Stigma and Attitudes towards Psychiatric Patients in Portuguese Medical Students

Estigma e Atitudes para com Doentes Mentais em Estudantes de Medicina

Diogo TELLES-CORREIA, João GAMA MARQUES, João GRAMAÇA, Daniel SAMPAIO

ABSTRACT
Introduction: This study aims to assess the impact of psychiatric education on attitudes of medical students towards psychiatric patients.

Material and Methods: A cross-sectional survey of medical students was conducted at the biggest Portuguese medical school. The students completed an anonymous self-report questionnaire, including sociodemographic data, family history of psychiatric illness, and the Community Attitudes toward the Mentally Ill scale.

Results: Of the 2 178 students, 398 answered the survey, representing 18.2% of the whole medical school. There was a significant improvement in all Community Attitudes toward the Mentally Ill scale dimensions along the medical course. The higher scores were in Restrictiveness subscale (38.01), and the lower scores were for Authoritarianism (36.13). The best improvement along the course was for Authoritarianism (5th year score - 1st year score = 2.03), and the worst was for Benevolence (5th year score - 1st year score = 0.39). The biggest improvement, in all scores, was found at the end of the 3rd year.

Discussion: The authors propose that the better attitudes found on third year students were due to a very specific anti-stigma module on the theoretical discipline 'Introduction to Mental Health'. After that, this positive effect was lost, with fourth and fifth year medical students showing a worsening of their attitudes.

Conclusion: Our results highlight the importance of anti-stigma specific education modules in order to improve students' attitudes toward mental health. Thus more anti-stigma preventive measures can be taken onward, on preparing the best way possible, the next generation of doctors.

Keywords: Attitude; Psychiatry; Social Stigma; Students, Medical.

RESUMO
Introdução: Este estudo pretende avaliar o impacto da educação psiquiátrica nas atitudes em alunos de medicina face aos doentes mentais.

Material e Métodos: Foi conduzido um inquérito em corte transversal na maior faculdade de medicina portuguesa. Os alunos preencheram um questionário que incluía informação sociodemográfica, antecedentes pessoais e familiares de doença psiquiátrica, bem como a Community Attitudes towards the Mentally Ill scale.

Resultados: Em 2 178 estudantes, 398 responderam ao inquérito, representando 18,2% daquela faculdade de medicina. Houve uma significativa melhoria em todas as dimensões avaliadas pela Community Attitudes towards the Mentally Ill scale, ao longo dos anos do curso de medicina. Os valores mais elevados verificaram-se na subescala Restritividade (38,01), e os valores mais baixos na subescala Authoritarianismo (36,13). A melhor diferença verificou-se para a sub-escala Autocratinismo (5º ano – 1º ano = 2,03), e a pior diferença verificou-se para a sub-escala Benevolência (5º ano – 1º ano = 0,39). Os melhores resultados foram encontrados no final do 3º ano.

Discussão: Os resultados poderão dever-se ao módulo de luta contra o estigma, incluído na disciplina de ‘Introdução à Saúde Mental’. Esse efeito positivo ter-se-á perdido no 4º e 5º anos, com uma degradação das atitudes.

Conclusão: Este estudo salienta a importância dos módulos de luta contra o estigma na melhoria das atitudes dos estudantes de medicina perante a saúde mental. Este tipo de acções pedagógicas preventivas com intuito anti-estigma, devem ser na melhor preparação possível de gerações médicas futuras.

Palavras-chave: Atitude; Estigma Social; Estudantes de Medicina; Psiquiatria.

INTRODUCTION
Stigma has been defined in many different ways. Some authors define it as a sign of disgrace or discredit that sets a person apart from others. Other authors proposed that stigma exists when elements of labeling, stereotyping, separating, status loss and discrimination occur in a power situation that allows these processes to unfold.

Stigma and discrimination cause a significant burden for people suffering from psychiatric disorders. In the last years many tools have been used to assess stigmatizing attitudes towards the psychiatric patients. Unfortunately negative attitudes towards the people with a psychiatric diagnosis are not confined to the lay public, but are also common among health professionals. Medical doctors in general, and not only Psychiatrists have contact with people with psychiatric diagnosis and medical education has an important role in reducing these negative attitudes in these professionals.

Like the general public, medical students often hold the stereotypical views that people with psychiatric diagnosis are unlikely to recover and can be dangerous.
reported that 28% of medical students thought that people with psychiatric disorder ‘are not easy to like’ and that 78% considered people with schizophrenia to be dangerous and violent.13

The knowledge and attitudes of undergraduate medical students towards psychiatric disorders is of utmost importance as these individuals will be involved in the care of these patients throughout their careers. For more than forty years investigators have been interested in medical students’ attitudes towards the psychiatric patients, but only in the last ten years the investigational works have become more elaborated14 and many studies have attempted to characterize the attitudes of medical students towards the patients with psychiatric diagnosis in different countries.15,16

Medical students are introduced to mental health issues in different ways, depending on the country. In Portugal, students are introduced to these issues mainly through the psychiatry disciplines (where they receive psychiatric education and training). This is, to our knowledge, the first Portuguese study among medical students.

There is some controversy about the impact of undergraduate psychiatric education and training on medical students’ attitudes about psychiatric disorders.17 Some authors have found that the psychiatric undergraduate training might have a mixed effect in terms of both positive and negative changes in medical student’s attitudes.18

Positive effects can be due to the information and education about psychiatric disorders received, and the negative effects may be due to the iatrogenic stigma of psychiatric diagnosis, e.g. the stigma that ‘begins with behavior and attitudes of medical professionals, especially psychiatrists’.19 Thus some authors suggest that inclusion of a specific anti-stigma training module as part of the undergraduate training course in psychiatry may be a valid tool.20

The present study aimed to assess the impact of psychiatric education and training on attitudes of medical students towards patients with psychiatric diagnosis comparing medical students across different years on this issue. We hypothesized that the attitudes of undergraduate medical students towards psychiatric disorders can be different depending on the year they attend, and that an anti-stigma specific module included in the 3rd year program of our medical school, could have some impact in these attitudes.

**MATERIAL AND METHODS**

This was a cross-sectional designed study. A group of 398 medical students (84 from the 1st year, 97 from the 2nd year, 71 from the 3rd year, 91 from the 4th year and 55 from the 5th year), belonging to the Faculty of Medicine of the University of Lisbon (FMUL) were assessed. At that time those 398 students represented 18.2% of all the FMUL population (2 178 students). Written informed consent was obtained from all participants, and the study protocol was approved by the institutional review committee. All the students were surveyed at the end of their respective years.

In this faculty, as in the other Portuguese medical faculties, training and education in psychiatry is given to students by means of four different disciplines. In the second year students attend ‘Medical Psychology’, where they learn the neuroanatomical and physiological basis of behaviour, and they have little physical contact with patients. In the third year, they attend ‘Introduction to mental health’. The discipline ‘Introduction to Mental Health’ consists of 26 classes, 13 of them theoretical (explanation of theories and concepts) and 13 practical (include direct contact with psychiatric patients). Ten of these classes (5 theoretical and 5 practical) are directly related to anti-stigma matters: 1 - The meaning of mental health; 2 - Living with mental problems; 3 - Coping with mental problems; 4 - Rehabilitation of mental illness; 5 - Prevention of mental illness.

In the fourth and fifth years students attend ‘Psychiatry I’ where they learn psychopathology and nosology, and ‘Psychiatry II’ where they learn the basis of custom psychopharmacological treatment.

A demographic questionnaire asked for details of age, sex, nationality, marital status, if they had children, prior psychiatric treatment and whether person had had contact with a relative with a psychiatric diagnosis. To assess medical students’ attitudes about psychiatric disorders, the Community Attitudes towards the Mentally Ill scale (CAMI) was used. This is a questionnaire created by Taylor and Dear in 1981,21 consisting of forty statements, each requiring a rating of the participants degree of agreement/disagreement on a five point Likert scale (with anchors 1 = strongly disagree to 5 = strongly agree) and yields four attitude factor scores, each calculated by adding the ten relevant items and then dividing them by ten, to obtain a mean score for each factor. A higher factor score indicates a more favorable attitude. In our sample a good reliability was found for the total scale (0.75) and for each subscale: Authoritarianism: Cronbach alpha 0.84; Benevolence: Cronbach alpha 0.87; Social Restrictiveness: Cronbach alpha 0.81; and Community Mental Health Ideology Cronbach alpha 0.85.

This instrument has already been translated, validated and used in different countries, including Portugal.22 In this scale there are four sub-scales that are used to assess four different kind of attitudes: Authoritarianism: reflects a view of the ‘mentally ill’ as an inferior class requiring coercive handling; Benevolence: reflects a sympathetic view of those suffering a ‘mental illness’ based on humanistic and religious principles; Social Restrictiveness: reflects a view of the ‘mentally ill’ as a threat to society; and Community Mental Health Ideology (CMHI): reflects a view that recognizes the therapeutic value of the community and acceptance of de-institutionalized care.

Statistical analyses were performed with the SPSS 13.0 for Windows software package. Descriptive data were presented in absolute frequencies, percentages and mean values. Comparison of sociodemographic variables between the different years was performed by means of Kruskal-Wallis and χ² tests. Comparison of CAMI
scores from different years was performed by means of Kruskal-Wallis test ($p < 0.05$ was considered statistically significant). Nonparametric tests were used because a normal distribution was not found by means of Kolmogorov-Smirnov test.

RESULTS

Demographic characteristics of the sample are displayed in Table 1.

There were better results in all CAMI dimensions in later medical course years. The higher scores were for the Restrictiveness subscale (38.01), and the lower scores were for Authoritarianism (36.13). The best improvement along the medical course was for Authoritarianism ($5^{th}$ year score - 1st year score = 2.03), and the worse one was for Benevolence ($5^{th}$ year score - 1st year score = 0.39) (Table 2).

The biggest improvement was in the end of the 3rd year, and after that, there was a decrease in all the scores, even though they never returned to the initial values (Fig. 1). Probably the great statistical significance found in Kruskal-Wallis test was due to this difference.

DISCUSSION

The main limitations of this study were the cross-sectional approach and the bias on the sample selection, as we had a very small and limited sample.

Because of differences between studies’ methodology it is difficult to compare results among different medical students’ populations around the world. Portuguese medical students have similar results to some studies that showed good or better attitudes towards the psychiatric patients in late medicine school years, after psychoeducation and psychiatric teaching. Although our students’ attitudes showed a regression in scores after the third year, they were still better at the end of the course than the in first year. Anyway we shall be aware of the bias of age, as older students may have better attitudes when compared to younger students.

We propose that the better attitudes found in third year students were due to a very specific anti-stigma module on our discipline ‘Introduction to Mental Health’.

Afterwards these better attitudes effect seemed to be lost, with fourth and fifth year medical students showing a worsening of their attitudes. That result might be secondary to the contact with real world psychiatric patients, and the diagnosis and treatment oriented teachings on disciplines as ‘Psychiatry I’ and ‘Psychiatry II’, respectively.

Another important issue might also be the contamination of negative attitudes towards the psychiatric patients from teachers to students, on daily clinical praxis of late medicine school years. This kind of phenomena has been described by other authors, especially among psychiatrists, and seems related with the stigma linked with the psychiatric diagnosis and treatment. Although negative attitudes towards psychiatry and psychiatrists may be well established before medical school enrollment some medical students may also be influenced by negative attitudes held towards psychiatry and psychiatrists by their medical educators.

Therefore we believe the positive effect seen in the CAMI results at the end of the third year might be due to the positive effect of the direct anti-stigma modules of

Table 1 - Main results in our sample

<table>
<thead>
<tr>
<th>Year</th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
<th>5th</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>84</td>
<td>97</td>
<td>71</td>
<td>91</td>
<td>55</td>
</tr>
<tr>
<td>Mean Age</td>
<td>19.36</td>
<td>20.62</td>
<td>21.90</td>
<td>22.61</td>
<td>24.46</td>
</tr>
<tr>
<td>Male (%)</td>
<td>33.33</td>
<td>32.98</td>
<td>28.16</td>
<td>32.96</td>
<td>42.01</td>
</tr>
<tr>
<td>Portuguese (%)</td>
<td>91.66</td>
<td>96.90</td>
<td>97.18</td>
<td>97.80</td>
<td>93.33</td>
</tr>
<tr>
<td>Single (%)</td>
<td>92.85</td>
<td>91.75</td>
<td>88.73</td>
<td>96.70</td>
<td>91.11</td>
</tr>
<tr>
<td>Children (%)</td>
<td>2.38</td>
<td>4.13</td>
<td>2.81</td>
<td>2.19</td>
<td>2.22</td>
</tr>
<tr>
<td>Substance use (%)</td>
<td>11.90</td>
<td>10.30</td>
<td>4.22</td>
<td>8.79</td>
<td>17.78</td>
</tr>
<tr>
<td>Previous psychiatric treatment (%)</td>
<td>2.38</td>
<td>4.13</td>
<td>2.81</td>
<td>2.19</td>
<td>4.93</td>
</tr>
<tr>
<td>Psychiatric illness in relatives (%)</td>
<td>40.46</td>
<td>45.36</td>
<td>50.70</td>
<td>52.74</td>
<td>44.44</td>
</tr>
</tbody>
</table>

Chi-Sq 229.4; $p < 0.001$; Kruskal-Wallis

Pears. Chi Sq 6.92; $p = 0.14$; $\chi^2$

Pears. Chi Sq 5.53; $p = 0.23$; $\chi^2$

Pears. Chi Sq 14.27; $p = 0.28$; $\chi^2$

Pears. Chi Sq 15.33; $p = 0.22$; $\chi^2$

Pears. Chi Sq 28.80; $p = 0.42$; $\chi^2$

Pears. Chi Sq 12.68; $p = 0.39$; $\chi^2$

Pears. Chi Sq 4.05; $p = 0.000$; $\chi^2$

Table 2 - CAMI results and comparison of scores from different years

<table>
<thead>
<tr>
<th>CAMI sub-scales</th>
<th>Total</th>
<th>1st Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
<th>4th Year</th>
<th>5th Year</th>
<th>Chi-Sq</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authoritarianism</td>
<td>36.13</td>
<td>35.17</td>
<td>36.08</td>
<td>38.15</td>
<td>36.90</td>
<td>37.20</td>
<td>40.49</td>
<td>0.000</td>
</tr>
<tr>
<td>Benevolence</td>
<td>36.68</td>
<td>36.31</td>
<td>36.40</td>
<td>38.22</td>
<td>36.40</td>
<td>36.70</td>
<td>14.93</td>
<td>0.005</td>
</tr>
<tr>
<td>Restrictiveness</td>
<td>38.01</td>
<td>36.89</td>
<td>37.70</td>
<td>40.26</td>
<td>37.90</td>
<td>38.26</td>
<td>27.93</td>
<td>0.000</td>
</tr>
<tr>
<td>CMHI</td>
<td>37.76</td>
<td>36.41</td>
<td>37.08</td>
<td>39.95</td>
<td>37.76</td>
<td>37.97</td>
<td>25.69</td>
<td>0.000</td>
</tr>
</tbody>
</table>

CAMI: Community Attitudes towards the Mentally Ill scale; CMHI: Community Mental Health Ideology.
the discipline ‘Introduction to Mental Health’. The positive impact of specific anti-stigma education modules was found by other authors. Nevertheless this positive impact wasn’t long lasting and this could be due, as stated, to contamination of negative attitudes towards the psychiatric disorders from teachers to students and negative attitudes held towards psychiatry and psychiatrists by their medical educators, among other factors that are mostly present in late medicine school years.

CONCLUSION

Our results highlight the importance of anti-stigma specific education modules in order to improve medical students’ attitudes towards mental health. This could be important to improve the quality of clinical, technical and relational skills of these medical students in the future.

Further and more detailed studies are recommended to assess the need for academic measures to fight negative attitudes and stigma against psychiatric patients among medical students.

According to our study, the stigma towards psychiatric patients experienced by medical students can change throughout the medical course. Therefore, it could be important to test the impact of the specific anti-stigma modules not only in the beginning but also all over the years of medical education, eventually integrating these modules in other disciplines.

It could also be interesting to investigate the impact of these anti-stigma modules in the way of coping with psychiatric symptoms of students themselves, or in the ones with relatives with a psychiatric diagnosis. Could these modules improve protective coping strategies such as help-seeking or prevent negative coping strategies like treatment discontinuation?

Further studies can, as well, be developed to explore the many other aspects that can influence medical students’ stigma towards psychiatric disorders and/or patients beyond the academic disciplines. One of these aspects can be, as stated, the contamination of negative attitudes from teachers to students, towards the psychiatric disorders.

ACKNOWLEDGMENTS

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

The authors want to acknowledge Teresa Mósca, clinical psychologist at Hospital Júlio de Matos, Centro Hospitalar Psiquiátrico de Lisboa, for all the help regarding the Portuguese version of CAMI.

PROTECTION OF HUMANS AND ANIMALS

The authors declare that the procedures were followed according to the regulations established by the Clinical Research and Ethics Committee and to the Helsinki Declaration of the World Medical Association.

DATA CONFIDENTIALITY

The authors declare having followed the protocols in use at their working center regarding patient’s data publication.

CONFLICTS OF INTEREST

The authors declare that there are no conflicts of interest.

FUNDING SOURCES

No subsidies or grants contributed to this work.
REFERENCES

34. Stuart H. Media portrayal of mental illness and its treatments: what effect does it have on people with mental illness? CNS Drugs. 2006;20:99-106.
37. Pellegrini C. Mental illness stigma in health care settings a barrier to care. CMAJ. 2014;186:E17.
Diogo TELLES-CORREIA, João GAMA MARQUES, João GRAMAÇA, Daniel SAMPAIO

Stigma and Attitudes Towards Psychiatric Patients in Portuguese Medical Students


Publicado pela Acta Médica Portuguesa, a Revista Científica da Ordem dos Médicos

Av. Almirante Gago Coutinho, 151
1749-084 Lisboa, Portugal.
Tel: +351 218 428 215
E-mail: submissao@actamedicaportuguesa.com
www.actamedicaportuguesa.com
ISSN:0870-399X | e-ISSN: 1646-0758