Survey of Italian General Practitioners: Knowledge, Opinions, and Activities of Palliative Care

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Abstract

Context. General practitioners (GPs) play a key role in the end-of-life care of patients; however, currently in Italy, there are no national population-based studies available of the knowledge and activities of GPs in palliative care.

Objectives. This survey aimed to investigate the knowledge, opinions, and activities of Italian GPs regarding palliative care.

Methods. A telephone survey of 1690 GPs was performed. Information was gathered through an ad hoc questionnaire.

Results. Valid interviews were obtained for 88% of the sampled GPs (n = 1489). Regarding knowledge, 25% of GPs recognized a correct definition of palliative care, 41% the objectives of palliative care, 66% that palliative care should be provided by a multiprofessional team including GPs, and 60% that in-home care for patients at the end of life requires an individual plan care. Furthermore, 92% of them reported that “there is no maximum daily morphine dose for the management of pain.” Regarding opinions, most of the GPs strongly agreed that for patients at the end of life, the GPs’ duties included availability during working hours to break bad news to patients and families and to collaborate with the multiprofessional team in establishing an individual care plan. Finally, regarding activities, most GPs reported that, in their daily practice with patients at the end of life, they discontinue the drugs that are not beneficial to symptom management and seek advice from palliative care physicians when symptom management is ineffective.

Conclusion. This survey reveals the uncertainty of GPs regarding many theoretical issues but a strong willingness to integrate with the multiprofessional palliative care team. To further enhance the skills of GPs and facilitate the collaboration with palliative care services, it might be useful to realize ad hoc training schemes tailored to the different organizational procedures of in-home palliative care services.

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Accepted for publication: August 13, 2012.

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0885-3924/$ - see front matter
http://dx.doi.org/10.1016/j.jpainsymman.2012.08.020
**Introduction**

General practitioners (GPs) are the primary contact with the health care system and may ensure the continuity and coordination of care in the community; furthermore, because of the longevity of care provided, their familiarity with the patient and family is extensive.1,2 For these reasons, GPs play a key role in the end-of-life care of patients.1–8 The findings of a systematic review published in 2002, supported by other recent studies, showed that GP involvement in palliative care teams improves the diagnostic accuracy, application of evidence-based treatments, and identification of problems in the delivery of care and enables terminally ill patients to choose their place of death.1,2,9,10

Between 5% and 35% of GPs in the U.K. and 25% of urban Australian GPs are not involved in palliative care.10,11 Several potential barriers have been identified; these include lack of time and remuneration, lack of training and experience in palliative medicine, inadequate communication between health care professionals, unwillingness to provide home visits and out-of-hours care, and unclear rules and procedures in community service organizations.2,5,10 The main determinants of the non-involvement of GPs are part-time employment, working in an urban setting, young age, and short-term GP experience.7,10

In recent years, a number of studies regarding knowledge, activities, attitudes, opinions, and duties of GPs and palliative care have been carried out in the U.S., Australia, The Netherlands, the U.K., Romania, and Hungary.3,5,7,10–14 The variability of findings may lie partially in the difference of primary care models and on the heterogeneity of development, scope, and organizational dimensions of palliative care services among the countries.1,15 As previously shown by the systematic review of Mitchell1 in 2002, at least one common issue emerges from these studies: the inadequate training of GPs in palliative care, with shortcomings principally in communication, bereavement care, symptom control, technical skills, and ethical issues.1,4,6,7,10,12,14,16

Currently, in Italy, there are no national population-based studies available of the knowledge and activities of GPs in palliative care. We report on a telephone survey aimed at assessing the knowledge, opinions, and activities of Italian GPs in palliative care. This article describes the results from specific parts of the interview investigating the:

- GPs’ knowledge of palliative care (definition, objectives, organizational issues, clinical issues, and use of opioids),
- GPs’ opinions of their duties for in-home care for end-of-life patients and on the role of the palliative care physician, and
- GPs’ self-reported daily practices during in-home care for patients at the end of life.

**Methods**

This was a telephone survey designed and implemented by the Italian Society of Palliative Care (SICP) and the Italian Society of General Practice (SIMG) in collaboration with SGR International—Market Research & Consultancy Group, Rome, Italy. SGR International is an independent institute specializing in market, sociologic, and social research, which uses professional interviewers trained according to World Association for Social, Opinion, and Market Research regulations.

A random sample of Italian GPs was surveyed between September and November 2008. In 2008, there were 44,279 GPs distributed throughout the 20 Italian regions. A two-stage stratified random sampling was used to identify a sample of Italian GPs. In the first stage, 10 of 20 Italian regions were selected (convenience sample) after stratification by three geographical areas (four regions in the north, three in central Italy, and three in the south and the islands). A convenience sample of 10 regions was used because in these regions, the in-home palliative care teams were available. The GPs working in these areas could provide information on activities carried out within the in-home palliative care programs and opinions about collaboration with the palliative care physicians.
In the second stage, a random sample of GPs was identified through the SGR International database of 24,400 GPs working in the 10 Italian regions. We used the SGR International database because at the time the survey was designed, no other comprehensive database of GPs at a national level was available. The SGR International database accounted for 75% of Italian GPs and contained personal details, addresses, and telephone numbers necessary to carry out the survey.

The Questionnaire
The process of questionnaire building was performed by a working group comprising multiprofessional members of the SICP and members of the SIMG expert in palliative care. The questionnaire was built to reflect everyday GP practice, and any formal definition was avoided.

The questionnaire covered three areas and included six questions on knowledge, seven questions on opinions, and three questions on the activities of Italian GPs regarding palliative care. All questions were multiple choice (more than one answer could be chosen when relevant) and, in some cases, measured using a 10-point Likert scale. The questionnaire also included questions about the personal and professional characteristics of the GPs included in the survey (gender, age, geographic area, years of experience, and number of end-of-life patients per year).

Statistical Analyses
Data management and statistical analyses were performed using SPSS Version 18.0 for Windows (SPSS Inc., Chicago, IL). Demographics, professional characteristics, and GPs’ answers to the questionnaire were analyzed using descriptive analytical methods.

Results
Study Sample
Fig. 1 is a flowchart of the Italian GPs included the survey. The 10 Italian regions selected for the survey following stratification by three were Emilia-Romagna, Lombardia, Piemonte, and Veneto (North); Lazio, Toscana, and Abruzzo (Central); and Calabria, Puglia, and Sicilia (South and Islands). A random sample of 1690 GPs was selected for the interview from the SGR International database. Of these, 172 (10.2%) refused to be interviewed. Of the remaining 1518 GPs, 29 (1.7%) reported treating no terminal patients during the last year. The survey was performed with the remaining 1489 GPs (88.1%).

Characteristics of the Italian GP Sample
The characteristics of the study sample are shown in Table 1. Approximately 80% of the GPs interviewed were male, and almost two-thirds were aged between 51 and 60 years. More than two-thirds of them had between 16 and 30 years of experience; the number of GPs in this category was greater in northern Italy where they followed an average of three to 10 patients with palliative care needs per year. Central Italy is characterized by a double percentage (8.3%) of GPs who follow more than 11 patients with palliative care needs per year compared with the north and south of Italy. No differences by gender and age were observed.

Italian GP Knowledge About Palliative Care
Table 2 shows the responses of Italian GPs regarding their knowledge about palliative care. Concerning the definition of palliative care, it should be taken into account that, of the five possible options, only Option 5 is completely wrong; this response was chosen by 2.4% of the Italian GP sample. Of the remaining four choices, Option 1 gives the most appropriate and comprehensive definition; 25.5% of Italian GPs chose Option 1. The other three descriptions (Options 2–4) only partially define the scope of palliative care; 33.2%, 30.0%, and 8.9% chose Options 2, 3, and 4, respectively.

Regarding the objectives of palliative care, two of the five possible options (4 and 5) were incorrect and were chosen by 1.1% of GPs. The most appropriate option, Number 1 (“ensures the best quality of life for patients”), was chosen by 40.6% of the GPs interviewed. Almost half of the GPs correlated palliative care with pain relief and 8.9% with symptom management.

Two incorrect options were given regarding health care strategies for the provision of palliative care: Number 5 (“palliative care should be provided by specialized nursing staff”),
which was chosen by 1.1% of the GPs, and Number 2 (“palliative care should only be provided by GPs”), which was chosen in more than 20% of the responses. More than two-thirds of the GPs interviewed gave the most appropriate answer (“palliative care should be provided by an expert multiprofessional palliative care team, which includes the patient’s GP”). Options 3 (“multiprofessional hospital team led by a pain therapist”) and 4 (“specialized nursing staff in collaboration with an anesthetist”) were indicated in more than 7% and 3% of the responses, respectively.

Concerning the requirements of palliative care pathways, 59.5% of the GPs interviewed answered that palliative care pathways require an individual care plan. More than 20% believed that, in their experience, care pathways give continuity of care after the patient’s discharge from hospital. More than 10% of GPs chose the option “diagnosis and therapy based on experience;” 6% opted for “diagnosis and therapy based on scientific evidence;” just more than 1% chose “high-performance technology;” and 0.4% opted for “standard therapy based on international guidelines.”
In answer to the question "How many steps constitute the World Health Organization (WHO) analgesic ladder?," only a minority of Italian GPs answered correctly (10.1%). However, most GPs who were interviewed (92.3%) replied that "for the management of pain, there is no established maximum daily morphine dose when side effects are absent or tolerable." Less than 8% indicated the other three possible options.

Overall, the 1.1% of Italian GPs gave the wrong answers to all six questions on knowledge of palliative care, 8.9% gave one correct answer of six, 24.8% gave two correct answers, 35.7% gave three correct answers, 20.7% gave four correct answers, and 7.9% gave five correct answers. Only a negligible proportion of Italian GPs (1%) gave the correct answer to all six questions related to their knowledge of palliative care.

Italian GPs’ Opinions of What They Consider to Be Their Duties as Related to In-Home Care

Table 3 shows the duties that the Italian GPs interviewed considered their responsibility. All the nine activities proposed in the interview were indicated, with a high level of agreement from more than 50% of the interviewees. Seven of the nine activities proposed are specific to GPs and two are to be carried out in collaboration with the multiprofessional team or other health professionals. The most prevalent option, indicated by more than 95% of GPs, was availability during working hours (8 AM to 8 PM on workdays). The least selected, indicated by just more than 50% of GPs, was setting up and checking the syringe driver. The two duties to be performed in collaboration with the multiprofessional team or with other health professionals were indicated in a high percentage of responses (83.7% and 77.8%, respectively). Only 20.9% of Italian GPs considered the nine proposed activities as mandatory. The GPs also were asked "Do you believe that these activities must be paid separately from the national contract?" 73.6% of them gave a positive answer.

Italian GPs’ Opinions of Activities for Which They Consider the Presence of a Palliative Care Physician Beneficial

Table 4 shows the responses of the GPs concerning the activities for which they consider the presence of a palliative care physician beneficial to the in-home care team. The palliative care physician’s presence was deemed mostly beneficial when providing advice when requested (63.3%) and for care team coordination (39.0%). Just more than one-quarter of the GPs interviewed believed that a palliative care physician could be beneficial for hands-on skills training and to share the clinical responsibilities for patients. Less than 7% of GP respondents did not consider the presence of a palliative care physician on the in-home care team to be beneficial.
Activities of Italian GPs Regarding Patients at the End of Life and in the Final Days of Life in the In-Home Care Programs

Table 5 shows the responses of Italian GPs concerning activities carried out for patients at the end of life. As daily practice, in the case of patients in the terminal stage of illness, “constant availability on weekdays” is the activity most frequently indicated by the GPs interviewed (93.7%). The least indicated was “availability during the night” (16.7%).

Table 6 shows the responses of Italian GPs concerning the ranking of activities appropriate for patients in the final days of terminal illness. “The withdrawal of drugs that are not beneficial to symptom management” was indicated most frequently as a fundamental action (89.3%). “The patient’s admission to hospital” was indicated least in the study (25.0%).

Discussion

This is the first national survey carried out in Italy to investigate the knowledge, opinions, and activities of a representative sample of GPs involved in in-home palliative care. Our findings show some uncertainty on the part of Italian GPs regarding the definition and goals of palliative care; a greater knowledge concerning the organizational aspects and pathways of palliative care provision; and excellent knowledge about the nonexistence of a maximum dose of morphine that can be administered in a day, but a poor understanding of the WHO analgesic ladder. Furthermore, most Italian GPs are aware of their duties and activities in an in-home palliative care program: all nine options presented in the questionnaire achieved more than a 50% level of
agreement from the GPs surveyed. Moreover, nearly 94% of the Italian GPs interviewed recognized the benefit of having a palliative care physician involved in the in-home care, even if in different ways and intensities. Concerning self-reported daily practice with terminally ill patients, the GPs interviewed are usually available from 8 AM to 8 PM on working days and prescribe opioids for pain relief. Finally, the GPs interviewed believe that, in the last days of a patient's life, the most important GP activities are related to the withdrawal of inappropriate interventions and the involvement of a palliative care physician.

These results are partially consistent with previous studies carried out in other countries on this topic,\textsuperscript{1,3,5,7,10–14} but there are some aspects strictly related to the spontaneous and unregulated development of palliative care services and programs in Italy. During recent decades, the inconsistency of health policies instituted by the Italian National Health Service has led to an uneven distribution of palliative care programs and networks throughout the Italian regions and to the heterogeneity of organizational models of palliative care services. Public or private services and nonprofit organizations developed different organizational models of in-home palliative care teams. The differences are mainly in the composition and working hours of palliative care teams, relationship and collaboration with the GPs, and availability of training or case-based education in palliative care for GPs.

Furthermore, GPs’ remuneration and work conditions are regulated by a national contract but complemented by regional agreements,\textsuperscript{17} which lead to different mandatory tasks and varying remuneration for GPs working in the 20 Italian regions. This situation, caused by unclear rules and procedures for in-home palliative care referrals and the inconsistency of

### Table 3

<table>
<thead>
<tr>
<th>Questions</th>
<th>GPs (N= 1489)</th>
</tr>
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<tbody>
<tr>
<td>Which of the following activities do you consider part of the GPs’ duties in an in-home palliative care program?</td>
<td></td>
</tr>
<tr>
<td>To be available during working hours (8 AM–8 PM on weekdays)</td>
<td>95.2</td>
</tr>
<tr>
<td>To break bad news to the patient and his/her family</td>
<td>91.6</td>
</tr>
<tr>
<td>To make decisions about appropriate care to avoid under- or overtreatment</td>
<td>89.9</td>
</tr>
<tr>
<td>To collaborate with the multiprofessional care team</td>
<td>83.7</td>
</tr>
<tr>
<td>To identify the patients requiring specific palliative care pathways</td>
<td>82.9</td>
</tr>
<tr>
<td>To develop, in conjunction with other health care professionals, the patient’s individual care plan</td>
<td>77.8</td>
</tr>
<tr>
<td>To prescribe pain relief therapy (not including strong opioids)</td>
<td>62.9</td>
</tr>
<tr>
<td>To prescribe pain relief therapy (including strong opioids)</td>
<td>57.9</td>
</tr>
<tr>
<td>To set up and check continuous intravenous drug administration systems (e.g., a syringe driver for the subcutaneous administration of morphine)</td>
<td>53.2</td>
</tr>
</tbody>
</table>

GP = general practitioner.
\textsuperscript{a}GPs who allocated a score from seven to 10 on a scale from one to 10, with one being “strongly disagree” and 10 “strongly agree.”

### Table 4

<table>
<thead>
<tr>
<th>Questions</th>
<th>GPs (N= 1489), % Yes\textsuperscript{a,b}</th>
</tr>
</thead>
<tbody>
<tr>
<td>For which of the following activities do you think the presence of a palliative care physician is beneficial to an in-home care team?</td>
<td></td>
</tr>
<tr>
<td>For providing specialized advice to GPs on request</td>
<td>63.3</td>
</tr>
<tr>
<td>For team coordination</td>
<td>39.0</td>
</tr>
<tr>
<td>In skills training for GPs and nurses through a constant dialogue and collaboration when addressing the needs of each patient</td>
<td>24.2</td>
</tr>
<tr>
<td>To share clinical responsibility for patients (e.g., with a delegation or a shift of care)</td>
<td>21.7</td>
</tr>
</tbody>
</table>

GP = general practitioner.
\textsuperscript{a}A total of 6.6% of Italian GPs do not believe that the presence of the palliative care physician is beneficial.
\textsuperscript{b}The total sum is greater than 100 because a number of GPs gave more than one answer.
work and pay conditions, may have produced several obstacles to the integration and collaboration between Italian GPs and in-home palliative care teams.

In this survey, we did not collect any information about the activities of palliative care services and their relationship with the GPs. As a consequence, we could not analyze the relationship between palliative care activities and GPs’ knowledge, opinions, and activities. More specific studies are required to investigate this point.

Law 38/2010, recently approved in Italy, stipulates the institution of a National Palliative Care Network and, for each Italian region, the development of Regional Networks to ensure continuity of care for patients in all care settings. This innovative Italian legislation, ensuring the right to well-being and respect for the dignity and autonomy of each person, guarantees equal access and quality of palliative care services for all patients. In particular, Article 1 of the law specifies that GPs must coordinate basic in-home palliative care provision and that, to guarantee the continuity of care, they must be part of the in-home palliative care team.¹⁸

Simultaneously, the SICP and SIMG approved a consensus document that, by defining the organization of in-home palliative care services, the formation of the in-home palliative care team, palliative care pathways, and access and referral procedures, ensures the continuity of care for patients and their families.¹⁹

These two important initiatives may simplify, both at a national and regional level, the role of Italian GPs in the provision of in-home palliative care and improve the integration and collaboration between the GPs and specialized in-home palliative care teams.

As mentioned in the Introduction section, the scientific literature shows an inadequate training of GPs in palliative care, predominantly in communication, bereavement care, symptom management, technical skills, and

### Table 5

**Activities of Italian GPs During In-Home Care for Patients at the End of Life**

<table>
<thead>
<tr>
<th>Questions</th>
<th>GPs (N=1489), % Yes²</th>
</tr>
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<tbody>
<tr>
<td>When treating patients in the terminal phase of illness usually in daily practice:</td>
<td></td>
</tr>
<tr>
<td>I am available from 8 AM to 8 PM on working days</td>
<td>93.7</td>
</tr>
<tr>
<td>I personally and routinely prescribe opioids</td>
<td>77.2</td>
</tr>
<tr>
<td>I personally treat symptoms of shortness of breath according to protocol</td>
<td>70.7</td>
</tr>
<tr>
<td>I am available on nonwork days</td>
<td>43.1</td>
</tr>
<tr>
<td>I do my utmost to understand if the patient wants to know the truth about his/her prognosis</td>
<td>41.8</td>
</tr>
<tr>
<td>I do my utmost to understand the patient’s wishes about the place of death</td>
<td>27.7</td>
</tr>
<tr>
<td>I visit the family during the days following the patient’s death</td>
<td>21.3</td>
</tr>
<tr>
<td>I am available during the night</td>
<td>16.7</td>
</tr>
</tbody>
</table>

GP = general practitioner.
²The total sum is greater than 100 because a number of GPs gave more than one answer.

### Table 6

**Principal Activities of Italian GPs During In-Home Care for Patients in the Last Days of Life**

<table>
<thead>
<tr>
<th>Questions</th>
<th>GPs (N=1489), Very Important³ (%)</th>
</tr>
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<tbody>
<tr>
<td>On a scale from one to 10, with one being “redundant” and 10 “fundamental,” which of the following actions do you think are most appropriate for patients in the final days of a terminal illness?</td>
<td></td>
</tr>
<tr>
<td>The withdrawal of drugs that are not beneficial to symptom management</td>
<td>89.3</td>
</tr>
<tr>
<td>The withholding of antibiotic treatment in cases of suspected pneumonia</td>
<td>84.6</td>
</tr>
<tr>
<td>The request for advice from a palliative care physician when the patient is in distress and symptom management is inefficient</td>
<td>76.8</td>
</tr>
<tr>
<td>The continuation of analgesic therapies (i.e., morphine), even if the patient is unconscious</td>
<td>73.4</td>
</tr>
<tr>
<td>The management of pain by increasing opioid doses</td>
<td>69.8</td>
</tr>
<tr>
<td>To proceed to palliative sedation when the patient is in distress and symptom management is ineffective</td>
<td>48.7</td>
</tr>
<tr>
<td>To visit the patient’s home daily or several times a day</td>
<td>47.0</td>
</tr>
<tr>
<td>The patient’s admission to hospital</td>
<td>25.0</td>
</tr>
</tbody>
</table>

GP = general practitioner.
³GPs who gave a score from seven to 10 on a scale from one to 10, with one being “redundant” and 10 “fundamental.”
A number of the outcomes of our survey may be a result of poor or ineffective training in palliative care for Italian GPs. The effectiveness of diverse training schemes for GPs has been examined, and it seems that for palliative care, the traditional training methods may not be effective in delivering positive changes in clinical practice. Case-based education seems to be most successful; in particular, the direct involvement of GPs in the care of patients within specialist teams may lead to “learning by experience” and help to develop or consolidate the GPs’ skills in palliative care.1

In recent decades, the U.K., U.S., and Australia have carried out, at a regional or national level, a number of initiatives aimed at involving GPs in multidisciplinary care teams and thus increasing their knowledge and skills in palliative care. All these initiatives, strictly related to the different organizational models and policies of the national health care systems, are intended to “bridge the gap” between primary and secondary health care services for dying patients.16,20,21 Likewise, Italy could most certainly benefit from similar initiatives that could lead to the development of care models, in which palliative care delivery is shared between GPs and specialized multi-professional palliative care teams and, consequently, to an improvement in the quality of care provision.

There are a number of limitations to this study. First, our questionnaire shows some weakness according to the theories on multiple-choice tools. The working group tried to generate answers close to the everyday GP practice. Any formal statement, such as the WHO palliative care definition, was avoided. This limitation might have slightly influenced the results. Second, information on the sociodemographic characteristics of the Italian GPs was not available, and, therefore, we could not compare our GP sample with the general Italian GP population. Third, sociodemographic information of nonrespondent GPs (i.e., GPs without terminal patients in the 12-month period and GPs who refused to be interviewed) was not collected; therefore, depending on the extent to which they might have differed from the study population, the possibility of nonrespondent bias remains. Fourth, there is no section on formal education, additional training, and training needs in palliative care in the questionnaire used for this survey. Finally, this survey did not investigate the quality of the activities performed by the GPs for patients at the end of life. Specific studies are needed for investigating this important point.

**Conclusion**

This study revealed some uncertainty on the part of Italian GPs regarding theoretical issues, such as the definition and goals of palliative care, but a strong inclination toward integration with the multidisciplinary palliative care team. To further enhance the skills of Italian GPs and facilitate the integration with in-home palliative care teams, the development and implementation of ad hoc training schemes, tailored to the organizational models of palliative care delivery, is essential. This would contribute to bridging the gaps caused by the diverse working conditions throughout the Italian regions by opening areas of collaboration among health professionals to promote continuity of care and more appropriately address the needs of these patients and their families.

**Disclosures and Acknowledgments**

This work was funded through a grant from Wyeth and Company/Pfizer. The authors declare that they have no competing interests. This project was realized in collaboration with SGR International—Market Research & Consultancy Group, Rome, Italy. The authors also thank Silvia Marenco (Hospice Maria Chiglione, IRCCS AOU San Martino—National Cancer Research Institute, Genoa, Italy) and Suzanne Bennett (Fondazione Maruzza Lefebvre D’Ovidio Onlus, Rome, Italy) for English revision of the manuscript.

**References**


