Educational needs for palliative care of Italian undergraduate students

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Abstract

Background. Since most of the clinical training is carried out within the academic departments, the future physicians may not feel prepared to deal with clinical situations typical of primary care.

Aim of the study was to evaluate how students of the last year of course of the School of Medicine assess their level of professional autonomy with respect to different clinical situations of primary care.

Methods. Anonymous questionnaire about ten primary care clinical cases. The students were required to self-assess the degree of preparation for an autonomous treatment for each clinical case on a scale of four levels.

Results. In 124 questionnaires the percentage of students who claim to be able to manage the various clinical situations in full autonomy or with a limited specialist integration varies from 54% and 90% with the exception of the scenario "palliative care" (14%).

Conclusions. Students, who are at the end of their course of study feel poorly adequate to deal with the settings of palliative care, a problem that has not been considered sufficiently during their training experience. Direct experience in various setting represents an essential component for an all-round training.

Keywords: ; palliative care; general practice; undergraduate students; educational needs

Background

Medicine students who are to conclude their study course are aimed at beginning a professional career. However
future doctors may not feel specifically prepared to independently face the clinical cases that are different from those observed in the academic environment.

The aim of this study was to evaluate, through a structured questionnaire, how students assess their level of operational autonomy at the end of the curriculum of the School of Medicine with respect to the different clinical situations of primary care.

**Methods**

Traineeship in Family Medicine at the University of Bologna is open to students attending the last (sixth) year. It is concluded by a final meeting between students (10-15 students per session) and general practitioners (course supervisors). At the beginning of each meeting, during eight consecutive meetings, students were asked to fill out anonymously a structured questionnaire about ten typically primary care clinical cases. The student was required to self-assess the degree of preparation for an autonomous treatment for each case, on a scale of four levels: 1) full autonomy; 2) need for partial delegation to a specialist; 3) need for a relevant delegation to a specialist; 4) total delegation to the specialist. The order of presentation of the clinical cases in each questionnaire was randomly assigned to minimize reciprocal influences during its compilation. The resulting data were presented as percentages and analysed with the Bonferroni Chi-square test. The value of 0.01 was chosen for the determination of significance.

**Results**

A total of 124 questionnaires were collected, all entirely filled out by 49 male students (40%) and 75 females (60%), with an average age of 25 years, with no difference in age between genders. Table 1 shows the different answers to each clinical case.

**Table 1.**

Self-assessment of professional preparation as the main clinical manager of different primary cases in 124 students at the end of the course of Medicine.

<table>
<thead>
<tr>
<th>Clinical cases</th>
<th>Full autonomy (%)</th>
<th>Partial delegation to the Specialist (%)</th>
<th>Relevant delegation to the Specialist (%)</th>
<th>Total delegation to the Specialist (%)</th>
<th>Full autonomy or partial delegation to the Specialist (%)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Acute bronchitis</td>
<td>56</td>
<td>34</td>
<td>10</td>
<td>1</td>
<td>90</td>
<td>-</td>
</tr>
<tr>
<td>2 Hyperglycemia</td>
<td>50</td>
<td>38</td>
<td>10</td>
<td>2</td>
<td>88</td>
<td>-</td>
</tr>
<tr>
<td>3 Epigastric pain</td>
<td>61</td>
<td>26</td>
<td>10</td>
<td>3</td>
<td>87</td>
<td>-</td>
</tr>
<tr>
<td>4 Lumbosciatica</td>
<td>40</td>
<td>43</td>
<td>17</td>
<td>1</td>
<td>83</td>
<td>-</td>
</tr>
</tbody>
</table>

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The percentage referring to the "palpitations" case (76%) was lower (P < 0.01) compared to "acute bronchitis" (90%), "hyperglycemia" (88%), and "epigastric pain" (87%). The percentage of the case "anxiety" (61%), was lower also compared to "lumbosciatica" (83%), "subclinical hypothyroidism" (82%) and "headaches" (79%). The percentage of the case "dermatitis" was lower (54%) also compared to "palpitations", while the clinical case of "palliative care" (14%) was significantly lower than all other nine tested scenarios.

### Discussion

The results of this study show that the majority of students at the final stage of the Course in Medicine feel to be ready to face different situations that are common in primary care, with the exception of the palliative care case. This difference is not influenced by gender and age of the participants. It is not possible to know the potential influence of a professional vocation as the questionnaire did not contain specific questions to avoid reducing the anonymity of the answers in small groups. However the low number of students who are ready for an autonomous approach or with a limited specialist delegation to the palliative care scenario allows supposing that this difficulty is actually common among the participants.

It was previously pointed out that new graduates do not feel prepared to deal with some aspects of the clinical decision-making process (Mc Gregor et al. 2012). Poor preparation in palliative care has been proven in studies conducted in different countries and it is common to different educational systems (Bowden et al.2013, Prazak et al. 2015, Crawford et al. 2015, Evigor 2013). The results of our study may not be surprising because a specific training in palliative care is not part of the mandatory scholastic curriculum, therefore a lack of experience in this medical situation may justify the data of the questionnaire. It has been demonstrated that experience in palliative care improves students' knowledge and attitudes towards this discipline (Van Gunten et al. 2012, Mutto et al. 2014).

The palliative care scenario represents the only case in our questionnaire with a home setting and our results suggest that a direct experience of the various settings should be an essential component for an all-round education (Klemenc-Ketis et al.2014). Since the aim is to graduate general physicians, many experiences have highlighted the importance of implementing such training in the primary health care centers so that programs that provide such experiences have shown good results (Chastonay et al. 2012).
This single center study features some limitations such as limited number of participants, the simplicity and amount of proposed scenarios, the reduced number of features collected concerning the participants.

In conclusion, our results study show that students, who are at the end of their course of studies and about to undertake an independent professional activity, feel poorly adequate to deal with the settings of palliative care, a problem that has not been considered sufficiently during their training experience. Direct experience in various setting represents an essential component for an all-round training.

Take Home Messages

Notes On Contributors

Cesare Tosetti, Donato Zocchi, Antonio Balduzzi, Giuliano Ermini, Carla Marzo, Stefano Rubini, Pietro Speziali, are MD, General Practitioners at the Health Care Agency of Bologna and Contract Professors at the University of Bologna, Italy. Luigi Bagnoli, Marcello Salera are MD, General Practitioners at the Health Care Agency of Bologna and past Contract Professors at the University of Bologna

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Appendices

Declarations

The author has declared that there are no conflicts of interest.

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