

PROFILE OF MEDICAL RESIDENTS SEEN BY THE STUDENTS' PSYCHOLOGICAL CARE TEAM AT THE MEDICAL SCHOOL OF THE UNIVERSIDADE DE SÃO PAULO

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ABSTRACT

OBJECTIVE. To trace the profile of medical residents seen by a mental healthcare service in order to increase knowledge of their needs.

METHODS. This was an observational study of a retrospective cohort. Data were compiled by reviewing the patient records of a series of residents seen by the Students' Psychological Care Team at FMUSP between 1998 and 2002 and by accessing the student enrollment records. The proportions of residents seen were broken down by year [chronological], residency year, sex, age, specialty, medical school and distance from the family home. The differences between the proportions in each subcategory of each variable were analyzed.

RESULTS. During the period studied, a total of 2,131 residents were enrolled, making a total follow-up of 4,727 residency-years. Within this sample, and calculating on the basis of first consultation only, 104 residents were seen by the Students' Psychological Care Team (4.9% of residents seen, or 2.2 residents seen for every 100 residency-years of follow-up). The data show that a greater proportion of residents with the following characteristics were seen: first year of residency (4.5%), age less than 26 (6.1%), female sex (6.9%), graduate of a medical school other than FMUSP (5.9%) and residents studying cognitive specialties (6.7%).

CONCLUSION. Psychiatric care was associated with sex, with factors linked to adaptive crises and with cognitive specialties. The proportion of residents seen by the service did not increase over the period analyzed.

KEYWORDS: Psychiatry. Mental health. Occupational Health Program. Epidemiology. Medical Specialties. Internship and Residency.

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INTRODUCTION

One justification for creating and maintaining mental health-care services for students and residents¹ is that the literature describes a high degree of emotional suffering among physicians and medical students. This suffering is expressed as high suicide rates,² an elevated prevalence of depressive and anxiety disorders³ and of alcohol and drug abuse,⁴ in addition to very frequent professional dysfunction.⁵

Suicide rates among physicians are higher than the rates observed in the general population and vary depending on sex: Schernhammer and Colditz² estimated odds ratios of 1,414 male physicians and 2,274 female physicians after carrying out a meta-analysis.

Rates of alcohol and drug consumption, abuse or dependence

are similar or lower than those for the general population. When medical residents from different specialties are compared, it is found that residents who work in emergency services and psychiatry residents have the highest rates of substance abuse, with cocaine and marijuana the most prevalent among emergency residents and benzodiazepines and marijuana being preferred by psychiatry residents. The lowest rates of abuse are observed among Pediatrics, Surgery and Pathology residents while Internal Medicine and Gynecology-Obstetrics residents have intermediate abuse rates.^{6,7}

Conard et al.⁸ analyzed at what age residents began abusing substances and found that, with the exception of tranquilizers and barbiturates, they began illicit drug use before attending university. Flaherty and Richman⁹ state that, in contrast with

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what is observed in the general population, physicians' problems with alcohol consumption tend to increase with age. These authors also noted that, by the time they finished their degrees in medicine, women's patterns of alcohol consumption were similar to those of the men.

Although residents as a group have mean depression prevalence rates that are comparable with the general population, certain subsets of residents have higher prevalence rates. Peterlini et al.³ found that prevalence rates were higher among female first-year residence. Goebert et al.¹⁰ observed a 21.2% occurrence of depression among medical residents and found that depression prevalence rates reduced as the medical course progressed. The following factors are described as being associated with depression: placements that demand more than 100 hours' work per week, a high rate of placement turnover and a history of depression in the family or of previous episodes of depression.¹¹

The Residency Stress Syndrome is described in the literature as follows:¹² episodic cognitive disorders, chronic feelings of anger, the development of a pervasive cynicism, episodes of major depression, suicidal ideation and substance abuse. Factors associated with this syndrome include sleep deprivation, excessive workload, changes to the level of responsibility for patient care, frequent changes to working conditions and competition between colleagues. Shanafelt et al.¹³ studied burnout (also known as Professional Exhaustion Syndrome) among medical residents and its consequences for the care dispensed to patients, finding that 76% of the residents they investigated exhibited this syndrome during their three-year residency period. This syndrome includes depersonalization, emotional exhaustion and feelings of personal underachievement, and there is an association between the presence of this syndrome and a deterioration in patient care. Their results are consistent with the findings of Fahrenkopf et al., who observed a 74% prevalence among a cohort of residents at pediatric hospitals in the United States (45 days' follow-up).¹⁴

With relation to mental disorders in general, the literature indicates that the following are important risk factors: a lack of social support, which among other elements can include living separated from or a long distance away from the family; having few relationships with work colleagues, not knowing many work colleagues or not knowing them well and also financial problems.^{15,16}

These high rates of stress and mental disorders within the medical population bring with them elevated social costs. According to information from the state of São Paulo's Regional Medical Council (*Conselho Regional de Medicina de São Paulo*), mental disorders are the primary cause of retirement among physicians and depression and anxiety are the most common types of disorder.¹⁷ Other detrimental consequences are absenteeism, increased numbers of conflicts with colleagues and with the population being cared for, a greater number of medical errors and a deterioration in the care dispensed to patients.¹⁸ The importance of this subject has led to countless institutional initiatives intended to reduce the likelihood of professional dysfunction and sickness among physicians, medical students and residents.¹⁹⁻²¹

The objective of this study was to trace the profile of the medical residents seen at a mental healthcare service. This

should increase our knowledge of the needs of this group, both in general and specifically at our teaching institution. The results will contribute to attempts to reduce both occupational dysfunctions and suffering within this population of residents and to improving their chances of learning and the quality of care provided to patients.

METHODS

The sample population investigated in this study was everybody registered by the Medical Residency Commission (*Coreme - Comissão de Residência Médica*) at the start of each academic year and who enrolled on a medical residency program between 1998 and 2002. The subset analyzed comprises all residents seen by the Students' Psychological Care Team between 1998 and 2002. This was an observational study of a retrospective cohort, analyzing secondary data.

The Medical School at the *Universidade de São Paulo* (FMUSP) established its Students' Psychological Care Team in 1983 and the team began work in 1986. During the 1980s and 1990s, many services with the same objectives – to provide psychological and psychiatric care to medical students – were set up at the principal medical schools in Brazil.¹ The FMUSP Students' Psychological Care Team includes physicians specialized in psychiatry and psychology and its clients include students of medicine, speech therapy, physiotherapy and occupational therapy from the *Universidade de São Paulo* and the medical residents at the University's *Hospital das Clínicas*. The activities of the Students' Psychological Care Team are strictly treatment-oriented, and include psychotherapy, psychiatric medical consultations, family therapy, guidance for professors and the promotion of reflection groups. Taking the period 1998-2006, the mean number of patients per month was 99, distributed as follows: 69 medical students; 20 medical residents and 10 physiotherapy, occupational therapy or speech therapy students.

The Students' Psychological Care Team accepts patients who present spontaneously and patients who are referred by tutors, colleagues or departments. A series of initiatives are undertaken with the objective of raising awareness about the service and facilitating access to it: All students are interviewed during their first year; the medical residents attend a presentation in the form of a lecture specifically about the subject of mental health in medical residency when they are enrolled at the institution; every year the Students' Psychological Care Team sends an explanatory letter to all medical residents, full professors, heads of departments and those responsible for medical residency programs explaining what it does, the way it does it and how its appointments system works. The Students' Psychological Care Team only provides care to undergraduates and residents while they are still studying, referring them to other institutions and/or professionals when it is necessary to continue treatment beyond this period.

The procedures adopted for this study were as follows: data on the entire sample of medical residents was acquired from records maintained by Coreme, which include information on sex, age, domicile, residency year, medical school and specialty (these data were provided to the Students' Psychological Care Team by Coreme in database format); information on the residents seen by the team was taken from data recorded by the

Students' Psychological Care Team on their patient records (consultations were held in appropriate consulting rooms away from the Hospital das Clínicas campus, which is where the medical residents carry out the activities for the programs they are on, in order to maintain privacy. The following types of care were provided: clinical psychiatry medical consultations; psychotherapy sessions (psychoanalytic approach; lasting from 30 to 50 minutes per session and continuing for varying periods of up to 3 years); psychotherapy with medical consultation (when both procedures were carried out simultaneously by the same professional); guidance for family members and guidance for professors involved in medical residency programs.

The variables analyzed were: Year (chronological) - 1998, 1999, 2000, 2001 or 2002; Residency Year - from year 1 (R1) to year 5 (R5); Sex; Age - classified into two categories on the basis of the median age; Specialties - broken down into the following categories: Cognitive Specialties, which deal directly with the patient and which put the emphasis on clinical knowledge, clinical reasoning and subjective relationships (for example, Internal Medicine, Psychiatry, Pediatrics, Geriatrics), Technical-Surgical and Skills-Based Specialties, which also deal directly with patients, but in which the doctor-patient relationship is classified as bureaucratic, standardized and programmed, mediated by sophisticated equipment and diagnostic support teams and where emphasis is on technical knowledge (for example, all of the surgical specialties), Mixed Specialties, in which technical skills and cognitive knowledge are combined, creating autonomous clinics (for example, : Gynecology and Obstetrics, Ophthalmology, Orthopedics and Traumatology), and finally Technological and/or Bureaucratic Specialties, which do not deal directly with the patient, but are geared to research, laboratory diagnoses and management (for example: Preventative Medicine, Hospital Administration, Clinical Pathology);²² Medical School – either FMUSP or other medical schools; and Proximity to Family Home – classed as nearby when residents domiciles were within the metropolitan district of São Paulo, according to DATASUS,²³ and as distant when their families lived outside of this region.

Diagnoses were established according to the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).²⁴ The DSM-IV's multi-axis system was adopted. Diagnoses were grouped into the major nosographical categories from the mental disorders chapter, irrespective of their graduations in terms of clinical course and severity, and classified as Mood Disorders, Anxiety Disorders, Other Disorders (an arbitrary umbrella category for Eating Disorders, Sleep Disorders, Adaptive Disorders, Personality Disorders and Attention Deficit Disorders) and Psychological Conflicts, which includes all those complaints presented by the medical residents, involving suffering, maladaptation and dysfunction, but which do not meet the criteria for any specific Mental Disorder. The most common complaints grouped under the heading of Psychological Conflicts were: failure to adapt to departments' human environments; worries and stress about meeting the demands of the medical residency program; doubts about whether a specialty was well-chosen; loss of loved ones; loneliness and lack of intimate relationships; separation from families and friendship circles; fear of revealing homosexuality and family conflicts (parents separating and/or conflicts in the bosom of the family).

The dataset was transferred to a database compatible with Stata software for the statistical analysis.²⁵ Data analysis included a study of the frequency distributions of the variables investigated and tests for associations between psychiatric diagnoses and the other variables studied, using the Chi-square or Fisher's exact tests, as necessary, and setting the significance level at 5%. More specifically, the following procedures were undertaken: description of the proportions of residents seen by the Students' Psychological Care Team, broken down by: year [chronological], residency year, sex, age, specialty, medical school and distance from family home; analysis of the differences between categories (tests of associations and/or differences between proportions – Chi-square or Fisher's exact test); description of the proportional distribution of psychiatric diagnoses across the residents seen by the Students' Psychological Care Team broken down by: year [chronological], residency year, sex, age, specialty, medical school and distance from family home; analysis of differences between categories (tests of associations and/or differences between proportions – Chi-square or Fisher's exact test).

This research project was approved by the Ethics Commission at the FMUSP's Hospital das Clínicas.

RESULTS

During the period 1998-2002, Coreme registered 2,131 individuals, a large proportion of whom completed more than one residency year at FMUSP, giving a total of 4,727 residency-years (= number of residents x number of years' residency completed during the study period). From this sample, and calculating on the basis of first consultation only, 104 residents were seen by the Students' Psychological Care Team, which equates to 4.9% of all residents seen, or 2.2 residents seen for every 100 residency-years of follow-up. Due to ethical considerations (the need for absolute confidentiality with relation to the names of those seen) it was not possible to establish a direct relationship between the data on each individual held in the two different databases.

Observing Table 1, it will be noted that there were no significant differences between the proportions of residents seen by the Students' Psychological Care Team in terms of the variables 'year [chronological]' or 'family home'; that there were significantly greater proportions in the categories 'female sex', 'age under 26 years' and 'other medical schools'; and significantly smaller proportions in the categories 'R2', 'R3' and 'R4' when compared with 'R1', in the 'skills-based' and 'mixed' specialties, when compared with 'cognitive', and for the diagnoses 'Anxiety Disorders' and 'Other Disorders' when compared with 'Mood Disorders'.

In Table 2, relating to Mood Disorders, it can be observed that a significantly smaller proportion of residents in years R2, R3 and R4 were seen with this diagnosis (0.6%, 0.3% and 0.2%) when compared with R1 (2.2%), while the difference fell within the region of the null hypothesis for R5; the proportion of female residents with this diagnosis (3.2%) is significantly greater than the proportion of male residents (1.5%); and the proportion of residents on skills-based residencies with this diagnosis (0.7%) is significantly less than those in cognitive specialties (3.1%). There were no significant differences between the proportions of other categories or variables.

Table 3 lists the proportions of residents seen due to

Table 1 – Proportions of residents seen by the Students' Psychological Care Team at the Universidade de São Paulo Medical School (FMUSP), broken down by the variables analyzed (1998-2002, Brazil).

Variable	Category	Total	Number Seen	% Seen	95%CI	p**
Year [chronological]						0.25
	1998	891	15	1.7	0.9-2.8	
	1999	906	25	2.8	1.8-4.0	
	2000	981	15	1.5	0.9-2.5	
	2001	987	24	2.4	1.6-3.6	
	2002	962	25	2.6	1.7-3.8	
Residency Year						
	R1*	1534	69	4.5	3.5-5.7	
	R2	1491	22	1.5	0.9-2.2	<0.001
	R3	1077	9	0.8	0.4-1.6	<0.001
	R4	516	3	0.6	0.1-1.7	<0.001
	R5	109	1	0.9	0.0-5.0	0.08
Sex						<0.05
	Male	1218	41	3.4	2.4-4.5	
	Female	913	63	6.9	5.3-8.7	
Age (years)						<0.05
	Under 26	1053	64	6.1	4.7-7.7	
	26 or over	1078	40	3.7	2.7-5.0	
Specialty						
	Cognitive*	1226	82	6.7	5.4-8.2	
	Technological	224	12	5.4	2.8-9.2	0.484
	Skills-based	561	8	1.4	0.6-2.8	<0.001
	Mixed	120	2	1.7	0.2-5.9	<0.05
Family Home****						0.23
	Nearby	1049	45	4.3	3.1-5.7	
	Distant	1065	58	5.4	4.2-7.0	
Medical School						<0.05
	FMUSP	1042	40	3.8	2.8-5.2	
	Others	1089	64	5.9	4.6-7.4	
Diagnosis						
	Mood disorders*	2131	47	2.2	1.6-2.9	
	Psychological Conflicts	2131	31	1.5	1.0-2.1	0.07
	Anxiety Disorders	2131	12	0.6	0.3-1.0	<0.001
	Other Disorders***	2131	14	0.7	0.4-1.1	<0.001
Total		2131	104	4.9	4.0-5.9	

*reference category; ** chi-square; ***includes Eating Disorders, Sleep Disorders, Adaptive Disorders, Personality Disorders and Attention Deficit Disorders; ****1 family home datum ignored for residents seen by the team and 17 data ignored for the entire sample of residents.

Table 2 – Analysis of associations between variables analyzed and diagnoses of mood disorders among residents seen by the Students' Psychological Care Team at the Universidade de São Paulo Medical School (FMUSP, 1998-2002, Brazil).

Variable	Category	MOOD DISORDERS			
		N	(%)	Ratio Between Proportions	95%CI
Residency Year					
	R1	34	2.2	1.00	
	R2	9	0.6	0.27	0.13-0.57
	R3	3	0.3	0.13	0.04-0.41
	R4	1	0.2	0.09	0.01-0.64
	R5	0	0		
Sex					
	Male	18	1.5	1.00	
	Female	29	3.2	2.15	1.20-3.85
Age					
	Under 26	29	2.8	1.00	
	26 or over	18	1.7	0.61	0.34-1.08
Specialty					
	Cognitive	38	3.1	1.00	
	Skills-based	4	0.7	0.23	0.08-0.64
	Mixed	1	0.8	0.27	0.04-1.94
	Technological	4	1.8	0.58	0.21-1.60
Medical School					
	FMUSP	24	2.3	1.00	
	Others	23	2.1	0.92	0.52-1.62

psychological conflicts, illustrating that the proportions of R2 and R3 residents (0.6% and 0.1%) seen for this reason are significantly smaller than for R1 residents (1.4%), while for R4 and R5 the differences were within the null hypothesis zone; the proportion of females (2.4%) is significantly greater than the proportion of males (0.7%); the proportion of residents from skills-based specialties (0.2%) is significantly smaller than for cognitive specialties (2%); and the proportion of residents with this diagnosis who had been trained at other medical schools (2.2%) was significantly greater than the proportion of residents trained at FMUSP (0.7%). There were no significant differences between the proportions of other categories or variables.

No significant differences between proportions of study variable categories were found for Anxiety Disorders or Other Disorders.

DISCUSSION

The results revealed significant differences between specialties in terms of the proportions of residents seeking care at the Students' Psychological Care Service. Specifically, cognitive

Table 3 – Analysis of associations between variables analyzed and diagnoses of psychological conflicts among residents seen by the Students' Psychological Care Team at the Universidade de São Paulo Medical School (FMUSP, 1998-2002, Brazil).

Variable	Category	PSYCHOLOGICAL CONFLICTS			
		N	(%)	Ratio Between Proportions	95%CI
Residency Year					
	R1	21	1.4	1.00	
	R2	9	0.6	0.44	0.20-0.96
	R3	1	0.1	0.07	0.01-0.50
	R4	0	0		
	R5	0	0		
Sex					
	Male	9	0.7	1.00	
	Female	22	2.4	3.56	1.51-7.05
Age					
	Under 26	19	1.8	1.00	
	26 or over	12	1.1	0.62	0.30-1.26
Specialty					
	Cognitive	25	2.0	1.00	
	Skills-Based	1	0.2	0.09	0.01-0.64
	Mixed	0	0		
	Technological	5	2.2	1.16	0.45-2.99
Medical School					
	FMUSP	7	0.7	1.00	
	Others	24	2.2	3.28	1.42-7.58

specialty residents sought care the most, while skills-based specialties had the lowest proportion seeking care.

Several different hypotheses can be formulated to explain these data. When compared with the surgical specialties (skills-based), the cognitive specialties (clinical) had a greater proportion of residents trained at other medical schools and a greater proportion of female residents, both of which factors are associated with seeking our help. The surgical specialties value strong, virile, pragmatic and uncomplicated attitudes, and it is of note that a significant proportion of the residents from these specialties arrived at the Students' Psychological Care Service after being referred by those responsible for their residencies and also that, during consultations, they exhibited great concern about the possibility that this could have repercussions for their futures in the profession. A study undertaken by Bellodi²⁶ has made an important contribution to understanding of this difference between specialties, administering personality tests to Internal Medicine and Clinical Surgery residents.

She observed that surgeons are less antagonized by their environments, or, in other words, that they are more submissive to

authority and place excessive value on hierarchy – the oldest and most experienced surgeon's word is final. These characteristics may lead to better adaptation to the departmental environment and reduced relational conflict.

Clinicians exhibited the greatest difficulty in controlling experiences causing anxiety and this characteristic combined with a hypercritical attitude to their own work may lead to states of anguish and depression.

Clinicians project their aggression more, living it out through fantasy and displacing it onto their environment, whereas surgeons exhibit aggression that is more directed towards their work. In other words, the clinicians have a greater tendency to recognize their aggressive impulse and, very often, in projecting them onto their environments, may erroneously internalize them as hostile and threatening, leading to experiences of conflict, opposition and mental suffering.

Another important result is the observation that first-year residents sought the service most often. The point of transition from final-year student to resident involves a great many changes.

A resident is a qualified physician, and the responsibility that before only fell on the treating physician is now shared by the resident. At the same, residents are still being trained, they are beginning to learn their specialty, which is an ambiguous position to be in, and they must deal with this throughout their new training period. Other features of the lives of medical residents also require new investments, such as gaining independence from their parents, becoming financially independent and, in some cases, significant emotional bonds, such as engagement, marriage and parenthood.

For residents who have come from other cities or regions, starting a residency at HC-FMUSP means breaking with the family, emotional and social connections that have hitherto conferred emotional stability on them. For a more psychologically vulnerable subset of residents, these changes can lead to experiences of anxiety and feelings of guilt, bringing the ego's defense mechanisms into action²⁷ in order to avoid the irruption of unbearable psychic pain that could lead to suffering or sickness. It is legitimate to state that a situation is produced in the face of which the individual brings their defensive resources into action.

There are two facets of the word "crisis" that are of note because they encapsulate the possibility of therapeutic management: crisis as rupture – the old and well-known references are no longer sufficient to deal with the new situation; and crises as development – the mobilization of ego defense mechanisms creates the conditions for change, that transformation in which impossibilities and limitations can be overcome. The sign of crisis is the symptom. It is by working through the conditions under which it appeared and its determinants that the therapeutic process will find a path to success.

Living a long distance away from the family home did not prove to be an important factor in seeking the psychological service. While there was a tendency for a greater proportion of residents whose family home was distant to present at the service, this difference was not statistically significant. One possible interpretation takes into account the fact that a large proportion of these residents already left their families when they enrolled at the medical school as undergraduates and have already overcome this adaptive phase. One might also question

the geographical criterion used to define a nearby family home, which was that the domicile should be within Greater São Paulo. Given the Metropolitan dimensions of our city and the great difficulty involved in traveling to the other towns that make up the conurbation, real family interaction is impractical for those whose families do not live in the city of São Paulo itself.

Having graduated from the same institution providing the residency was a factor associated with reduced demand for the service. One explanation may be found in the fact that the emotional bonds developed while an undergraduate are retained, in addition to maintenance of the teaching references to which the residents had become accustomed while students.

Another significant result was the fact that more women than men presented at our service. While consensus has not yet been reached on whether there is an increased prevalence of psychiatric morbidity among the female population, there is widespread agreement in the scientific literature that more women than men suffer from depressive disorders, anxiety disorders and somatoform disorders.²⁸ It is also known that women more readily accept the need to seek care.

A study carried out by Ramsay et al.²⁹ found that there were more mild disorders and eating disorders among women. In contrast, alcohol and drug abuse were two to three times more prevalent among men. It could be suggested that discrimination and the social stigma attached to alcohol or drug dependence make it less likely for male residents to seek care.

Millan made an interesting contribution to elucidating this subject.³⁰ Personality tests were administered to first-year medical students at FMUSP and analyzing possible differences between the sexes significant variations were observed in three factors: Tenderness (Tough-minded vs. Sensitive); Imagination (Practical vs. Imaginative) and Self-sufficiency (Group Dependent vs. Self-sufficient). According to the results of this study, females were more Sensitive (in terms of the factor Tenderness), more Practical (in terms of the factor Imagination) and more Group Dependent (in terms of the factor Self-sufficiency). These personality traits may make it more likely that women will seek care.

More sensitive people may exhibit greater contact with their own subjectivity, which may facilitate identification and acceptance of subjective conditions that need attention. In the same vein, being less self-sufficient and more dependent on the support of others leads in the same direction.

Analyzing the diagnoses made during consultations, the category with the greatest proportion was Mood Disorders, followed by Psychological Conflicts, Other Disorders and Anxiety Disorders, in that order.

Analysis demonstrated that Mood Disorders and Psychological Conflicts had similar proportional distributions, according to the variables studied, both being associated with the first year of medical residency, female sex and cognitive specialties. Population data have shown that there is twice the prevalence of depressive disorders among women³¹ and the association with first-year students is also consistent with published results.³² With relation to the specialties, Mood Disorders and Psychological Conflicts follow the same general tendency of the sample that has already been discussed.

Notwithstanding, residents who had graduated from medical school at FMUSP had a significantly lower proportion of

'psychological conflicts' (which is the category that does not define any specific mental disorders) than those who had graduated from other medical schools. This demonstrates the powerful environmental influence that leads residents from other medical schools to seek our service, not because of disease, but because of a need to adapt. There was no difference in the proportion of mood disorders in these two categories, which may indicate the powerful effect of biological factors in the clinical onset of these conditions, with the stress of the first year of medical residency playing the role of trigger factor, initiating depressive episodes.

The analyses of 'Anxiety Disorders' and 'Other Disorders', were seriously limited by lack of statistical power caused by the low frequency with which these events were observed in our sample.

Finally, it should be pointed out that one limitation of this study is the fact that multivariate analyses that might have determined the independent effect of each variable were not performed because it was not ethically possible to establish a relationship between the data on individual patients in each of the two databases.

In synthesis, our findings demonstrate greater demand for care from residents with the following characteristics: first year of residency, age less than 26, female sex, graduate of a medical school other than FMUSP and studying a cognitive specialty.

These data are consistent with the data available in the literature cited previously. Nevertheless, certain results are more striking and demand further elucidation and suggest interventions.

While the near total absence of residents from surgical specialties from our consultations was expected, the extremely low percentages were a surprise. These are the specialties with the longest working hours, with heavy exposure to sleep deprivation and a large number of stressful placements in emergency services. Despite the fact that the characteristics associated with these specialties - male sex and graduation from FMUSP medical school - are also factors related with reduced demand for mental healthcare, the impression remains that mental disorders must have emerged within this population and either they went untreated or the residents sought support outside of the institution.

One further relevant detail is that demand for care did not increase over time. Although the Students' Psychological Care Team offers mental healthcare to students and residents at FMUSP, the demand from students remained at much higher levels than demand from residents, suggesting great subjective changes at this point when the student is transitioning from the status of student to qualified physician and is embarking on a medical residency. It is easier for students to find the time to attend consultations, they are less concerned with the effects this may have on their image and they receive greater institutional support.

Residents find it difficult to tear themselves away from their work, since, very often, absences will need to be covered by a colleague; another possibility is that residents are at a different stage in their lives, at which their efforts appear to converge on their career goals, focusing on a good start to their professional lives, momentarily relegating care for their personal lives to the background. At this point, the physician's professional side is dominant in their life.

It is therefore relevant to discuss the relationship that may

exist between demand for the Students' Psychological Care Team from residents and the following factors: the awareness of the fact that such a service exists at the institution, the subjective environment of each different department and personality differences between residences on different specialties.

When medical residents are enrolled on their medical residency at HC-FMUSP, they attend a lecture specifically about the work of the Students' Psychological Care Team. Full professors, heads of departments and those responsible for medical residency programs are sent explanatory material about the service every year. All first-year residents are sent a letter explaining the mission of the Students' Psychological Care Team and providing instructions on how to make appointments, together with their pay slips and meal vouchers. It does not appear to be a problem with ineffective information, but with the subjective environment of each department and the personality differences between the residents on each specialty.

One possible approach to solve this problem would be to invest in greater proximity between mentors and residents. Mentors are ex-residents who have completed their training, but who remain within the departments for an extra year, fulfilling the role of conduit between the residents and higher levels of the hierarchy. This "elder brother" is the closest representative of the institution to the residents, very often playing the role of confidant and adviser. In countless individual cases these professionals' contributions have proven highly valuable to solving the cases of some of the residents seen by the Students' Psychological Care Team. It is important to consider a program specifically for the mentors, which would not be merely informative, but which would be something more detailed offering to listen to problematic situations that occur during their working routines and giving more detailed explanations about what types of problems can be referred to the Students' Psychological Care Team.

Concluding, in this study psychiatric and psychological care was associated with female sex and factors linked to adaptive crises. Furthermore, care was also associated with clinical specialties, in which the residents tend to have personalities that are different from those on surgical specialties and tend to experience distinct working environments. Finally, the fact that the proportion of residents seen by the service did not increase during the period analyzed, encourages us to plan fresh interventions which will widen its coverage.

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