



The teaching of liaison psychiatry

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ABSTRACT

Objective: To document performance and satisfaction of medical students in a short course on liaison psychiatry.

Methods: The emphasis in this optional course is placed on the discussion of clinical cases, bed-side clinical teaching, and a research-oriented part. The "Innovative Teaching Plan" (ITP) is intended to train student-leaders to guide small groups (SG) of students. Trainee performance was assessed by the marks in the final examination, and a reliable and valid tool, the Medical Teaching Quality Questionnaire (MTQQ) was used to document trainee satisfaction. The results of four academic courses are presented in this report.

Results: External experts consulted assured that the content of the course was adequate. It has been completed by more than 200 medical students, and high marks have been obtained by most. Above average scores (AA, "high" or "very high") were given by substantial proportions of students in most items, related to the "relevance" of the subject, the "usefulness of the clinical cases" or the "enhancement of student-teacher interaction". Compared to the first academic course, students' satisfaction has improved. "Enhancement of a researcher's mind" was rated AA by 61.1% of students in the last academic course, and "global satisfaction" by 88.8%.

Conclusions: Good performance and high satisfaction of medical students was documented in a course on liaison psychiatry. Lessons may be drawn to inform about efficient and effective ways of teaching and learning this subject.

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Introduction

"But if we are seriously and in all sincerity to try to assess the debit side of clinical science, then unhesitatingly I would put among its greatest failures its almost complete neglect of psychological factors in disease...." (Lord Platt, 1967)[1]

Liaison psychiatry may be a crucial psychiatric discipline to cover a gap in the standard teaching of psychological medicine aspects of interest for general physicians [2]. With this rationale, the Medical School of Zaragoza approved in the year 2000 the inclusion in the fourth year of the curriculum of a new, "optional" subject called "Psychosomatics and Liaison Psychiatry", based on both, traditional medical humanism and "empirical science" [3,4]. The specific aim of this study is to describe

the teaching method and to document with a reliable and valid instrument the results of both trainee performance and satisfaction. While a number of reports in the international literature have approached the teaching of psychosomatics in medical schools [5–8], most come from German countries, where Psychosomatics is a medical speciality different from Psychiatry [9]. Furthermore, some reports used standardized assessment methods [10] but most previous studies did not.

Methods

The course has a theoretical part, for lecture-oriented sessions; a seminar part, to potentiate active participation and learning in small groups (SG); a practical, bed-side clinical teaching; and a research-oriented part. The contents of the theoretical, lecture-oriented part follows standard material in textbooks, such as the one we recommend [11]. The teaching methodology of the one-semester course is summarized in Table 1. A crucial innovation in the last 2 years was the introduction of the "Innovative Teaching Plan" for students (ITP) (<http://www.unizar.es/innovacion/convocatorias2010/index.php>), intended to educate student-leaders to stimulate between-students interaction and

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Table 1
Teaching methodology in the liaison psychiatry course.

–One semester, 6 credits
–Two hours/week for classes/seminars
–50% lectures/50% clinical cases seminars
–Two weeks “intense” clinical, hospital work
–“ Innovative Teaching Plan” for students (I.T.P.)
–Weekly session with I.T.P. leaders
–“ Small Groups” (SG) (<i>n</i> = 4 students) with I.T.P. leader in seminars
–One research project by SG and I.T.P. leader.

participation. The last academic year a requirement for each SG was to design an original research project, led by the trained ITP. Since the course was intended to keep students quite active and participating in the SG, only the first twenty applicants were admitted in the last academic years.

Trainee performance has been assessed by the marks in the final examination, and the Medical Teaching Quality Questionnaire (MTQQ) [12] was used to document trainee satisfaction. We originally developed the MTQQ to capture the student's perception of salient aspects of teaching practices. It contains five-point Likert-type items related to the subject matter; to the teaching method; and to the actual stimulation of research interest. Performance of teachers is also assessed, and a global satisfaction item tries to capture to what extent the course meets the student's expectations. The questionnaire also invites the student to answer open questions about “the two most positive” and “the two most negative” aspects of the course. Reliability of the MTQQ was considered to be “good to excellent” (Cronbach's alfa coefficient was 0.865; and test–retest kappaW was 0.655 (I.C. 99% .562–.748); and construct validity was also supported [12].

All participating students completed anonymously the MTQQ in the last week of teaching. The questionnaires were then placed in a sealed envelope, under the custody of teachers and students' course representatives, to be open after the official marks were made public by the University officials. The results of the last four academic courses with available assessments are presented in this report.

MTQQ items were treated separately for the statistical analysis. Scores in each item have been combined into three categories, positive results or “above average” (AA: “high” or “very high”), “average” (“middle”) and “below average”. Descriptive, summary statistics are presented as frequencies and percentages for discrete variables, and means and standard deviations for continuous variables.

Results

Three external experts, liaison psychiatrists from different medical schools assured that the content of the course was adequate. The optional course has been well accepted, and more than 200 medical students have completed studies since it was organized. A substantial proportion of applicants could not be admitted the last academic years.

Most students (94%–96%) took the first round of the final examination each year, and all of them passed the examination. High marks have been obtained throughout

this experience (9.1 ± 0.5 points, maximum 10 points). Fig. 1 shows that more than half the students scored above average (AA: “high” or “very high”) the relevance of this subject for medical training or its usefulness for physicians, and the usefulness of the clinical cases was rated particularly high (75.3% AA). Fig. 2 shows that scores related to the quality of the teaching methods were in general favourable, particularly so in rating the “enhancement of students-teacher interaction” and “stirring interest in psychosomatics” (66.7% and 60.5% AA, respectively). The study of bibliographical material was rated less positively (only 24.7% AA). The score on “enhancement of researcher's mind” was reasonably favourable (43.2% AA). However, the last two years the course was rated more positively, when more emphasis was placed on research training and the students were asked to write up a research project: 20.5% students in the academic course 2005–06, but 61.1% of the students in the academic course 2010–2011 rated AA this item. Similarly, a clear improvement has been documented in the last two years in “global satisfaction” (15.8% vs. 88.8%). Among “the two most positive” aspects of the course, the students indicated most frequently the relevance of the subject and the discussion of clinical cases. Similarly, an exceptional, positive view of bed-side teaching, which is not rated in the questionnaire, was also indicated by 17.3% of students.

Discussion

The content of this course on liaison psychiatry for medical students was considered to be adequate by external experts consulted, and the teaching results are positive and encouraging. As most previous medical education research, this study has focused on the assessment of trainee performance and trainee satisfaction [13], frequently used sources of information entering into the academic decision-making process [14]. The performance of trainees in this particular course was quite positive, since most passed the first round of the final examination with high marks. These results compare favourably with other medical subjects in this particular medical school, and for example average marks in Psychiatry in the same academic period were 8.11 ± 1.22 , maximum 10 points). The optional condition of the subject may partially explain the positive results, as well as the fact that most students rated the course as “no-difficult” (97.3%). Student's satisfaction has improved the last academic courses, and ratings of teaching effectiveness revealed positive perceptions in a variety of aspects, such as the relevance of the course for the education of general physicians or the “stirring interest in psychosomatics”. In relation to the quality of the teaching methods, particular importance may be given to the positive ratings in enhancing the student–teacher interaction, since more than two thirds of students rated the item AA. The desirability of this interaction has been supported in different studies [15,16]. This report further documents that the inclusion of clinical cases in the teaching seminars was most favourably valued by the students. In fact, standard philosophy supports the use of teaching with cases [17], which has long been used to advance deeper learning in medical fields [18].

The positive rating in “enhancing a researcher's mind” merits emphasis, since innovation and research is certainly crucial in psychosomatics. It is remarkable that the students were able to produce

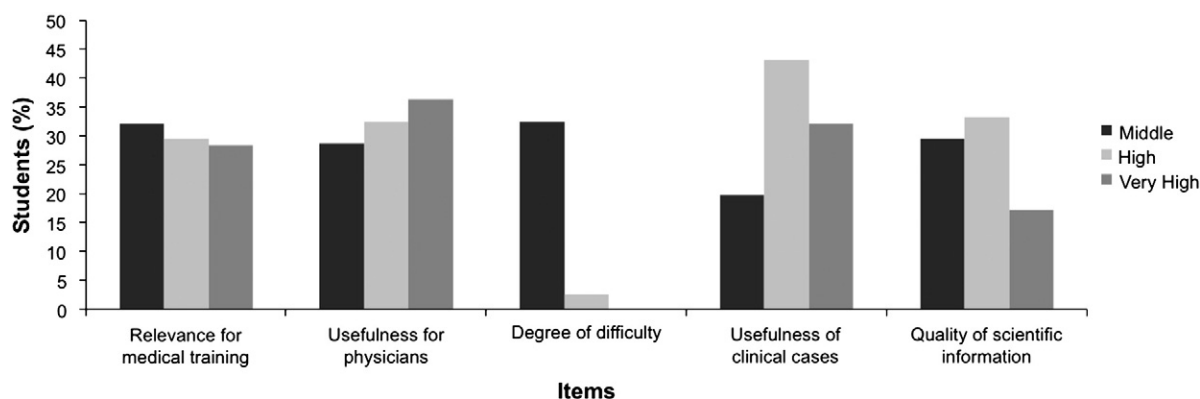


Fig. 1. Assessment by medical students (*n* = 81) of the relevance and quality of contents in a liaison psychiatry course.

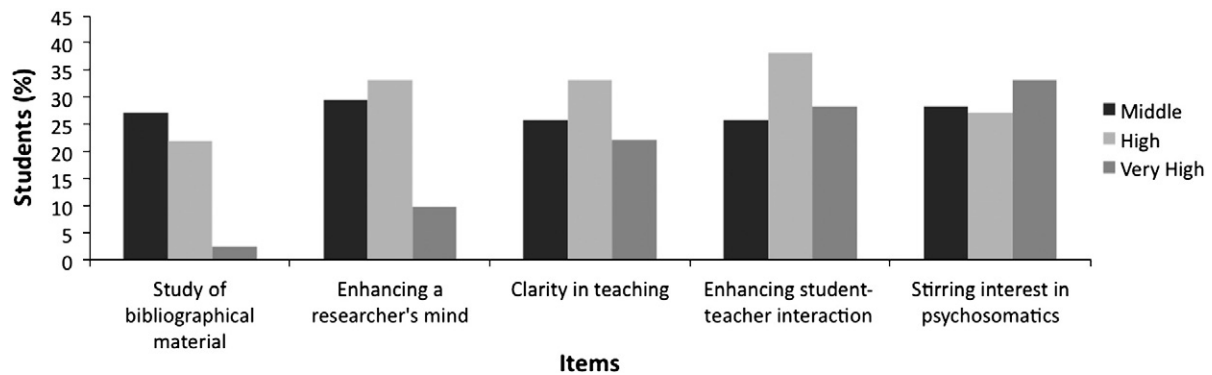


Fig. 2. Assessment by medical students ($n=81$) of the quality of teaching methods in a liaison psychiatry course.

quite decent, original research protocols, with only limited training. The explanation of this relates to the high quality of medical students in countries such as Spain, where the acceptance in medical schools requires very high marks (<http://wzar.unizar.es/servicios/acceso/admisgrado/corte/grados11-12.pdf>). However, we believe it also relates to the clear message sent to trainees about the relevance of research, and the decision to stimulate the initiative and the potential of such bright students. Research activity is not a mandatory component of medical education in Spain, and similarly in other countries, although some previous reports underlie the fact that most students are interested in research and complain of the lack of institutional incentive [19].

Contrary to the positive aspects, most students rated low or very low the items related to “out of classroom” (“no presencial”) work with bibliography material. While this type of study is valued by the teachers, particularly aiming at continuous, post-graduate education, it seems obvious that changes in this methodology have to be introduced should the objective be to make it more attractive for the students.

Among the strengths of the study we include the use of a reliable and valid assessment instrument and the longitudinal design. We value the innovative method introduced by training I.T.P. students as leaders in the SGs, and also in the development of the original research designs. Students' responses to the open questions in the MTQQ support this interpretation. Limitations in the study should also be addressed. First, the number of students participating in each academic course was limited, and the students were self-selected. Therefore, we cannot claim that the positive results of this course might be generalized to all students in the medical school. Second, it has been shown that medical students may be only moderately consistent in the extent to which they evaluate teachers, and the inconsistency may vary by course and by teachers within the courses [14]. However, this potential bias is minimized in this study, because different academic courses were assessed and results were similar.

In conclusion, in view of the positive results of this course, this study may draw lessons to inform medical teachers about efficient and effective ways of teaching and learning liaison psychiatry.

References

- [1] Platt L. Medical science: master or servant? *Br Med J* Nov. 25 1967;4:439–44.
- [2] Lobo A, Lozano M, Diefenbacher A. Psychosomatic psychiatry: a European view. *Eur J Psychiatry* 2007;21:153–68.
- [3] Lobo A. Philosophical humanism and empirical science: Spanish perspectives on Psychosomatics. In: Temoshock L, Fox BH, editors. *Special International Issue, Advances, Institute for the Advancement of Health*, 3; 1986. p. 58–76.
- [4] Oldner EM, Bilsker D. Evidence-based psychiatry. *Can J Psychiatry* Mar. 1995;40: 97–101.
- [5] Schüppel R, Gatter J, Hrabal V. Teaching psychosomatic medicine: predictors of students' attitudes toward a compulsory course. *J Psychosom Res* May 1997;42: 481–4.
- [6] Waldstein SR, Neumann SA, Drossman DA, Novack DH. Teaching psychosomatic (biopsychosocial) medicine in United States medical schools: survey findings. *Psychosom Med* May-Jun. 2001;63:335–43.
- [7] Halperin PJ. Psychiatry in Medicine: five years of experience with an innovative required fourth-year medical school course. *Acad Psychiatry* Mar-Apr. 2006;30: 120–5.
- [8] Novack DH, Cameron O, Epel E, Ader R, Waldstein SR, Levenstein S. Psychosomatic medicine: the scientific foundation of the biopsychosocial model. *Acad Psychiatry* Sep.-Oct. 2007;31:388–401.
- [9] Herzog T, Creed F, Huyse FJ, Malt UF, Lobo A, Stein B. Psychosomatic medicine in the general hospital. In: Katona C, Montgomery S, Sensky T, editors. *Psychiatry in Europe: Directions and Developments*. London: Gaskell; 1994. (S. 143–151).
- [10] West CP, McDonald FS. Evaluation of a longitudinal medical school evidence-based medicine curriculum: a pilot study. *J Gen Intern Med* Jul. 2008;23:1057–9.
- [11] Levenson JL. *Textbook of Psychosomatic Medicine*. 2nd ed. Washington D.C.: The American Psychiatric Publishing; 2011.
- [12] Saz P, Campayo A, Lobo E, Aguilar E, De-La-Fuente S, Lobo A. Psychometric properties of a teaching evaluation questionnaire for an Academic Psychiatric Area. *Educ Méd* Jun. 2007;10:121–6.
- [13] Prystowsky JB, Bordage G. An outcomes research perspective on medical education: the predominance of trainee assessment and satisfaction. *Med Educ* 2001;35:331–6.
- [14] West RF. The short-term stability of student ratings of instruction in medical school. *Med Educ* Mar. 1988;22:104–12.
- [15] Young L, Orlandi A, Galichet B, Heussler H. Effective teaching and learning on the wards: easier said than done. *Med Educ* Aug. 2009;43:808–17.
- [16] Jaarsma AD, Dolmans DD, Muijtjens AM, Boerboom TT, van Beukelen P, Scherpbier AJ. Students' and teachers' perceived and actual verbal interactions in seminar groups. *Med Educ* Apr. 2009;43:368–76.
- [17] Boehrer J, Linsky M. Teaching with Cases: Learning to Question. In: Svinicki MD, editor. *The Changing Face of College Teaching. New Directions for Teaching and Learning*, 42. San Francisco: Jossey-Bass; 1990.
- [18] Zimmerman SD, Lester Short GF, Hendrix EM. Impact of interdisciplinary learning on critical thinking using case study method in allied health care graduate students. *J Allied Health* Spring 2011;40:15–8.
- [19] De Oliveira NA, Luz MR, Saraiva RM, Alves LA. Student views of research training programmes in medical schools. *Med Educ* Jul. 2011;45:748–55.