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Clinical activities of out-of-hospital Italian public geriatrics: a survey of members of the Italian Society of Geriatrics Hospital and Territory

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Abstract

The out-of-hospital public geriatrician is a key professional figure to address the challenges of the complexity of old patients and to act as a bridge between general and local medical services and increasingly crowded hospitals. This is a distinctive geriatrician in Italy who works mostly in the territory and intermediate care, capable of mediating the transition of the setting and following the patient in their home care. To have an overview of the current state of activities outside the hospital, distributed across the national territory, we conducted an online survey addressed to all Italian Society of Geriatrics Hospital and Territory (SIGOT) out-of-hospital members by email and disseminated it using SIGOT social channels. The questionnaire, available from June to September 2024, specifically addressed general characteristics/demographics of the members and the peculiarities of the activities inherent to home visits, multidimensional assessment, telemedicine, contact and collaboration with the general practitioner, and personal opinions (free field). A total of 67 out-of-hospital geriatricians responded to the survey. The results emphasize the specificity of the out-of-hospital geriatrician's role and underline the collaboration between geriatricians and general practitioners, the importance of the Comprehensive Geriatric Assessment, and the relevance of domiciliary care. At the same time, this survey points out some critical issues, such as the lack of development of telemedicine in clinical practice and a long waiting time for a programmable (P-priority) first geriatric visit.

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Introduction

The out-of-hospital public geriatrician is a distinctive figure of the Italian National Health System (NHS) who takes care of older outpatients. To the best of our knowledge, this professional figure is largely absent in other countries.[1] The out-of-hospital public geriatrician is a professional figure having a separate employment contract (so-called "bogus self-employment"), which is different from that of other clinicians employed in the Italian NHS. Specifically, he is recruited only by certificate of medical specialization and length of service. This figure provides specialist services in out-of-hospital clinics, representing an effective link between general practitioners (GPs) and hospitals or universities. In addition, the out-of-hospital public geriatrician is the only public specialist who can also make home visits paid for by the Italian NHS. This role is particularly valuable for managing very old or disabled patients.

The Italian National Plan for the Care of the Non-self-sufficient and Rehabilitation highlighted the central role of the geriatrician within the integrated team to adopt a Comprehensive Geriatric Assessment (CGA) and establish effective communication between hospital and community services.[2,3]

The difficulty of hospitals in managing many complex clinical

and social situations, even at the stage of a patient's discharge, underscores the important role of "intermediate care" and "transitional care" in achieving effective continuity of care.[4] The Italian Society of Geriatrics Hospital and Territory (SIGOT) has always given a strong impetus to the activities of the territory, so much so that it included letter T (T is for territory) in its name. Its scientific committee recently sponsored a survey aimed at photographing the clinical and organizational activities of SIGOT out-of-hospital geriatricians. The purpose of this paper is to illustrate and discuss the main results of this survey.

Materials and Methods

The survey was written considering all the best practices in conducting and reporting survey-type research.[5-7] Specifically, we followed the Checklist for Reporting of Survey Studies, a checklist published in 2021 as a result of a literature review and Delphi process, which involved experts from around the world with recognized expertise in the development and implementation of survey studies.[8] Accordingly, a survey questionnaire was developed specifically for this study. An initial draft was composed in English and sent to the Scientific Committee members to obtain their comments and feedback. Two authors (MC, FF) designed an online survey to collect information on the knowledge and interests of SIGOT out-of-hospital physicians. The questionnaire was then reviewed by three other investigators (CM, MG, AC), formatted with Google Forms, and, in June 2024, sent *via* email to all SIGOT out-of-hospital geriatricians. The Survey was available online until September 15, 2024. The complete questionnaire, translated into English, is available in this article as *Supplementary Material*. The main topics of the survey were: general/demographic characteristics, cognitive impairment (which will be the subject of a second brief report), home visits, multidimensional assessment, telemedicine, collaboration with the GPs, and personal opinions of out-of-hospital geriatricians. Compilation of the survey took an average of 15 minutes. All quantitative variables were expressed as percentages (%).

Results

A total of 67 out-of-hospital geriatricians responded to the survey, accounting for 61% of the 110 estimated SIGOT out-of-hospital geriatricians. Respondents work mainly in northern Italy (44.8%), followed by southern Italy and islands (31.3%), and finally by central Italy (23.9%). The good coverage of all geographical areas makes the total number of responses more representative of the distribution of SIGOT members across the Italian territory and therefore of the activities described in the Survey. Most of the respondents are over 50 years old (56%). Results relating to the activities covered by the survey are described in Figures 1-5. Only 7.5% of the geriatricians surveyed responded that they regularly use telemedicine (Figure 1). The answers to the question "Do you ever contact a general practitioner directly?" (Figure 2) highlighted that contact with a GP is common in the geriatricians' work experience (>80% positive answers, with higher predominance, 74.6% for complex cases). A long waiting time for a programmable (P-priority) first geriatric visit (between 3 and 6 months, according to the experience of 44.8% of the interviewed geriatricians), and the possibility of finding a geriatrician different from the first who had visited the patient (34.3%) may be critical elements (Figure 3). According to Figure 4, the request for home visits is very frequent in the experience of SIGOT territorial geriatricians: more than 500/year in 22.4% and between 250 and 500/year in 13.4% of the

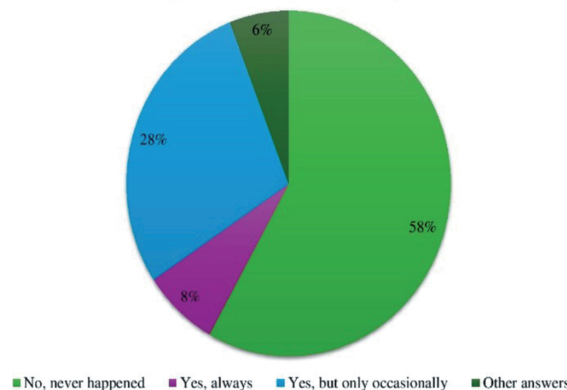

Figure 1. Geriatric involvement in telemedicine activities (in %).

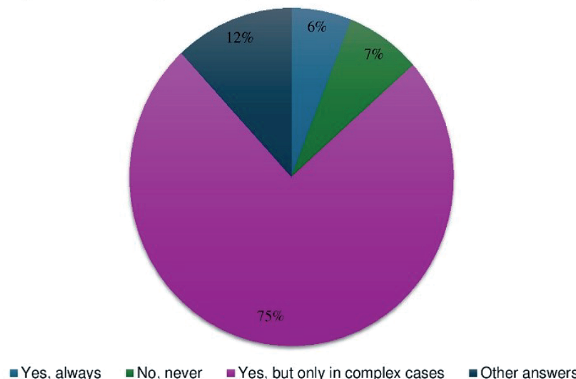

Figure 2. Importance of collaboration and cooperation between geriatrician and general practitioner (in %).

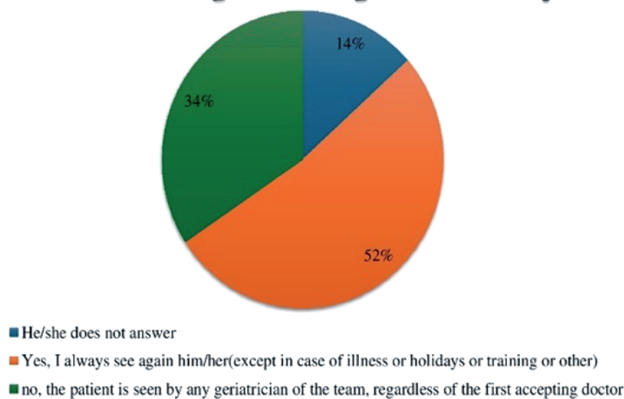

Figure 3. Perception of continuity of care relevance among out-of-hospital geriatricians (in %).

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Question number 11: in the clinic where you work, how many patients were assessed at home on average in the year 2023?

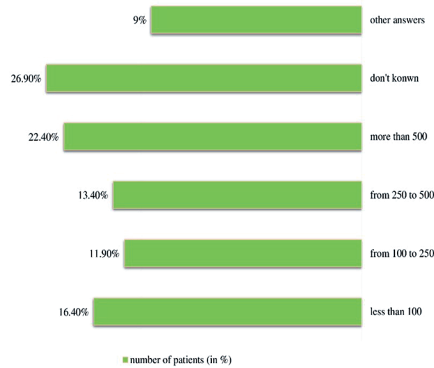

Figure 4. Prevalence and rate of home visits in 2023.

Question number 14: which dimensions of comprehensive multidimensional assessment do you delve into? (more than one answer)

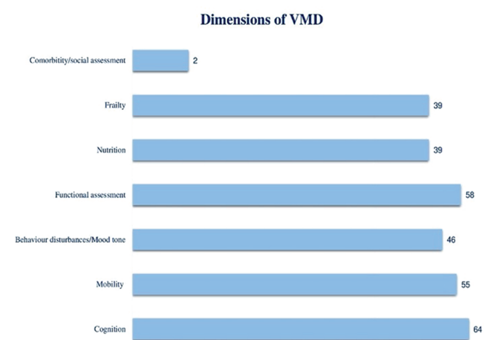

Figure 5. Dimensions of Comprehensive Geriatric Assessment investigated during the visiti (number of answers).

geriatricians surveyed. Excluding the colleagues who answered "I don't know", one fourth of the origin of the requests for home visits are from the integrated home care regime according to a principle of hospital-territory continuity, and the remaining part from other sources (when the patients become unportable). Regarding the CGA, this methodology is used by 76.1% of geriatricians. All dimensions (cognitive, affective, motor, nutritional, frailty) are frequently assessed by the geriatrician, while comorbidity and social aspects appear less investigated (Figure 5).

Discussion

This survey photographed the clinical and organizational characteristics of SIGOT out-of-hospital geriatricians. Some results deserve to be discussed. Firstly, a limitation in the use of telemedicine was observed. According to the Italian Ministry of Health, the term "telemedicine" refers to all healthcare services in which, using innovative technologies, the healthcare provider and the patient are not in the same place.[9] Additionally, the World Health Organization stated that the definition of telemedicine (or telehealth) implies the use of telecommunications and virtual technologies to provide healthcare outside traditional healthcare facilities.[10] Different care settings for older adults, such as hospitals, long-term care facilities, and home care, have been viewed as interconnected systems that can benefit from "E-Geriatrics" approaches. This involves telemedicine and artificial intelligence to improve the management of older patients and foster interdisciplinary collaboration.[11] E-health technologies (such as telemedicine) can improve healthcare for elderly individuals, especially those who are frail and housebound. For example, telemonitoring has been an effective way to reduce hospitalization of patients with COVID-19 during recent pandemics,[12-14] and it has documented to decrease the number of physician visits (thus helping to reduce the cost of care) allowing patients to remain in their homes (thus improving their overall quality of life), and to reduce the caregivers' burden of care.[15-18] In other words, E-health technologies can be a viable and useful solution to make up for the limited capacity of national healthcare systems and family care.

Overall, 58% of surveyed geriatricians responded that they had never used telemedicine (Figure 1). This percentage is not very different from that found (62%) in another earlier SIGOT survey.[19] Notably, the SIGOT 2021 survey on the use of technology for old people was the first Italian survey to photograph the real world in which Italian geriatricians operate. It involved 78 SIGOT members without specifying their place of work (hospital or territorial clinic) and concluded that "there is still a lot of work to be done to really consider digital technologies as a widespread tool used in geriatric practice". About 3 years later, the situation does not seem to have changed much, despite the positive experience of telemedicine (and other eHealth technologies) during the COVID-19 pandemic.

There are persistent cultural difficulties in strengthening telemedicine. Indeed, its enhancement depends not only on aspects more directly related to technology itself (*e.g.*, usability, purchase cost, quality of the network) and on health policy programs (implemented by regional and local authorities), but also on a more functional integration of the primary care physicians with hospital services. Furthermore, cultural barriers are linked to the resistance of healthcare workers due to skills shortages, heavy workloads, insufficient training, and probably the fear of perceiving telemedicine as less reliable and complete than a face-to-face visit. The National Recovery and Resilience Plan (PNRR) has envisaged a significant investment in the digitalization of the Italian healthcare system, with a particular focus on telemedicine. The PNRR identifies the digitalization of healthcare as one of the fundamental pillars to ensure a resilient post-pandemic recovery. It envisages the creation of integrated digital platforms that allow the exchange of healthcare data and the provision of remote services, the training of healthcare personnel on new technologies, and the implementation of innovative solutions in the field of remote diagnosis and patient monitoring. This financial commitment by the government represents a unique opportunity to transform the Italian healthcare system and bring it up to date.[20] This road is still long, and a renewed commitment by SIGOT on this point can be incisive.

Another finding highlighted by this survey was the stringent collaboration with the GPs. As is known, GP is usually the primary medical contact for older patients. However, the role of geriatricians cannot be completely fulfilled by GPs, as it requires specific training and clinical experience relevant to this specific population.[21] Recently, SIGOT and the Italian Society of General Medicine, jointly with the National Institutes of Health, promoted with several other Italian Scientific Societies the creation of the first guidelines on the CGA,[22] and initiatives are planned to raise awareness of the widest possible audience.[23] Unfortunately, collaboration between scientific societies cannot replace collaboration between geriatricians and GPs. Consequently, some results in Figure 2 deserve to be highlighted. Specifically, in 6% of cases, there was no contact between the geriatrician and the GP. This percentage, certainly influenced by the

different regional and local health organizations, must be discussed on a case-by-case basis.

The answer relating to the possibility of finding a geriatrician different from the first who had visited the patient also highlights the importance of maintaining consistency in the treatment of patients. Nonetheless, the use of codified clinical tools such as the electronic health record to standardize information should be implemented.

Lastly, regarding home visits, the out-of-hospital public geriatrician is the only public specialist who takes care of old patients with disabilities forced into their homes according to the Italian NHS, and data in Figure 4 photographed the irreplaceable contribution of the out-of-hospital public geriatrician. CGA methodology suggests the need for greater integration of geriatricians with other health and social professionals. However, home visits are organized in a non-homogeneous way across Italian regions.

Strengths and limitations

This survey had the merit of photographing the real world in which the clinical activities of out-of-hospital geriatricians take place, thus providing information and evidence not commonly reported in the published literature. On the other hand, we recognize that the survey has limitations. Firstly, it covered only some aspects of the work experience of the out-of-hospital public geriatrician. New surveys would be useful to examine other and different facets of the out-of-hospital setting, such as integration with the hospital network or other specialists, and coordination of territorial operations centers. Secondly, the “don’t know” percentages found in some questions could represent a bias. In addition, this survey was targeted at SIGOT members. Therefore, the results may not reflect the opinions and work experiences of all Italian geriatricians. Collaboration with other geriatric scientific societies could fill this gap. Finally, 67 out-of-hospital geriatricians responded to the survey, representing 61% of the estimated total number of 110 territorial geriatricians enrolled in SIGOT. However, the age of respondents (there was a prevalence of respondents aged over 50) has certainly limited the generalizability of findings.

Conclusions

This survey highlighted some aspects of the professional activity of the out-of-hospital geriatrician, thus enhancing the specificities of this professional figure in the Italian NHS. At the same time, the results underline critical areas requiring attention, such as limited use of telemedicine, standardization of organizational protocols, and high waiting times for the first visit.

Dissemination of these results may be a useful starting basis for working on these critical issues.

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