

## **Analysis of psychiatric consultations in a multidisciplinary hospital patients**

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### **Summary**

**Aim.** The aim of the research is the analysis of psychiatric consultations conducted in the multi-disciplinary hospital, establishing the cause of the consultations according to ICD-10 and the analysis of psychiatric consultations regarding their number on particular wards.

**Material and methods.** Retrospective analysis of medical documentation concerning given consultations in the multidisciplinary hospital in Tarnowskie Góry in the years 2002–2010 has been conducted. In the statistics studies Shapiro-Wilk test, Kruskal-Wallis test, Mann-Whitney U test, Chi-square test of independence and the others have been used.

**Results.** In the analysed years, 3,672 consultations have been done, the mean age of the consulted patients has been 46.9 years. Taking into consideration the sex of the consulted patients, 41.99% of them were female and 58.01% were male. The main diagnoses of all consultations present as follows: F00–F09: 18.82%, F10–F19: 29.58%, F20–F29: 17.70%, F30–F39: 10.29%, F40–F48: 13.83%, F50–F59: 0.16%, F60–F69: 3.21%, F70–F79: 1.77%, F80–F89: 0%, F90–F98: 1.01%, other: 3.62%. The consultations most often have taken place on the following wards: Hospital Admitting Department (13.21%), Hospital Emergency Service (6.97%), Surgery Department (8.42%), Internal Medicine Department (6.51%), Neurology Department (4.82%).

**Conclusions.** The most frequent causes of consultation were addictions, the next were organic and psychotic disorders, neurotic and affective disorders. Consultations most often have taken place at the Hospital Admitting Department/Hospital Emergency Service, Surgery Department, Internal Medicine Department and Neurology Department.

**Key words:** consultation psychiatry, multi-profile hospital

### **Introduction**

Consultation psychiatry is defined as a branch of psychiatry dealing with diagnosis, treatment and prevention of mental disorders in patients with somatic diseases, with

particular emphasis on somatic diseases and symptoms resulting from the participation of psychosocial factors (psychosomatic illness). It is also defined as a science of psychiatry which builds relationships with somatic medicine (liaison) by training of medical staff in the field of psychiatry, psychological and social aspects of somatic diseases, as well as observation and research at the frontier of psychiatry, psychology and psychosomatic medicine [1–3]. There are several models of consultation: patient-oriented, focused on the crisis, the situation, on the doctor or treating team. Action of consultant psychiatrist (or interdisciplinary team) aims at, among others, facilitating discharge from the hospital, establishing the place and methods of further treatment, contact with family physician to ensure continuity of treatment [4–6]. The presence of the psychiatric ward at the general hospital results in greater availability for the psychiatric diagnosis and treatment and influences the development of community psychiatry [7].

### **Aim**

The primary aim of undertaking this research is the analysis of psychiatric consultations in multidisciplinary hospital patients. The specific objectives of this work are: to determine the causes of psychiatric consultations on the basis of diagnoses according to ICD-10 and the analysis of psychiatric consultations in terms of numbers on individual departments.

### **Material and methods**

A retrospective analysis of documents concerning psychiatric consultations under the Multidisciplinary Hospital in Tarnowskie Góry, including consultations for patients from other hospitals and Rescue Service (within the Hospital Emergency Service or the Department of Psychiatry). The analysis concerned the medical reports and the book of admissions and denials.

The level of statistical significance was  $p \leq 0.05$ . Arithmetic mean, standard deviation, median, and 5 and 95 percentile were used to describe age. The following statistical tests were used: Shapiro-Wilk test, Kruskal-Wallis test, Mann-Whitney U test, chi-square test of independence with Yates correction, test for equality of two proportions, Fisher-Snedecor test (multiple proportions test), Kendall rank correlation coefficient together with the test of significance, multivariate logistic regression analysis.

### **Results**

In the years 2002–2010, 3,672 psychiatric consultations were conducted in the Multidisciplinary Hospital in Tarnowskie Góry. The most common site of consultations was Hospital Admitting Department with the Hospital Emergency Service (total of 20.18%), followed by Department of Surgery, (8.42%), Department of Internal Medicine (6.51%), and Department of Neurology (4.82%). Large consultation group consisted of patients admitted directly to the department (37.96%) and transported by ambulance or the police (12.75%). Detailed data are shown in Table 1.

Table 1. Number of consultations in different departments

Site of consultations	Number of consultations	% of the total number of consultations
1 – Hospital Admitting Department	485	13.21%
2 – Hospital Emergency Service	256	6.97%
3 – Department of Psychiatry (patients from outside)	1394	37.96%
4 – Department of Psychiatry – Ambulance	417	11.36%
5 – Department of Psychiatry – Ambulance and Police	51	1.39%
6 – Department of General Surgery with the subdivision of Chemotherapy	309	8.42%
7 – Department of Internal Medicine and subdivision of Nephrology	239	6.51%
8 – Department of Neurology	177	4.82%
9 – Department of Otolaryngology	23	0.63%
10 – Department of Paediatric	13	0.35%
11 – Department of Ophthalmology	19	0.52%
12 – Department of Anaesthesiology and Intensive Care	41	1.12%
13 – “Repty” Centre	84	2.29%
14 – Other hospital	103	2.81%
15 – Tarnowskie Góry Detention Centre	8	0.22%
16 – Department of Gynaecology and Obstetrics	30	0.82%
17 – Department of Urology	23	0.63%

In the considered period the age of consulted patients ranged from 9.5 to 96 years (mean age 46.9). The distribution of age and sex is presented in Table 2.

Table 2. Distribution of age and sex of all analysed patients

Age groups (years)										Shapiro-Wilk Test
up to 17	18–20	21–30	31–40	41–50	51–60	61–70	71–80	81–90*	91–100*	
1.77%	2.83%	15.63%	19.17%	21.02%	17.37%	9.89%	9.42%	2.75%	0.14%	p < 0.000001
Parameter					Sex					
					Female		Male			
Number					1,542		2,130			
% of the total number of consultations (n = 3,672)					41.99%		58.01%			
Equality Test for Fractions					p < 0.000001					

\* – categories for statistical analysis combined into one

The following diagnoses were dominant: addictions, organic disorders and psychoses (Table 3). During the considered period statistically significant differences were found in the group of organic disorders ( $p = 0.006$ ), and neurotic disorders ( $p = 0.005$ ). Statistically significant differences among the primary diagnoses between sexes were found in the group of disorders associated with addictions ( $p < 0.000001$ ), affective disorders ( $p < 0.000001$ ) and neurotic disorders ( $p < 0.000001$ ), which is presented in Table 3.

Table 3. Percentage of primary diagnoses and primary diagnoses by gender of all the consultations

Group of diagnoses	Number	% of consultations (n = 3,672)	Female (n = 1,542) (100%)	Male (n = 2,130) (100%)	Test for equality of proportions
Organic disorders F00–F09	691	18.8%	337 (21.9%)	354 (16.6%)	$p = 0.00006$
Addictions F10–F19	1086	29.6%	208 (13.5%)	878 (41.2%)	$p < 0.000001$
Psychotic disorders F20–F29	650	17.7%	308 (19.9%)	342 (16.1%)	$p = 0.002$
Affective disorders F30–F39	378	10.3%	233 (15.1%)	145 (6.8%)	$p < 0.000001$
Neurotic disorders F40–F48	508	13.8%	318 (20.6%)	190 (8.9%)	$p < 0.000001$
Eating disorders F50–F59	6	0.2%	4 (0.3%)	2 (0.1%)	ns ( $p = 0.22$ )
Personality disorders F60–F69	118	3.2%	36 (2.3%)	82 (3.9%)	$p = 0.01$
Intellectual disability F70–F79	65	1.8%	17 (1.1%)	48 (2.3%)	$p = 0.009$
Other disorders of children and adolescents F90–F98	37	1.0%	21 (1.4%)	16 (0.8%)	ns ( $p = 0.07$ )
other diagnosis	133	3.62%	60 (3.89%)	73 (3.43%)	ns ( $p = 0.46$ )

More than one diagnosis was made in case of 7.4% of all consultations. The most common concomitant diagnoses were addictions (87.4%), personality disorders (7.4%), and neurotic disorders (4.8%).

Primary diagnoses in the studied period according to the site of consultations are presented in Table 4.

Table 4. Diagnoses in the years 2002–2010 in site of consultation (percentage of consultations in a given location)

Site of consultation	Diagnoses									
	Organic disorders	Addictions	Psychotic disorders	Affective disorders	Neurotic disorders	Eating disorders	Personality disorders	Intellectual disability	Other disorders of children and adolescents	Other diagnoses
	F00–F09	F10–F19	F20–F29	F30–F39	F40–F48	F50–F59	F60–F69	F70–F79	F90–F98	
Hospital Admitting Department	13.6%	38.4%	9.5%	9.5%	15.7%	0.2%	3.9%	1.4%	0.6%	7.2%
Hospital Emergency Service	9.8%	46.1%	8.6%	5.9%	16.8%	0.0%	2.7%	1.6%	1.9%	6.6%
Department of Psychiatry	11.3%	29.4%	22.5%	12.6%	16.4%	0.1%	3.1%	1.6%	1.1%	1.9%
Department of Psychiatry – Ambulance	12.9%	30.2%	29.9%	5.0%	6.2%	0.2%	5.5%	4.6%	2.2%	3.1%
Department of Psychiatry – Ambulance and Police	3.9%	35.3%	31.4%	5.9%	0.0%	0.0%	17.7%	0.0%	0.0%	5.9%
Department of General Surgery with the subdivision of Chemotherapy	38.8%	26.9%	7.8%	9.1%	10.7%	0.0%	1.3%	2.6%	0.0%	2.9%
Department of Internal Medicine and subdivision of Nephrology	40.6%	13.8%	7.9%	15.9%	17.6%	0.4%	0.8%	0.4%	0.0%	2.5%
Department of Neurology	38.9%	43.5%	4.5%	5.1%	2.8%	0.00%	1.7%	1.1%	0.0%	2.3%
Department of Otolaryngology	34.8%	26.1%	13.0%	8.7%	4.4%	0.0%	0.0%	0.0%	0.0%	13.0%
Department of Paediatric	0.0%	23.1%	7.7%	0.0%	30.8%	0.0%	0.0%	0.0%	38.5%	0.0%
Department of Ophthalmology	57.9%	26.3%	0.0%	0.0%	10.5%	0.0%	0.00%	5.3%	0.0%	0.0%
Department of Anaesthesiology and Intensive Care	19.5%	7.3%	26.8%	17.1%	7.3%	0.0%	7.3%	0.0%	0.0%	14.6%
"Reply" Centre	55.9%	1.2%	11.9%	16.7%	11.9%	1.2%	1.2%	0.0%	0.0%	0.0%

*table continued on the next page*

Other hospital	18.5%	12.6%	24.3%	10.7%	25.2%	0.0%	1.9%	0.0%	0.0%	6.8%
Tarnowskie Góry Detention Centre	0.0%	25.0%	37.5%	0.0%	0.0%	0.0%	12.5%	0.0%	0.0%	25.0%
Department of Gynaecology and Obstetrics	10.0%	0.0%	63.3%	10.0%	16.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Department of Urology	21.7%	8.7%	21.7%	21.7%	13.0%	0.0%	4.4%	4.4%	0.0%	4.4%

Primary diagnoses by age groups (percentage) are presented in Table 5. It has been demonstrated that the age distribution compared to the diagnosis is statistically significant ( $p < 0.000001$ ).

Table 5. **Diagnoses from the years 2002–2010 according to age (percentages for specified diagnoses)**

Group of diagnosis	Age groups (years)									
	up to 17	18–20	21–30	31–40	41–50	51–60	61–70	71–80	over 81	
Organic disorders F00–F09	0.0%	0.1%	2.6%	1.9%	6.7%	16.2%	24.6%	36.5%	11.4%	
Addictions F10–F19	0.7%	1.8%	15.5%	24.9%	30.8%	18.9%	5.9%	1.1%	0.2%	
Psychotic disorders F20–F29	0.9%	2.3%	23.4%	21.2%	23.5%	19.1%	5.9%	2.9%	0.8%	
Affective disorders F30–F39	0.5%	1.3%	8.7%	15.1%	21.9%	26.7%	14.3%	8.5%	2.9%	
Neurotic disorders F40–F48	1.4%	5.9%	20.3%	25.4%	21.6%	14.9%	5.1%	4.3%	1.0%	
Eating disorders F50–F59	0.0%	50.0%	16.7%	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%	
Personality disorders F60–F69	0.0%	12.7%	40.7%	34.8%	9.3%	2.5%	0.0%	0.0%	0.0%	
Intellectual disability F70–F79	1.5%	10.8%	38.5%	38.5%	4.6%	4.6%	1.5%	0.0%	0.0%	
Other disorders of children and adolescents F90–F98	94.6%	5.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Other diagnoses	4.5%	4.5%	19.6%	22.6%	22.6%	9.8%	6.8%	6.8%	3.0%	
Statistical survey										
Chi-square test with Yates correction: $p < 0.000001$										

Aggressive behaviour, psychomotor agitation during the consultation or in the medical history most often occurred in people with behavioural and emotional disorders with the beginning in childhood (16.2%). In the group of persons with intellectual disability, aggressive behaviour occurred in 13.9% of people, in the group of people with psychosis, aggressive behaviour occurred in 10.6% of people. In the group of people with addictions aggressive behaviour occurred in only 3.8% of people.

Comorbid somatic disorders were most often diagnosed in people with addictions (22.6%), intellectual disability (21.5%), organic disorders (20.8%) and affective disorders (14.3%); the data are presented in Table 6.

Table 6. Somatic diagnoses co-occurring with primary diagnoses

Group of diagnosis	Number (100%)	Somatic diagnosis
Organic disorders F00–F09	691	144 (20.8%)
Addictions F10–F19	1,086	245 (22.6%)
Psychotic disorders F20–F29	650	56 (8.6%)
Affective disorders F30–F39	378	54 (14.3%)
Neurotic disorders F40–F48	508	41 (8.1%)
Eating disorders F50–F59	6	0
Personality disorders F60–F69	118	6 (5.1%)
Intellectual disability F70–F79	65	14 (21.5%)
Other disorders of children and adolescents F90–F98	37	2 (5.4%)
Other diagnoses	133	29 (21.8%)
Statistical survey		
Chi-square test with Yates correction		$p < 0.000001$
Total	3,672	591 (16.1%)

After a consultation, the following patients were admitted to the department of psychiatry: suicidal patients or patients with suicidal ideation or aggressive behaviour, or with the purpose to observe the mental state (18.1%), patients with psychoses (16.6%), affective disorders (11.6%), personality disorders (10.2%) and addictions (9.0%). After psychiatric consultation without the required consent under paragraph 23, 115 patients were admitted to the hospital, and 5 patients under paragraph 24 of the Mental Health Act (Table 7).

Table 7. Admissions to the department in groups of primary diagnoses

Group of diagnosis	Number (100%)	Admission to the department
Organic disorders F00–F09	691	37 (5.4%)
Addictions F10–F19	1,086	98 (9.0%)
Psychotic disorders F20–F29	650	108 (16.6%)
Affective disorders F30–F39	378	44 (11.6%)

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Neurotic disorders F40–F48	508	23 (4.5%)
Eating disorders F50–F59	6	0
Personality disorders F60–F69	118	12 (10.2%)
Intellectual disability F70–F79	65	6 (9.2%)
Other disorders of children and adolescents F90–F98	37	0
Other diagnoses	133	24 (18.1%)
Statistical survey		
Chi-square test with Yates correction		$p < 0.000001$
Total	3.672	352 (9.6%)

## Discussion

The available literature shows the large range of psychiatric diagnoses made in consultations. This can be explained by the relationship with adopted research methodology, used criteria (DSM-II, DSM-III, ICD-9, ICD-10), the characteristics of the centre in which the psychiatric consultations were conducted or cultural factors [8–25].

Jin-An Su et al. [8], in the publication from 2010, presented an analysis of psychiatric consultations from 2001–2006 in a large hospital in Taiwan. 1,610 patients were included in the studied group. The diagnoses were dominated by mood disorders (29.6%), disorders associated with the abuse of psychoactive substances (25.6%), organic disorders (17.2%), adjustment and anxiety disorders (14.4%), psychoses (4.7%). Personality disorders and mental retardation constituted 0.7% of the diagnoses, eating disorders 0.1%. Among the more recent publications covering a large group of patients the work of de Jonge et al. [9] should be mentioned. They performed the analysis of consultations from 33 hospitals in Europe, including 9,542 patients. Mood disorders were diagnosed in 18.5% of patients, organic disorder in 17.6%, disorders associated with substance abuse in 12.8%, psychoses in 4.5%, anxiety disorders in 18.5%, other diagnoses in 31.3%. Adjustment disorders were not identified in this publication. The study of Diefenbacher and Strain [10] from 2002 included an analysis from the years 1988–1997 when 4,429 consultations were conducted. The following disorders were the most common: mood disorders (29.8%), organic disorders (40.1%), disorders associated with substance abuse (8.5%), psychoses (4.7%). Other diagnoses were not included in the study. Bourgeois et al. [11] presented an analysis of 901 consultations, including mood disorders in 40.7% of patients, organic disorder in 32%, disorders associated with substance abuse in 18.6%, psychotic disorders in 11.1%, adjustment disorders in 10.8%, anxiety syndromes in 9%.

In our analysis, the most commonly diagnosed psychiatric disorder (primary diagnosis) during the consultation were psychiatric disorders associated with substance abuse (29.6%). Other authors obtained results ranging from 1.8 to 28.7% [12–25]. In most publications percentage of such patients was lower than in our group, which was dominated by emergency consultations and male sex, which could have an im-



pact on the distribution of diagnoses. It is also worth to mention the economic factor, including unemployment. Similar percentages of people with addictions have been reported by Bourgeois et al. [11] and Ormont et al. [25].

The second most common diagnosis in the studied material were organic disorders, which constituted 18.82% of all consultations. This result is similar to the results obtained by other authors, the data in the literature range from 15.7% to 21.8% [13–17]. In some of the studies the percentage of diagnoses is significantly lower: 8.8% [18], 13.6% [20], 4.0% [22], 10.3% [23], however, it should be noted that in some older studies [20, 23] no specific diagnostic system has been used, while in other studies H-ICDA version from 1965 has been used [18]. Higher percentages (24–35%) have been obtained in the studies using DSM-III [19, 21, 24, 25]. The structure of the hospitals where the studies have been conducted could play a role in the distribution of diagnoses.

The next most common diagnosis in this study were psychoses, which constituted 17.7% of all diagnoses. Most research found in medical databases give slightly lower percentages, ranging from 0 to 16% [12–25]. It is difficult to refer to authors, who at the time of the consultation did not find a single psychosis [20], reports in which the proportion of all psychoses in the hospital is close to the prevalence of schizophrenia in general population are thought-provoking [17], however, only two studies obtained results similar to those obtained in our group [19, 23]. Perhaps the explanation is the same as in the case of addictions, i.e. a large number of emergency consultations. Perhaps self-censorship of doctors, who involved a consultant only in dramatic situations, also affected the results.

In our group, neurotic disorders constituted 13.83% of all diagnoses after consultations. Comparison with other studies is difficult, as some researchers included neurotic disorders (anxiety) into mood disorders [16, 18, 22], some researchers included this diagnosis into “other diagnoses” [13] or presented the results for anxiety disorders and adjustment disorders separately, and in this study they are presented together. Thus, a large range of the results between 7.3 and 36% [12, 14, 15, 17, 19–21, 23–25].

Among all the diagnoses of our patients, affective disorders constituted 10.29%. Ramchandani et al. and McKegney [19, 21] obtained very similar result. In some reports neuroses were included in mood disorders, which significantly overstates the results (31.3–51.3%), and makes it difficult to compare them. In other juxtapositions mood disorders occur with a frequency of 13.9% to 55% [12–15, 17, 20, 23–25]. Similarly to the previous diagnostic categories in some studies the criteria of diagnosis were not specified [12, 23].

Personality disorders in our analysis constituted 3.21% of consultations which places us almost exactly in the middle of the scale, because the data found in the literature range from 0.7% to 19.5% [8, 26–29]. It is worth noting that the percentage of personality disorders among patients brought into consultation by ambulance escorted by police was 17.7%.

Intellectual disability constituted only 1.8% of consultation, which is still higher than the number in other publications (0.2–0.7%) [8–28]. A higher percentage of this diagnosis in this study is probably associated with consultations issued because of aggressive behaviour in the nearby Psychiatric Rehabilitation Centre for children.

Among the available publications, it is worth to present research conducted in Poland separately. Nowosielski and Florkowski [30] analysed 735 consultations from the years 2006–2007. The most common initial diagnoses were: depressive disorder (18.6%), neurotic disorders (12.4%), disorders associated with substance abuse (10.7%), disturbance of consciousness (8.6%), suicide attempts (7.8%), aggressive behaviour (7.5%), psychoses (4.6%), dementia (0.8%), mental retardation (0.6%), personality disorders (0.5%); consultants diagnosed: organic disorders (36.5%), qualitative disturbance of consciousness (22.1%), neurotic disorders (24.0%), disorders associated with substance abuse (16.5%), personality disorders (14.1%), mental retardation (2.1%) and schizophrenia (1.4%).

In a study of Leksowski et al. [31] 109 consultations conducted in 1994–1995, were analysed. Mood disorders constituted 20.18% of all consultations, psychoses – 18.34%, organic disorder – 25.68%, neurotic disorders – 11.92%, disorders associated with substance abuse – 11.0%, mental retardation – 3.66%, eating disorders – 1.83%. It is worth noting that this study took place in the same hospital (Multidisciplinary Hospital in Tarnowskie Góry). The results regarding psychoses and neuroses are similar. Differences in the remaining results can arise from the fact that Leksowski et al. [31] omitted consultations conducted in the psychiatric department, and included those that were conducted in patients brought to the hospital by ambulance. In addition, zoning (patients only from Tarnowskie Góry county) could also affect the results. In our study, the obtained percentage of diagnoses of substance abuse was much higher (29.6%), perhaps because of increasing unemployment in the region.

This study includes substantial material, however it is impacted by all the limitations characteristic of retrospective analyses.

The degree of structuring the data in the book of reports and book of admissions and denials is small. Completeness of data was, therefore, dependent on inquisitiveness and reliability of a physician. Thus, omissions, especially in the case of somatic diseases, should be taken into account.

It was not possible to earnestly estimate the aim of consultations. In almost all cases in which the patient was not admitted to the psychiatric department he/she was advised to visit the Outpatient Mental health Clinic or treatment was modified if necessary.

Despite these limitations, we have decided to publish the results, because in Poland only a few similar analyses were carried out, therefore, this work may be a prelude to a deeper analysis of this issue. Prior to conducting such an analysis it would be advisable to establish a detailed, obligatory, consultation sheet.

After conducting the studies and having an experience as consultants, the authors also raise practical conclusions. In many cases, it would be advisable to create a consultative team including a psychiatrist, a psychologist and a social assistant, and the constant education of physicians in other specialties on mental disorders in somatic diseases is even necessary. It is also worth to pay special attention to the increasing number of patients with alcohol and substance dependence.

## Conclusions

1. During the considered period 3,672 psychiatric consultations were conducted in the Multidisciplinary Hospital in Tarnowskie Góry. The most commonly consulted patients were diagnosed with addictions, organic disorders and psychoses. 34.1% of patients admitted to Psychiatric Department after psychiatric consultations were admitted without the required consent (3.3% of all consultations).
2. The most common site of hospital consultations was Hospital Admitting Department and Hospital Emergency Service, Department of Surgery and Department of Internal Medicine.

## References

1. Lipowski ZJ. *History of consultation-liaison psychiatry*. In: Rundell JR, Wiese MG. ed. *Textbook of consultation-liaison psychiatry*. Washington, DC: American Psychiatric Press; 1996. p. 2–11.
2. Hamburg BA. *Consultation/liaison psychiatry*. Bull. N. Y. Acad. Med. 1987; 63: 376–385.
3. White A. *Styles of liaison psychiatry: discussion paper*. J. R. Soc. Med. 1990; 83: 506–508.
4. Rymaszewska J. *Zagadnienia i ogólne zasady w psychiatrii konsultacyjnej*. Psychiatr. Prakt. Ogólnolek. 2007; 1: 1–7.
5. Guzek A. *Psychiatria konsultacyjna w Europie i Stanach Zjednoczonych*. In: Leder S, Brykczyńska C. ed. *Psychiatria konsultacyjna, psychiatria liaison*. Krakow: Library of Polish Psychiatry; 1996. p. 17–28
6. Blumienfield M, Tiamson MLA. *Consultation-liaison psychiatry*. Philadelphia: Lippincott Williams and Wilkins; 2003.
7. Gorczyca P, Matysiakiewicz J, Pudlo R, Grzywa J, Hese RT. *Dostęp ludności do diagnostyki i terapii psychiatrycznej jako problem społeczny przed reformami w służbie zdrowia i nowym podziałem administracyjnym kraju*. In: Pudlo R, Matysiakiewicz J. *Psychiatria ekologiczna. Próba bilansu*. Tarnowskie Góry: Polish Psychiatric Association; 2006. p. 90–95.
8. Su JA, Chou SY, Chang CJ, Weng HH. *Changes in consultation-liaison psychiatry in the first five years of operation of a newly-opened hospital*. Chang Gung Med. J. 2010 ; 33: 292–300.
9. de Jonge P, Huyse FJ, Herzog T, Lobo A, Malt U, Opmeer BC. et al. *Referral pattern of neurological patients to psychiatric Consultation-Liaison Services in 33 European hospitals*. Gen. Hosp. Psychiatry 2001; 23: 152–157.
10. Diefenbacher A, Strain JJ. *Consultation-liaison psychiatry: stability and change over a 10-year period*. Gen. Hosp. Psychiatry 2002; 24: 249–256.
11. Bourgeois JA, Wegelin JA, Servis ME, Hales RE. *Psychiatric diagnoses of 901 inpatients seen by consultation-liaison psychiatrists at an academic medical center in a managed care environment*. Psychosomatics 2005; 46: 47–57.
12. Karasu TB, Plutchik R, Steinmuller RI, Conte H, Siegel B. *Patterns of psychiatric consultation in a general hospital*. Hosp. Community Psychiatry 1977; 28: 291–294.
13. Craig TJ. *An epidemiologic study of a psychiatric liaison service*. Gen. Hosp. Psychiatry 1982; 4: 131–137.
14. Pérez EL, Silverman M. *Utilization pattern of a Canadian psychiatric consultation service*. Gen. Hosp. Psychiatry 1983; 5: 185–190.

15. Hengeveld MW, Rooymans HG, Vecht-van den Bergh R. *Psychiatric consultations in a Dutch university hospital: a report on 1814 referrals, compared with a literature review*. Gen. Hosp. Psychiatry 1984; 6: 271–279.
16. Malhotra S, Malhotra A. *Liaison psychiatry in an Indian general hospital*. Gen. Hosp. Psychiatry 1984; 6: 266–270.
17. Hales RE, Polly S, Bridenbaugh H, Orman D. *Psychiatric consultations in a military general hospital. a report on 1065 cases*. Gen. Hosp. Psychiatry 1986; 8: 173–182.
18. Wallen J, Pincus HA, Goldman HH, Marcus SE. *Psychiatric consultations in short-term general hospitals*. Arch. Gen. Psychiatry 1987; 44: 163–168.
19. Ramchandani D, Lamdan RM, O'Dowd MA, Boland R, Hails K, Ball S. et al. *What, why, and how of consultation-liaison psychiatry. An analysis of the consultation process in the 1990s at five urban teaching hospitals*. Psychosomatics 1997; 38: 349–355.
20. Loewenstein RJ, Sharfstein SS. *Psychiatric consultations at the NIH*. Gen. Hosp. Psychiatry 1983; 5: 83–87.
21. McKegney FP, McMahon T, King J. *The use of DSM-III in a general hospital consultationliaison service*. Gen. Hosp. Psychiatry 1983; 5: 115–121.
22. Schofield A, Doonan H, Daly RJ. *Liaison psychiatry in an Irish hospital: a survey of a year's experience*. Gen. Hosp. Psychiatry 1986; 8: 119–122.
23. Sobel SN, Munitz H, Karp L. *Psychiatric consultations in two Israeli general hospitals*. Gen. Hosp. Psychiatry 1988; 10: 298–304.
24. Clarke DM, Smith GC. *Consultation-liaison psychiatry in general medical units*. Aust. N. Z. J. Psychiatry 1995; 29: 424–432.
25. Ormont MA, Weisman HW, Heller SS, Najara JE, Shindledecker RD. *The timing of psychiatric consultation requests. Utilization, liaison, and diagnostic considerations*. Psychosomatics 1997; 38: 38–44.
26. Christodoulou C, Fineti K, Douzenis A, Moussas G, Michopoulos I, Lykouras L. *Transfers to psychiatry through the consultation-liaison psychiatry service: 11 years of experience*. Ann. Gen. Psychiatry 2008; 7: 10.
27. Diefenbacher A, Golombek U, Strain JJ. *Personality disorders in consultation-liaison psychiatry – an empirical investigation*. Eur. Psychiatry 2009; 24(supl. 1): 1072.
28. Gobar AH, Collins JL, Mathura CB. *Utilization of a consultation liaison psychiatry service in a general hospital*. J. Natl. Med. Assoc. 1987; 79: 505–508.
29. Kishi Y, Meller WH, Kato M, Thurber S, Swigart SE, Okuyama T. et al. *A comparison of psychiatric consultation liaison services between hospitals in the United States and Japan*. Psychosomatics 2007; 48: 517–522.
30. Nowosielski R, Florkowski A. *Badanie katamnetyczne konsultacji psychiatrycznych chorych somatycznie*. Pol. Merk. Lek. 2012; 187: 28–33.
31. Leksowski W, Matysiakiewicz J, Pudło R, Tomalczyk E, Świerzy U, Gorczyca P. *Rola konsultacyjna oddziału psychiatrycznego przy szpitalu ogólnym*. In: Leder S, Brykczyńska C. ed. *Psychiatria konsultacyjna, psychiatria liaison*. Krakow: Library of Polish Psychiatry; 1996. p. 37–43.

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