

Tests, treatments and procedures at risk of inappropriateness in Italy that Physicians should talk about.

Five recommendations from the Italian Medical Students' Association APS (SISM - Italy)

1	<p>Don't settle for receiving a teaching limited to a mere mnemonic exercise that does not employ active learning processes, require to center the teaching on the semeiological examination and on the rational that underlies every diagnostic and therapeutic process.</p> <p>Too often the study of medical students is limited to a passive and mnemonic learning of a multitude of knowledges that do not find practical applications or are not used in problem solving. In doing so, these knowledges are likely to become a purely theoretical background, superfluous in the overall set of skills, abilities and competencies of the future doctor. Therefore, students must assume an active role in improving their own training, both by asking that such knowledges are applied in the context of the lessons in clinical cases and concrete examples and by promoting the concept of the relevance of information. In such a way the teaching of Medical faculties may be improved with the aim of providing students not only indispensable notions, but also critical and reworking skills necessary to deal with medical procedures and to handle clinical cases in a working context. Improving the teaching of medical students by following these principles also means getting used to looking for the rational of every diagnostic/therapeutic practice evaluating pros and cons, and hence improving the capacity to discern between necessary actions or not, between a medicine always practiced with the same approach or one adapted to the single patient situations and his needs.</p>
2	<p>Don't observe the patient only from the biological point of view but consider also the subjective component of the disease, the level of health literacy and the familial and social context in which the patient is inserted.</p> <p>It's fundamental that medical students are aware of the importance of a doctor-patient relationship within which the patient is considered in its entirety and not as a passive receiver of assistance. Such relationship is essential to the realization of an effective treatment process and the spread of health within the population. It is now demonstrated what the impact of socio-economic and cultural determinants on the health of individuals is. In the light of this, on one hand it is vital to understand the patient's right to attribute a personal meaning to his own disease experience. Otherwise, the risk is to promote actions that could be unnecessary and even eventually perceived as violent by the patient himself. On the other hand, it is necessary to focus also on the possibility for the subject to understand health-related information and to make decisions about his own state of health. Lastly, a dialogue that favours the autonomy and emancipation of the patient should be promoted. These aspects not only help to ensure the adequate adherence to therapies and to the directives of the professional, but also allow to limit the eventual development of chronicity or disability and an increased awareness on the importance of some means of prevention.</p>
3	<p>Don't perform any diagnostic or therapeutic procedure without having previously collected the medical history and information on possible allergies or pre-existing diseases of the patient.</p> <p>The collection of the medical history represents, in most cases, the first contact with the patient, including the family history and the remote and prior pathological history. It is thus fundamental that the medical history collects as many details including, indeed, pre-existing diseases that could have a role in the pathological progression of the patients and eventual allergies. In particular, attention must be given to kidney related diseases and allergies to contrast agents in order to avoid exposing the patient to examinations that would involve avoidable risk. Due to the importance of this process, the student should receive an adequate formation on the compilation of medical record and on the approach with the patient during this delicate phase, in order to acquire the necessary information that will allow him to proceed to a more targeted and safe instrumental and diagnostic analysis.</p>
4	<p>Don't neglect to gather informations not only about the benefits, but also about the contraindications or side effects of the diagnostic or therapeutic procedures.</p> <p>The adverse reactions caused by the administration of drug treatments and the execution of diagnostic examinations (especially if a contrast agent is utilised) represent a particularly relevant threat in modern medicine. It is then fundamental for medical students to have the right tools to investigate further on every aspect of the diagnostic and therapeutic procedures they have to face, and to be motivated to do so. This necessity is even more relevant if we consider that up to half of the adverse reactions could be avoided or at least reduced through investigation and further knowledge of the used drug and of the assisted patient.</p>
5	<p>Before entering in the room and starting the examination, don't forget to ask the doctor/tutor informations about the patient's state of health and don't engage in diagnostic procedures without previously obtaining informed consent from the patient.</p> <p>As students, we are often tempted to take every occasion to put to practice on the patients everything we have learned during our theoretical studies. Despite this understandable propension, it is imperative to remember to consider the patient not as a test subject to exercise on, but as a person, with not negligible needs and sensitivity. In the same way, focusing on a single pathological aspect could lead to neglect the patient's overall state of health, on a physical, psychological and general well-being level. It is thus essential for future doctors to learn from the first years of training to evaluate these aspects as a whole, before starting any diagnostic and therapeutic path. Likewise, the collection of the informed consent must be seen as a fundamental moment to speak to the patient, inform him on the indications and contraindication of the suggested examination and possible diagnostic and therapeutic alternatives.</p>

How the list was created

The top five recommendation list for students on diagnostic and therapeutic appropriateness has been drafted by Italian Medical Students' Association (SISM). A task force composed of five medical students has developed a list of seventeen recommendations based on experiences gathered during their studies. This list was shared with Italian medical students through an online form. They were asked to give each recommendation a grade from 1 to 5. A total of 635 students from all the Italian medicine and surgery universities has answered the form, which was then used by the task force to choose the five final recommendations.

Sources

1	<ol style="list-style-type: none"> 1. Harden RM, Laidlaw JM. Be FAIR to students: four principles that lead to more effective learning. <i>Med Teach</i>. 2013;35(1):27-31. 2. Faisal R, Bahadur S, Shinwari L. Problem-based learning in comparison with lecture-based learning among medical students. <i>J Pak Med Assoc</i>. 2016;66(6):650-3.
2	<ol style="list-style-type: none"> 1. Quaranta I. La trasformazione dell'esperienza. <i>Antropologia e processi di cura</i>. 2. Bonaccorsi G, Lorini C, Baldasseroni A, Porchia BR, Capecchi L. Health services and health literacy: from the rationale to the many facets of a fundamental concept. A literature review. <i>Ann Ist Super Sanita</i>. 2016;52(1):114-8.
3	<ol style="list-style-type: none"> 1. Choosing Wisely Canada. The College of Family Physicians of Canada: Eleven things physicians and patients should question [Internet]. 2014 [cited 2017 Jun 5] 2. Davenport MS, Perazella MA, Yee J, et al. Use of Intravenous Iodinated Contrast Media in Patients with Kidney Disease: Consensus Statements from the American College of Radiology and the National Kidney Foundation. <i>Radiology</i>. 2020;:192094. 3. Aslan G, Afsar B, Sag AA, et al. The Effect of Urine pH and Urinary Uric Acid Levels on the Development of Contrast Nephropathy. <i>Kidney Blood Press Res</i>. 2020;45(1):131-141. 4. Vlachopoulos G, Schizas D, Hasemaki N, Georgalis A. Pathophysiology of Contrast-Induced Acute Kidney Injury (CIAKI). <i>Curr Pharm Des</i>. 2019;25(44):4642-4647. 5. Amiri A, Ghanavati R, Riahi beni H, Sezavar SH, Sheykhvatan M, Arab M. Metabolic Syndrome and the Iodine-Dose/Creatinine Clearance Ratio as Determinants of Contrast-Induced Acute Kidney Injury. <i>Cardiorenal Med</i>. 2018;8(3):217-227. 6. Sanan N, Rowane M, Hostoffer R. Radiologic Contrast Media Desensitization for Delayed Cardiac Catheterization. <i>Allergy Rhinol (Providence)</i>. 2019;10:2152656719892844.
4	<ol style="list-style-type: none"> 1. Coleman JJ, Pontefract SK. Adverse drug reactions. <i>Clin Med (Lond)</i>. 2016;16(5):481-485; 2. Morzycki A, Bhatia A, Murphy KJ. Adverse Reactions to Contrast Material: A Canadian Update. <i>Can Assoc Radiol J</i>. 2017;68(2):187-193; 3. Brinkman DJ, Tichelaar J, Schutte T, et al. Essential competencies in prescribing: A first European cross-sectional study among 895 final-year medical students. <i>Clin Pharmacol Ther</i>. 2017;101(2):281-289.
5	<ol style="list-style-type: none"> 1. Roli Mathur, Rajib Kishore Hazam, Kalyani Thakur (2017) When Patients Become Guinea Pigs – A fictitious case of ethics dumping based on real events; case study for TRUST project. 2. H. W. Romana Is Evidence-Based Medicine Patient-Centered and Is Patient-Centered Care Evidence-Based? <i>Health Serv Res</i>. 2006 Feb; 41(1): 1–8. 3. L. A. Siminoff Incorporating patient and family preferences into evidence-based medicine. <i>BMC Med Inform Decis Mak</i>. 2013; 13(Suppl 3): S6.

Slow medicine, network of professionals and citizens for a somber, respectful and just medical treatment, started in Italy in December 2012 the project "Fare di più non significa fare meglio - Choosing Wisely Italy". In analogy with the Choosing Wisely initiative already in motion in the United States. The project aims to encourage the dialogue between doctors, other health professionals and patients and citizens about diagnostic exams, treatments and potentially inappropriate procedures in Italy, to reach informed and shared choices. The Italian project is part of the Choosing Wisely International movement. The partners of the project are: FNOMCeO, FNOPI, ASI, SNR, ARS Toscana, Partecipasalute, Altroconsumo, Federazione per il Sociale e la Sanità della prov. aut. di Bolzano, Zadig. For further details: www.choosingwiselyitaly.org; www.slowmedicine.it.

SISM - Segretariato Italiano Studenti in Medicina - APS, is a free association of social promotion (Associazione di Promozione Sociale), non-partitica, non-denominazionale, non-lucrativa, which refuses discriminations on the basis of gender, race, language, nationality, religion, political ideology and sexual orientation. The association works to answer the individual's health needs through contributions regarding the students' academic training, their sensibilisation on ethical and social aspects of the medical profession and the intellectual, professional and deontological growth of the new medical class, as well as through information and health education of the population. SISM is a full member of IFMSA (International Federation of Medical Students' Associations). For further details: <https://nazionale.sism.org/>.