Teaching Medical Humanities to medical students: implementing an integrated approach

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Abstract

Medical Humanities is a rapidly expanding field of medical education. However, in Italy, only a few humanities are included in the curricula of medical schools. Other humanities are provided in the form of elective courses, with great heterogeneity among the various medical schools. The objective of this paper is to present an optional course in Medical Humanities, based on an integrated approach, aiming at fostering the human and professional growth of medical students. In addition, the paper presents the research project associated with the integrated course, aimed at evaluating the effects of the course program on students' personal and professional skills and psychological well-being.

Keywords: Medical Humanities; Medical education; Visual Thinking Strategies; Narrative Medicine; Reflective Practice

1. Introduction

"Medical Humanities" (MH) is a term used to define an interdisciplinary field that includes humanities, social sciences and arts and their application to medical education and practice (Kirklin, 2003). The MH movement began to spread in the United States in the late 1960s, under the leadership of physician and philosopher Edmund Pellegrino (Sulmasi, 2014). Pellegrino and other health professionals proposed a rediscovery of the human dimension of care, driven by the idea of curbing the technical drift that medicine was taking in those years (Sulmasi, 2014). Since then, MH has spread all over the world, enriched by the contributions of various humanistic disciplines (e.g. philosophy, history, literature, art). Still today, the purpose of MH

is to facilitate the understanding of the "human condition of health and illness to create knowledgeable and sensitive healthcare providers, patients, and family caregivers" (Klugman, 2017). MH promotes a holistic approach to care, by fostering the development of personal and professional skills in healthcare providers. Previous studies have shown that MH helps medical and not medical students to develop fundamental skills, such as empathy, and communication, observation and reasoning abilities (Ferrara et al., 2022; Krishna et al., 2022). The development of these skills is often hindered in stressful, demanding and competitive educational contexts, such as the medical one (Giusti et al., 2021). Therefore, the inclusion of humanities into medical curricula can have a strong educational value. Consequently, medical schools in multiple countries have been progressively incorporating humanities into their curricula (Howick et al., 2022; Qian et al., 2018; Smydra et al., 2022). Also in Italy, humanities are included among the curricular subjects of the medical degree courses. However, the space reserved for MH is mainly occupied by courses in Bioethics or History of medicine (Patuzzo & Ciliberti, 2018). This is because, in Italy, the curricula of degree courses must comply with criteria defined by the Ministry of University (MUR), which means that universities are left with little autonomy in the choice of subjects. For this reason, some universities have chosen to include humanities as optional subjects (i.e. extra-curricular courses).

Some years now, the teaching of Medical Humanities has landed at the University of L'Aquila (central region of Italy), where a course in Medical Humanities has been structured for medical students from the 3rd year onwards. The purpose of this article is to present the structure and curriculum of the *Integrated Course in Medical Humanities* (ICoMH) and its associated research project, both of which were activated at the University of L'Aquila last year - for the first time - in their full version.

2. The Integrated Course in Medical Humanities

The Integrated Course in Medical Humanities is the result of a collaboration between the Department of Medicine and the Department of Human Sciences of the University of L'Aquila. It has been promoted by the Italian Society of Medical Pedagogy (Società Italiana di Pedagogia Medica - SIPeM), with the aim to offer to undergraduate medical students the opportunity to broaden their view of the world, in order to enhance their personal and professional growth.

The course is organized in three optional modules reserved for students from the 3rd to the 6th year of the degree course. The structure of each module includes a theoretical part (which introduces the epistemological basis of the methods used) and a practical part, organized in workshop activities that involve students in the educational process. Table 1 summarizes objectives, methods, and target population of each module.

Table 1. The structure of the Integrated Course in Medical Humanities

Module	Course year	Objectives	Methods
Visual Thinking Strategies for the Clinical eye	3rd	Improve observation, communication and reasoning skills	Lectures, VTS workshops
Narrative Medicine for the personalization of care	4th	Develop comprehension and interpretation abilities, and empathic approach	Lectures, IDS workshops
Reflective Practices for Self-care	5th-6th	Develop awareness of the future profession	Lectures, maieutics workshops, close reading, Reflective Practice workshops

The three modules have been designed considering the curriculum of each year of the Italian Degree Course in medicine, which lasts 6 years. The course is meant to offer a comprehensive training in the humanities to students who attend all modules. However, there is no obligation to take the entire course and students may choose to take only one or two modules. All the lessons and workshops are taught by experts in Medical Humanities, with different backgrounds.

2.1. Visual Thinking Strategies for the Clinical Eye

During the third year of the Degree Course in Medicine, Italian students deal with the study of clinical methodology, learning the practices of semeiological analysis, aimed at the collection and analysis of clinical data. This prepares them for the internship in wards, which starts from the fourth year of the degree course. For this reason, it is important that students can practice observation and reasoning techniques, during the third year. That is what the first module focuses on.

This module centers on art and uses the Visual Thinking Strategies (VTS) method to promote the development of important cognitive and professional skills, through the active observation of images. VTS has been originally developed by Abigail Housen, a psychologist, and Philip Yenawine, an art educator, to help students develop critical thinking, and communication and observation skills (Housen, 2002) (Yenawine, 2013). Vincenza Ferrara was the first to introduce this method in medical training, in Italy (Ferrara, 2022). The method improves both semeiological skills and empathic sensitivity: it helps to develop the "clinical eye", which is essential to perform a physical examination. Physical examination is the first step in the evaluation of the patient and allows the clinician to complete the information collected during the anamnestic interview. Some specific skills are required to perform a comprehensive physical examination: 1. observing the patient carefully, paying attention to details; 2. reasoning about the information acquired through observation; 3. drawing conclusions based on the information collected. Through critical observation of images and active listening, the VTS method helps

clinicians to expand their perspective, embracing the patient's point of view. Additionally, this method improves communication and relational abilities, through group activities.

The theoretical part illustrates the epistemological fundamentals of medical practice, based on a bio-psycho-socio-cultural paradigm. The practical part includes workshops conducted according to the VTS method. This phase can be carried out directly in a museum or in the classroom, through a digital reproduction of the artwork to be analyzed. Active listening exercises are also proposed, through which students must reproduce an image they cannot see, after listening to a classmate's oral description of the image.

2.2. Narrative Medicine for the personalization of care

In their fourth year, medical students begin to intern on the wards, therefore connecting with patients. At this moment, they experience the transition from theoretical knowledge to clinical reality, often experiencing this change as traumatic. One of the most complicated tasks in the relationship with the patient is to understand the patient's needs, which are not only clinical, but often concern other aspects (emotional, psychological, etc.). At this stage, it is crucial to enhance the empathic skills of the students, enabling them to understand the patient's experience. For this reason, the training module reserved for fourth-year students is dedicated to the use of narrative in medicine, through the Narrative Based Medicine (NBM) paradigm, as defined by the Italian guidelines on the use of Narrative Medicine (Centro Nazionale Malattie Rare [CNMR] – Istituto Superiore di Sanità [ISS], 2015). Narrative Medicine (NM) is an approach to care theorized by Dr. Rita Charon, that uses the patient's narrative to enable the clinician to understand the complexity of the disease and to build, together with the patient, an effective and shared care pathway (Charon et al., 2016). This module also uses Digital Narrative Medicine (DNM), which enables the application of narrative medicine methods through digital techniques, such as the Illness Digital Storymap (IDS) by Cristina Cenci (Cenci & Mecarelli, 2020).

The theoretical part introduces the epistemological basis of the NBM paradigm. It also presents the digital platform through which the patients' stories had been collected, which is used for the second part. The second part of the module includes practical activities, based on the analysis of the stories of patients affected by different pathologies (cancer, heart failure, epilepsy, etc.). The analysis is performed by the students themselves, by using the IDS model. The IDS model provides a map that allows the clinician to navigate the patient's experience of illness. Along this experience, the map identifies five existential dimensions, derived from the socio-anthropological literature: chaos, liminality, normalization, resolution, appropriation. These dimensions summarize "life experiences, needs, the degree of acceptance of illness, emotions, quality of life, helpers, and opposers. […] The dimensions are subdivided into three different phases of the illness pathway: the present phase, the patient/caregiver's expected future, and the therapeutic pathway's target phase. The target phase integrates life experiences and existential

expectations with the clinical variables and the possible therapeutic scenarios" (Cenci & Mecarelli, 2020).

2.3. Reflective Practices for Self-care

Fifth and sixth-year students are already familiar with clinical practice and are preparing for their future profession. At this point in their education, it becomes important to reflect on the experiences they have gained, to better approach the world of work. Therefore, the objective of the third module is to promote the well-being of the students in the last years and to encourage reflections on the challenges they will face in their profession. This module addresses the problem of work-related stress and burnout, which is becoming more and more frequent in health professionals and students (Leombruni et al., 2022). Various reflection techniques are used in the module, borrowed from philosophy (maieutics, reflective practices) or other methods, such as close reading, proposed by Rita Charon as a tool for Narrative Medicine (Charon et al., 2016).

The first part includes an introduction to the risks for the psychophysical well-being of health professionals, followed by a maieutics workshop, aimed at identifying issues that are critical for the students. Workshop activities include reading and analyzing texts, creative writing, discussion, and dialogue. Close reading of written texts or images, and written production on the model of mythobiography are also proposed. These activities encourage students to engage in self-reflection, allowing them to evaluate their expectations for their future profession. Sharing within the community is an essential element in this module.

3. The research project

The ICoMH was activated in its full version in the academic year 2022-2023. A research project was proposed to assess the effects of the ICoMH on medical students and to gather information and feedback that could be used to improve the course. The Project has an estimated duration of 4 years and consists of 3 phases: 1. a survey on the characteristics and the motivations of the students who take one of the ICoMH modules; 2. an investigation of students' satisfaction and feed-back; 3. a pre-post analysis evaluating the effects of the course on students. Table 2 summarizes the steps of the research project.

Table2. Steps of the research project

Phase	Sample	Outcomes	Measurement Instruments	Study type
1st	Students taking the course / Students not taking the course	socio-demographic features	Ad hoc questionnaire	quantitative / qualitative
		motivations	Ad hoc questionnaire	
		anxious tendencies	Self-rating Anxiety Scale (SAS)	
		depressive tendencies	Beck Depression Inventory-II (BDI-II)	
		stress	Perceived Stress Scale-10 items (PSS-10)	
		academic performance	Grade Point Average	
			Number of exams passed	
2nd	Students taking the course	satisfaction, feed-back	Ad hoc questionnaire	qualitative
3rd	Students taking the course / Students not taking the course	socio-demographic features	Ad hoc questionnaire	quantitative
		anxious tendencies	SAS	
		depressive tendencies	BDI-II	
		stress	PSS-10	
		observation, communication and reasoning skills	VTS grid	
		empathy	Interpersonal Reactivity Index	
		coping	Brief-COPE	

The first phase involved the administration of a battery of questionnaires to both students who had chosen to take the course and students who had decided not to. The questionnaires investigated the socio-demographic and psychometric characteristics of the two subgroups, their academic performance, and the motivations that led the students to take the course or not. The first phase has been completed. The second phase involves collecting feedback from students, to reshape the training offer. Every year, all students who have attended a module are given a questionnaire to assess:

- whether the module met their expectations,
- whether they think it was useful for their training,
- which things they found interesting and which they did not,
- whether there is anything they found surprising,
- whether there is anything they would like to learn more about,

- whether they would recommend the Course to their colleagues,
- how they liked it overall.

The third phase involves the collection of data during four academic years, through the administration of questionnaires both to students who have attended one or more modules and to students who have not attended any modules. The objective is to detect and quantify any improvement in specific skills or psychological well-being in students who have attended one, two or all modules, compared to students who have not attended any modules. Skills such as observation, reasoning and communication skills, empathy and coping will be assessed. Psychological well-being will be investigated using the same questionnaires used in the first phase.

4. Conclusions

The progressive shift in medicine towards an evidence-based care paradigm has amplified the scientific dimension of care (caring), at the expense of its human dimension (taking care). Medical Humanities seeks to balance these two trends, creating a space for dialogue between evidence-based and personalized medicine. The Integrated Course in Medical Humanities aims to enrich the curricular training of medical students with the tools and perspectives of the humanistic vision. The structure, content and methods of the course are designed to guide students on a path to personal and professional growth. The research project is essential to identify the strengths and weaknesses of the course, in order to improve it. It also allows us to investigate students' opinions, to tailor the course to their educational needs.

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