et al. 2001), our results do not support the common clinical belief that the Christmas season is associated with higher rates of psychiatric emergencies. However it has been observed that although there were fewer suicide attempts than projected around Christmas holidays there also was a rebound increase afterwards. Accordingly with these observations, we found that in January there was an increase in suicide attempts, as well as in April and August. Considering that our study period is one year, this should be considered just an extemporaneous observation. Further investigations are needed to make this results more generalization-able.

Another limitation of our study is the fact that we just took into account the main psychiatric diagnosis and not dual diagnosis among the reasons for referral to the ER because of the paucity of the sample.

CONCLUSIONS

Considering the complexity of the spectrum of psychiatric disorders addressed in the ER, the crucial element at the time of psychiatric consultation, is to classify the situation as quickly as possible and just as quickly decide the fate of the patient. As evidenced by the reduced number of coercive interventions and the tendency to observe rather than to immediately intervene, subject to the conditions of real danger, one of the fundamental aspects of this activity appears to be empathy and the attempt to enter into a relationship with the patient, in order to share, where possible, the therapeutic project.

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