

# Well-being and help-seeking: an exploratory study among final-year medical students

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## SUMMARY

**Objective:** Doubts, competitiveness and preparation for the residency examination increase stress and insecurity at the end of medical course. Well-being is very important at this point, but it is known that medical students are reluctant to seek help, particularly for emotional problems. This study investigated the relationship among well-being, perceived needs and help-seeking in final-year students. **Methods:** Well-being was assessed using Beck's Inventories of Anxiety (BAI) and Depression (BDI) and the WHOQOL-brief (quality of life). A questionnaire was used to assess perceived needs and medical school support resources. **Results:** The students reported good quality of life (68%) but presented anxiety (27%), depression (20%) and impaired social functioning. Fifty-one percent of the students acknowledged academic needs and 25% psychological needs. Only a portion of the students with anxiety and depression or bad quality of life used the institutional support. Female gender, perceived psychological needs and anxiety symptoms were associated to the use of the Mental Health Service. Satisfaction with mentoring relationships and positive changes were associated to Mentoring attendance. **Conclusion:** There are different factors involved in help-seeking and identifying specificities in the use of institutional support resources can help to develop strategies to sensitize students about help-seeking during the medical course.

**Keywords:** Adaptation, psychological; students, medical; anxiety; depression; quality of life.

## RESUMO

### Bem-estar e busca de ajuda: um estudo exploratório entre alunos de Medicina ao final curso

**Objetivo:** Dúvidas, competição e o exame de residência aumentam o estresse e a insegurança ao final do curso; entretanto, sabe-se que alunos de Medicina são resistentes a procurar ajuda, especialmente para problemas emocionais. Este estudo investigou a relação entre bem-estar, percepção de necessidades e busca de ajuda entre alunos do último ano do curso médico. **Métodos:** Utilizou-se os Inventários Beck (ansiedade e depressão), o WHOQOL-breve (qualidade de vida) e um questionário para avaliar necessidades e o uso dos recursos de suporte institucionais. **Resultados:** Os alunos relataram boa qualidade de vida (68%), mas apresentaram sintomas de ansiedade (27%), depressão (20%) e prejuízo na vida social. Cinquenta e um por cento deles reconheceram necessidades acadêmicas e 25% necessidades psicológicas. Apenas parte dos alunos com sintomas de ansiedade e depressão, ou qualidade de vida ruim, usou os recursos institucionais de suporte. Ser mulher, reconhecer necessidades psicológicas e sintomas de ansiedade mostrou-se associado ao uso do Serviço de Saúde Mental da escola. Satisfação com as relações e mudanças positivas derivadas da atividade mostrou-se associada à participação na Tutoria. **Conclusão:** Há diferentes fatores envolvidos na busca de ajuda e identificá-los pode colaborar no desenvolvimento de estratégias de sensibilização dos alunos quanto à busca de ajuda durante o curso.

**Unitermos:** Adaptação psicológica; estudantes de medicina; ansiedade; depressão; qualidade de vida.

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## INTRODUCTION

Many studies indicate that the prevalence of stress, depression and anxiety among medical students is higher than the general population. Reports also highlight deterioration in mental health over time. Stress has a negative impact on academic performance, leads to a decline in humanitarian attitudes and empathy, and also affects the physician-patient relationship. On a personal level, stress contributes to substance abuse, breakdown of relationships, poorer general health, decline in self-care and even suicide<sup>1-3</sup>.

At the end of the course, medical students go through a particularly stressing and changing phase. During clerkships, while carrying out supervised activities in different specialties, students must apply the knowledge acquired over previous years, train clinical skills and develop the ability to solve a variety of health problems. Well-being is very important at this point, especially because students face two important tasks: choosing their specialty and being approved on the residency examination. However, doubts, increased competitiveness and preparing for exams, during a phase in which students are exposed to on-duty periods and patient care responsibilities, cause burnout and insecurity<sup>4-5</sup>.

However, medical students, as well as doctors, show strong reluctance to seeking help, particularly concerning emotional aspects<sup>6</sup>. They tend to self-diagnose and when seeking help, do so informally through friends and work colleagues<sup>7</sup>. Also, they use their privileged access to the health-care system to carry out exams and seek references or treatment. The practice of self-medication is learned very early in the career and increases with the access to clinical training<sup>8</sup>. Medical students fear that seeking help will be considered a sign of weakness, may have negative repercussions on their career, and they are concerned over the confidentiality of the services<sup>9,10</sup>. Accessibility and time available have also been identified as barriers to help-seeking<sup>11</sup>.

The aim of the present study was to investigate the relationship among well-being, perceived needs and help-seeking in a group of final-year medical students. We used symptoms of anxiety, depression and quality of life as indicators of well-being. We also explored the perceived psychological and academic needs of students and evaluated their knowledge, use and satisfaction regarding institutional support. Finally, we attempted to identify specific variables associated with the use of medical school support resources by the students.

## METHODS

### CONTEXT

Concerned with the well-being of their students, *Universidade de São Paulo* Medical School (FMUSP), Brazil, has made efforts to offer institutional support through a Mental Health Service and a Mentoring Program.

The Mental Health Service (MHS) provides specialized psychological help by psychologists and psychiatrists helping students to deal with the anxiety and emotional conflicts which arise during medical training. Every year, the freshmen students are invited to familiarize themselves with the service, and subsequently demand becomes spontaneous. Their professionals refer that, although there has been progress in this aspect, there is still prejudice among students in relation to psychiatric illness or psychological difficulties, and many students that need psychological help do not seek the service<sup>12</sup>.

The Mentoring Program (MP) provides mentors that follow students throughout the medical course, offering personal support and, specially, promoting professional development. Regular meetings (10 per year) are held to promote discussion and guidance on educational aspects, medical career and students' personal issues. The mentors are faculty members or physicians at the teaching hospital who are responsible for groups of 12-14 students, containing a mix of different academic years. All the 1,080 students of the medical school are randomly distributed in the groups. Students' participation is voluntary and incentivized by a system of credits, registration on the academic records, and a certificate at the end of the course. In spite of the careful planning, with selection and training of the mentors and incentives to student participation, the attendance to Mentoring Program is lower than that expected by the mentors<sup>13</sup>.

Even with specific goals, the MHS professionals<sup>12</sup> and also the mentors<sup>13</sup> share the hypothesis that the students who most need are those who did not seek help at the medical school support resources.

### PARTICIPANTS

All students in the final year of the FMUSP medical course (n = 180) were invited to participate on a voluntary basis.

### INSTRUMENTS

Beck's Depression Inventory (BDI) and Beck's Anxiety Inventory (BAI) were used to assess depressive and anxious symptoms. The following cut-off scores were used: absent (0-11), mild (12-19), moderate (20-35) and severe (36-63). Cut-off scores for anxious symptoms were: absent (0-10), mild (11-19), moderate (20-30) and severe (31-63)<sup>14</sup>. Quality of life was investigated by the WHO-QOL-brief, assessing overall quality of life (5-point scale, ranging from very poor to very good), general health satisfaction (5-point scale, ranging from very unsatisfied to very satisfied) and four domains: physical, psychological, social and environmental<sup>15</sup>.

A questionnaire with closed-ended questions (yes/no) was developed to assess perceived needs, knowledge, use, and satisfaction with institutional support resources:

1. *Over the past 12 months, do you think you needed help for problems such as sadness, anxiety or nervousness?*
2. *Over the past 12 months, do you think you needed help for problems such as choosing specialty, exams, grades or other academic matters?*
3. *Mental Health Service: do you know it? Used it? Recommend it?*
4. *Mentoring Program: do you know it? Recommend it?*

The students' attendance on the Mentoring Program and their annual evaluation of the program were obtained by consulting the program database. In the evaluation, students assessed the mentor, the mentoring group and the program (5-point scale, ranging from unsatisfied to very satisfied). Students also responded whether they note positive changes as a result of the program (yes/no answers) and what kind of changes they perceived. Although not analyzed separately, the changes categories included increased motivation, greater knowledge of the course, academic performance improvement, stress reduction and better relationships with colleagues.

All instruments were administered in specific rooms at the annual OSCE (Objective Structured Clinical Exam) – when all final year students are present. The OSCE consists of a circuit of stations to evaluate student clinical performance providing information about the quality of training. Privacy and adequate time to complete the scales and the questionnaire were provided to students. A code was assigned to each participant linking data and allowing the cross-checking of results.

#### DATA ANALYSIS

Mental Health Service use was analyzed as a binary variable (yes/no). Mentoring attendance was analyzed both as a binary variable (did not attend *versus* attended at least one meeting/year) and as an ordered categorical variable, according to three levels (never attended, attended one meeting or two meetings, attended more than three meetings). This classification was based on the fact that, traditionally, final-year students attended around two out of the 10 meetings of the year. They generally take part in the first two meetings of the year, hosting the freshmen students and helping them with advice and guidance. Those who continue to attend the Mentoring Program after this initial moment are considered students with high adherence.

Considering that the present study is an exploratory one, univariate analysis was used to investigate the association between well-being and help-seeking behavior. The non-parametric Chi-square test and Fisher's exact test were used to compare categorical variables. The Mann-Whitney test was applied to the quantitative variables. Odds ratios were calculated to measure the strength of association of the categories of interest, adopting a 95% confidence interval. The level of significance was set at 5%.

#### ETHICS

All the information used in the study was coded and students' confidentiality was preserved according to the guidelines for studies of human subjects. The study was approved by the Institution's Research Ethics Committee (CAPPesq nº 0915/08).

#### RESULTS

Of the 180 final-year students, 156 participated in the study (86%). The mean age of participating students was  $24.6 \pm 1.44$  years, and they were predominantly men (56%).

#### WELL-BEING AND PERCEIVED NEEDS

Although the majority of students reported good quality of life (68%) and satisfaction with health (67%), some students presented symptoms of anxiety (27%) and depression (20%). Of the different domains of quality of life, the social domain scored lowest among students. Not all students answered all the instruments, in particular the Beck's Depression Inventory (BDI). One quarter of students acknowledged psychological needs while more than half recognized academic needs on the final year of the course (Table 1).

#### MEDICAL SCHOOL SUPPORT RESOURCES

The Mental Health Service was known to almost all of the students (98%). A portion of them (26%) reported having used the service (75% did psychotherapy and 23% used medication). Of these, 56% recommended the service.

The Mentoring Program was known by all of the study participants. In relation to attendance, 41% of the students did not take part in any meetings during the year, 27% attended one or two meetings, and 32% attended three or more meetings. The students showed high level of satisfaction with their mentors (78%), as well as with the mentoring group (68%) and the program as a whole (59%). Positive changes resulting from the program were reported by 46% of the students. Only 12 students (20%) did not recommend the activity.

#### WELL-BEING, PERCEPTION OF NEEDS AND HELP-SEEKING

Only a portion of the students with anxiety (21%), depression (32%) and poor quality of life (15%) recognized emotional needs. A larger number with anxious (41%) and depressive (41%) symptoms, and poor quality of life (35%) recognized academic needs.

Regarding help-seeking, also only some of the students with anxiety (33%), depression (27%) and poor quality of life (20%) used the Mental Health Service. Similarly, considering Mentoring Program attendance, only a portion of the students with anxious (33%) and depressive (32%) symptoms or poor quality of life (35%) attended three or more meetings (Table 2).

**Table 1** – Well-being and perceived needs among the final-year students

	Variable	Category	n	%
Well-being	Anxiety	Absent	105	73%
		Mild	33	23%
		Moderate	4	3%
		Severe	2	1%
		N/A	11	
	Depression	Absent	89	80%
		Mild	17	15%
		Moderate	5	5%
		Severe	0	
		N/A	44	
	Global quality of life	G	101	68%
		NGNB	27	18%
		B	20	14%
		N/A	7	
	Health-related quality of life	G	99	67%
		NGNB	28	19%
		B	21	14%
		N/A	7	
	Quality of life domains		Median	Min-Max
		Physical	20	13-28
		Psychological	21	15-26
		Social	11	4-15
		Environmental	30	18-38
Perceived needs	Psychological	Yes	28	25%
		No	85	75%
		N/A	42	
	Academic	Yes	55	51%
		No	53	49%
		N/A	47	

G, good; NGNB, neither good nor bad; B, bad; N/A, no answer.

Analyzing the relationship among well-being, perceived needs and school support resources (Table 3), women (OR = 0.22;  $p = 0.001$ ), students who recognize psychological needs (OR = 3.19;  $p = 0.018$ ) and students with symptoms of anxiety (OR = 4.43;  $p = 0.003$ ) were significantly more likely to use the Mental Health Service.

Concerning Mentoring, no relationship was found between attendance and variables as gender, age, anxious and depressive symptoms, or quality of life. Students who were satisfied with their mentor (OR = 12.53,  $p < 0.001$ ), their mentoring group (OR = 7.02,  $p < 0.001$ ), the mentoring program as a whole (OR = 4.64,  $p < 0.001$ ) and reported positive changes (OR = 3.53,  $p < 0.001$ ) were also significantly more likely to attend the Mentoring Program.

## DISCUSSION

This study investigated the relationship among well-being, perceived needs and seeking help in final-year students.

The findings showed that the majority of students reported an overall good quality of life but presented anxiety, depression and related impaired social functioning. One quarter of students recognized psychological needs such as sadness, anxiety or nervousness during the last year of the course, while more than half recognized academic needs. Knowledge about the school support resources did not appear to be a barrier to help-seeking. Students were satisfied with the institutional support services but only a portion of them with significant anxious and depressive symptoms or poor quality of life, sought

**Table 2** – Well-being, perception of needs and help-seeking among final-year students

Variable	Category	Well-being					
		Anxiety + (n = 39)		Depression + (n = 22)		Bad quality of life (n = 20)	
		n	%	n	%	n	%
Perceived needs	<b>Psychological</b>						
	Yes	8	21%	7	32%	3	15%
	No	20	51%	7	32%	11	55%
	N/A	11	28%	8	36%	6	30%
	<b>Academic</b>						
	yes	16	41%	9	41%	7	35%
	No	11	28%	5	23%	4	20%
	N/A	12	31%	8	36%	9	45%
Help-seeking	<b>Mental Health Service</b>						
	Yes	13	33%	6	27%	4	20%
	No	14	36%	8	36%	8	40%
	N/A	12	31%	8	36%	8	40%
	<b>Mentoring Program</b>						
	Yes (3 +)	13	33%	7	32%	7	35%
	Yes (1 +)	27	69%	13	59%	13	65%
	No	12	31%	9	41%	7	35%

\*Mentoring Program Database, yes (3+) = attended more than 3 meetings; yes (1+) = attended at least one meeting.

**Table 3** – Use of medical school support resources (odds ratio)

Variable	Use of Mental Health Service (yes)		Mentoring Program Attendance (yes)	
	Odds ratio	95% CI	Odds ratio	95% CI
Male gender	0.22***	0.08-0.57	1.04	0.55-1.98
Age (>25)	1.20	0.50-2.89	1.18	0.61-2.26
Psychological needs (yes)	3.19*	1.22-8.34	0.73	0.30-1.74
Academic needs (yes)	1.42	0.58-3.45	0.90	0.41-1.98
Anxiety +	4.43*	1.65-11.90	1.50	0.66-3.41
Depression +	1.60	0.42-6.07	1.11	0.39-3.19
Quality of life	0.63	0.17-2.35	0.64	0.24-1.75
Satisfied with mentor	&	&	12.53***	2.40-65.34
Satisfied with group	&	&	7.02***	2.19-22.45
Satisfied with program	1.8	0.21-15.41	4.64*	1.72-12.55
Change (yes)	1.75	0.22-14.22	3.53*	1.55-8.04

\*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001; & not possible to calculate.

help from school support resources. Being female, acknowledging psychological needs and presenting anxious symptoms was found to be significantly associated to seeking help from the Mental Health Service. Students'

attendance to the Mentoring Program was associated only to program satisfaction, to the relationship with the mentor and mentoring group, and to recognized positive changes as a result of the activity.



As shown in other studies, the final-year students presented higher rates of anxiety (27%) and depression (20%) than those found in the general population. A recent study in the Brazilian population reported a prevalence of mood disorder with depressive episode of 16.8% over lifetime, 7.1% over the past year and 4.5% during the previous month. Concerning anxiety disorders, the researchers found 12.5% over lifetime, 7.7% over a year, and 4% over the past month<sup>16</sup>. However, also confirming previous reports, symptoms of depression in this study were predominantly mild<sup>17,18</sup>. These results are congruent with the observation that, although satisfied with the end of a long and demanding course, students are fearful and anxious about their professional futures. In the study by Paro *et al.*<sup>19</sup>, final-year students also scored lower than freshmen on vitality and social functioning aspects and those scoring positive for depressive symptoms had lower scores across all SF-36 domains (Short-Form Health Survey), used for assessing quality of life.

Some studies show a high level of non-perceived need for emotional issues among university students<sup>20</sup>. Amongst medical students, the difficulty in perceiving emotional needs may be explained by the fact that many students consider anxiety and stress as a natural response during medical training<sup>21</sup>. Vogel *et al.*<sup>22</sup> stated that people only seek help when perceiving their problem as being more severe than those of others. Thus, this “naturalization” of symptoms may contribute to non-recognition of the problem.

Studies have also shown that 1/3 to 3/4 of individuals did not seek help even when they experienced problems or an emotional disorder<sup>11,20,23</sup>. Negative attitudes and ideas regarding treatment, social stigma, fear of judgment by others, privacy-related issues and lack of time contribute to this behavior. Given that the students in this study were at the end of their training, aspects such as self-sufficiency in solving problems may have also played a role. Finally, it is important to bear in mind that the practice of informal consultations and self-diagnosis increases as the course and clinical experience progresses<sup>8,9,11</sup>.

There is no consensus on higher vulnerability of women to emotional stress, but many studies have shown that women tend to have more positive attitudes towards recognizing emotional needs and help-seeking<sup>24-28</sup>. The association between perceived psychological needs and help-seeking is consistent with theoretical models of help-seeking behavior showing that perceiving a need for care is a key stage to start accessing services<sup>29</sup>. Other studies have also shown that students seeking help present higher levels of anxiety, depression and stress. In the study by Eisenberg *et al.*<sup>20</sup>, the use of the mental health service of the campus was greater among individuals presenting significant values for depressive and anxious symptoms. In a study with Norwegian medical students, Tyssen *et al.*<sup>23</sup> also noted that those seeking help had higher stress levels than those who did not.

Presenting anxious symptoms is highly congruent with the context of final-year medical students who are near the time of the Residency Exam. In Brazil this is an extremely competitive moment given the growing number of medical schools in the country. This fact leads to oversubscription for the limited places available and, in addition, some specialties are more sought after.

None of the social demographic variables, perceived needs or elements of well-being was a significant factor in Mentoring Program attendance. This result is consistent with the primary goal of mentoring programs which is to provide students with broad developmental support. The role of mentors involves not only dealing with situations of conflict or problems, but mainly helping to cope with the challenges arising throughout the professional and personal development<sup>30</sup>. The students of this study seemed to understand the goal of the Mentoring Program and the difference between its purpose and the objective of the Mental Health Service.

This study did not explore the reasons why students were more, or less, satisfied with their mentors and colleagues, but highlighted that personal relationship is a central aspect in Mentoring.

Studies on Mentoring recognize that “chemistry” between mentors and mentees is necessary for meaningful and productive meetings<sup>31,32</sup>. Berk<sup>33</sup> emphasized that Mentoring goes beyond merely matching a more experienced teacher with a student. Although the basis of the relationship is the experience, knowledge and skills of the mentor, the personal and individual bond between mentor and mentee is critical in the success and longevity of this relationship. Consistent with this fundamental aspect, satisfaction with the mentoring relationships was strongly associated with attendance: students who were satisfied with their mentor were significantly more likely to attend the program, as were those satisfied with the mentoring group.

Another important factor influencing attendance of students was recognition of the benefits of Mentoring. The study by Tekian *et al.*<sup>34</sup> demonstrated the importance of these aspects: satisfaction with the mentor and changes due to the program. Medical students facing academic difficulties that took part in a Mentoring program experienced less academic problems. According to students, the way in which mentors managed time, their life style and commitment to the profession and teaching, contributed to this positive outcome.

The process of seeking help, using a mental health service or attending a mentoring program, is a complex issue and should be considered as such. Although this study described important aspects associated to help-seeking among medical students, more in-depth studies are necessary to understand this subjective experience. Aspects such as personality, coping strategies and resilience should also be investigated.

A possible limitation of this study was the timing of the administration of the survey. During the OSCE the students are normally under some stress and despite the care taken about the time and place for completing the instruments, this factor may have influenced the lack of response to some questions and also impacted some results such as the anxious symptoms.

On the other hand, the strength of this study is that, as far as we know, it is the only one that investigated and correlated the three main key aspects involved in help-seeking behavior, namely perceived need, mental health status and help-seeking. Although the results may not be generalized to medical students as a whole, the applied methodology may help to expand the understanding of the field.

Similar studies should be conducted in students from other academic years to explore changes over time, and from other Medical schools and courses.

## CONCLUSION

There are specificities in the help-seeking behavior of this final-year medical students group. Well-being, especially anxiety symptoms, gender and perceived psychological needs are fundamental aspects for seeking specialized help at the Mental Health Service. Satisfaction with the mentoring relationships and perceived positive changes contributed to better attendance of the Mentoring Program. These findings can improve the medical school support resources and help the development of specific strategies to sensitize students regarding help-seeking during medical training.

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