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Unmet needs and relationship between general practitioners (GPs) and allergists living in Campania region (southern Italy)

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To the Editor,

It is widely recognized that the prevalence of allergic diseases is increasing in all industrialized countries and that it determines increasing problems in managing such high number of patients. In Italy, the necessity of optimizing economic resources as well as the lack of specialist' turnover have the consequence that general practitioners (GPs) are called to manage individuals suffering from less severe / life-threatening allergic conditions and, consequently, to select those cases requiring specialized consultation. Several studies have investigated competences and role of GPs in managing respiratory (1-7), cutaneous (8), food/drug-related (9,10) allergic symptoms. Based on this background, the aim of our study was to assess, by a questionnaire, how GPs living in Campania region approach patients suffering from different allergic diseases in "real life", their knowledge about some debated topics in order to point out pitfalls and unmet needs in their relationship with allergists.

A board of experts belonging to Italian Association of Hospital and Territorial Allergists and Immunologists (AAIITO – Campania region) developed a questionnaire made of 10 multiple choice questions covering some aspects in management strategies of common allergy conditions adopted by GPs working in Campania region (13.595 Km², 5.833.332 inhabitants at 30 November 2014).

Between 10th of January 2018 and 28th of February 2018, a self-administered anonymous questionnaire was e-mailed to a sample of GPs randomly selected from the National Registers of Physicians and working in Campania region. E-mails containing questionnaire were sent and collected by twenty allergists belonging to AAIITO-Campania according to the five regional provinces. Compared to the total number of contacted GPs, 31% (n. 730) of these were available to effectively participate in the survey and to complete the questionnaire (**figure 1**).

Figure 1 shows the percentages of each answers (including the case of no-answer) in response to the 10 multiple choice questions.

Question 1. GPs do not shy away from the responsibility of managing patients suffering from allergic diseases independent-

ly (43%). Otherwise, the patient is referred (37%) to the allergist or (19%) to other specialists (e.g. otorhinolaryngologist, pulmonologist, dermatologist, gastroenterologist).

Question 2. Only 2, 50% of the GPs sends the patient to allergist both diagnostics (23%) and therapeutic (26%) purposes.

Question 3. About half of GPs (52%) manage personally asthmatic patients whereas, the remaining percentage send them to pulmonologist (34%) and to allergist (14%).

Question 4. High percentages (64%) of GPs manage directly patients suffering from suspected allergic rhinitis, and only a minor percentage of rhinitis were sent to otorhinolaryngologist (14%) and to allergist (19%).

Question 5. About 59% of GPs consider that allergen immunotherapy (AIT) should be administered only in selected allergic patients. It is noteworthy the about 21% of GP consider AIT not based on scientific evidence and 19% suitable for "all" allergic patients (19%).

Question 6. Only 23% of GPs consider allergy consultation in response to the question. It is noteworthy that 19% of GP consider suitable tests for "food intolerance", not approved by the scientific community.

Question 7. It is very appreciable that 45% of GPs assumes responsibility for using an alternative drug in patients with suspected allergic drug reaction. However, the request of an allergy consultation is correctly performed by other GPs.

Question 8. Allergists are the preferred specialists (50%) in response to question 8, followed by dermatologists (31%). Thirteen percent of GPs prefer to wait for the result of medical treatment before electing the reference specialist.

Question 9. A high percentage of GPs (79%) do not perform diagnostic tests for allergic disorders.

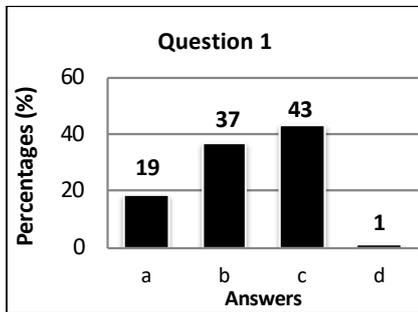
Question 10. Too long waiting lists are considered the most important reason of difficulties in sending patients to allergists (53%) followed by the lack of nearby territorial structures (20%) and the spending limits imposed by the National Health System (19%).

The overall evaluation of the answers of 730 GPs working in Campania region shows that a remarkable percentage of them manages personally patients suffering from suspected allergic diseases and particularly those with bronchial asthma and allergic rhinitis. Of course, we had no possibility to establish if GPs-suggested diagnostic approach and related therapies, could be considered corrected or not. This topic should be object of a future research. An allergy consultation is usually requested for diagnostic / therapeutic purposes or in the case of severe / life-threatening conditions such as drug / sting venom allergy or anaphylaxis. GPs have found some difficulties in the management of dyspeptic / gastrointestinal disorders of suspected allergic aetiology, some of them advice food intolerance tests generally not considered a scientifically validated diagnostic measures. Although the most of GPs consider AIT suitable for

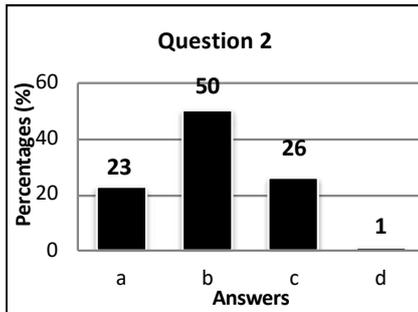
a well-defined allergic patient, others show poor knowledge of mechanisms and potential role of this therapy in allergic respiratory disorders. In the case of drug allergy, the advice of an alternative drug is frequent and this is an important aspect because, sometimes, patient's condition needs an immediate decision. In other cases, the confirmation of the diagnosis of drug allergy

and/or the testing of an alternative drug are correctly associated to the request of an allergy consultation. However, about 26% of GPs prefer to avoid any prescription of drugs without allergist's suggestion. Only a minority of GPs usually manage chronic urticaria probably because the well-known difficult diagnostic and therapeutic approach, in this case allergist is the preferred

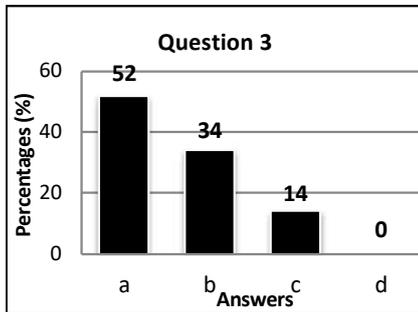
Figure 1 - Percentages of each answers (including the case of no-answer) in response to the 10 multiple choice questions.



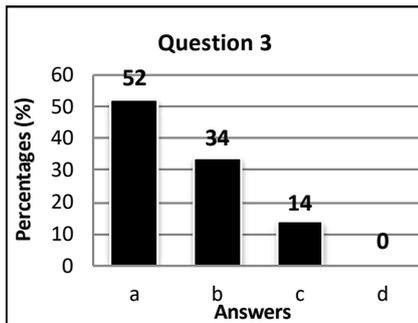
- 1. In patients with a suspected allergic disease I prefer:**
- a. Send the patient to an organ specialist (otorhinolaryngologist, pulmonologist, dermatologist, gastroenterologist)
 - b. Send the patient to allergologist
 - c. No answer
 - d. Manage the patient personally



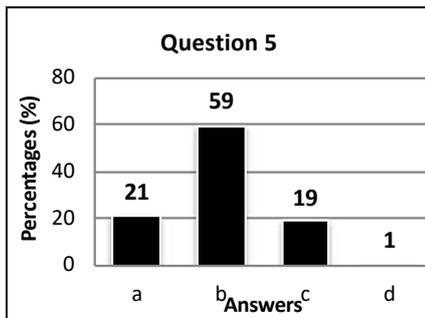
- 2. When do you solicit an allergy advice?**
- a. Only for diagnostics
 - b. Only for diagnostics and therapeutic purposes
 - c. Only for management of exclusive problems (e.g. drug / hymenoptera venom allergy)
 - d. No answer



- 3. In the case of a patient with suspected bronchial asthma, in most cases, I prefer:**
- a. Personally manage the patient
 - b. Send the patient to the pulmonologist
 - c. Send the patient to the allergist
 - d. No answer

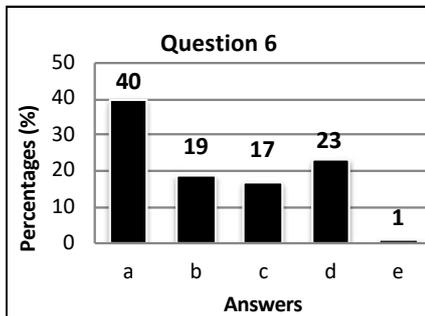


- 4. In the case of a patient with suspected allergic rhinitis, in most cases, I prefer:**
- a. Personally manage the patient
 - b. Send the patient to the otorhinolaryngologist
 - c. Send the patient to the allergist
 - d. No answer



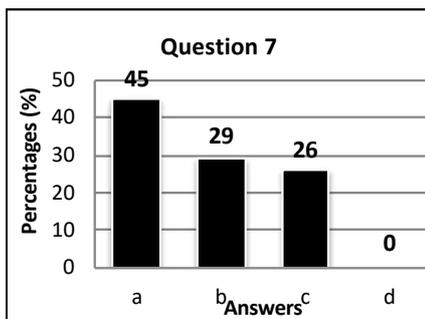
5. How to consider specific allergen immunotherapy (AIT)

- a. I do not consider it a scientifically validated therapy
- b. Efficacy and safety is to be reserved only for a narrow minority of patients
- c. It is recommended for the majority of allergic patients
- d. No answer



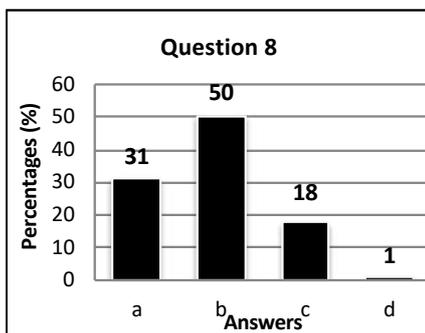
6. In the presence of a patient with dyspeptic / gastrointestinal disorders (abdominal pain, meteorism, irregular alve), for which you think it is advisable to investigate any hypersensitivity to specific foods, what advice?

- a. Investigations for Celiac disease or Lactase deficiency
- b. Tests for food intolerances (e.g. food-specific IgG, Cytotest, other tests for intolerances)
- c. Food allergy tests (prick test or specific IgE)
- d. Allergic specialist advice
- e. No answer



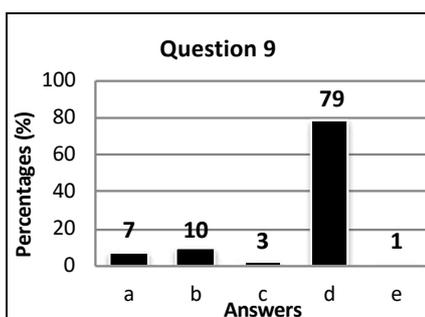
7. Your patient has had a suspected allergic reaction to an antibiotic: what advice?

- a. An alternative drug
- b. An alternative drug but I send the patient to the allergist anyway
- c. I send the patient to the allergist
- d. No answer



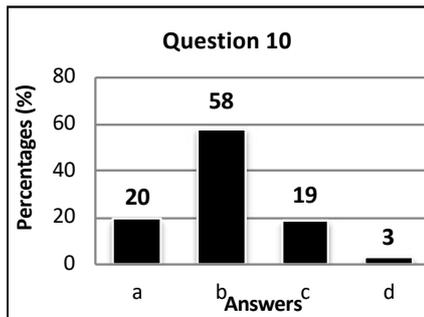
8. In the presence of a patient with chronic urticaria (ie, persisting for more than 6 weeks), in most cases (in addition to prescribing symptomatic therapy):

- a. I send the patient to the dermatologist
- b. I send the patient to the allergist
- c. I await the successful outcome of the treatment, as probably the urticaria will pass spontaneously
- d. No answer



9. Do you test for allergies or intolerance?

- a. Yes: skin prick tests for inhalant allergens
- b. Yes: skin prick tests for inhalant and food allergens
- c. Yes: tests for food intolerances
- d. No
- e. No answer



10. What difficulties do you find in guiding the allergic patient to the specialist?

- Lack of nearby territorial structures
- Excessively long waiting lists
- Spending limits imposed by the National Health System
- No answer

specialist. Very few GPs, probably those with special interest on allergic diseases, perform diagnostic tests for respiratory or food allergy. An important unmet need of GPs on allergy topics is the difficult communication with allergists because the paucity of these specialists in Campania region as well as for bureaucratic reasons (waiting lists too long). Finally, it is important to outline that we cannot compare our results with those of other authors because no study has used the same questions.

In conclusion, the results of our questionnaire administered to GPs of Campania region suggest a comfortable willingness of these GPs to manage personally some categories of allergic patients particularly those suffering from respiratory symptoms. Further efforts should be done to correct some pitfalls in managing other allergic conditions such as those skin or food-related and therapies (AIT). A better knowledge of the allergic diseases and a stronger collaborative alliance between allergists and GPs are desirable for a good management of allergic disorders in Campania primary care.

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Conflict of interests

The authors declare that they have no conflict of interests.

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