

MEDICAL EDUCATION AND COMPASSION: *ET SCIENTIFIC ET POETIC POSTURE OF MEDICAL IDENTITY*

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Accepting your invitation to combine the theme of this Symposium with the field of research concerning *adult learning*, this reflection starts from a question: is it possible to train medical students in compassion?

1. SOFT SKILLS IN MEDICAL EDUCATION

This particular competence falls within the field that the international scientific literature on the subject of adult learning investigates as “non-technical skills” and for which it uses the expression “*soft skill*” to distinguish it from “*hard skills*”, which represent the pattern of knowledge and techniques that can be taught and learned through methods of study attributable to “*knowlegde by description*”, as in Russel's expression ¹.

If the field of “hard skills” is characterized by the acquisition of knowledge as *products* and therefore by the reception of “contents”, the field of “soft skills” is characterized by work on the vision, the paradigm, with which the doctor observes, questions, wonders, in a word: *think* ².

The thought processes are characterized - as per the indications of neuroscience - as distinguishable in “low horder ” and “high order” thinking skills³: the former are those we resort to in the case of the application of procedures and protocols, the latter are those that they correspond to the functioning of the cortex and which are proper to us every time we are in the presence of a question, a research, a criticality that cannot be resolved in application alone but that requires signification and sense -making ⁴.

In this vision, taking care of medical training means designing it with particular attention not only to the *transmission of knowledge* - in a form of “*single loop learning*”, one in which the knowing subject receives and replicates, without any work on his own paradigm - but in a form of *transformative learning* ⁵- in a form of “*double loop learning*” in which the subject who knows

¹Russel B. Teoria della conoscenza. Longanesi Milano :1996.

² Zannini L. Il sapere medico, in Bertolini G., Massa R., a cura di, Clinica della formazione medica, FrancoAngeli, Milano: 2003.

De Mennato P. “Medical Professionalism and Reflexivity. Examples of training to the sense of ‘duty’ in medicine”. Educational Reflective Practices,2012. 2: 15-33;

De Mennato P., Formiconi A.R., Orefice C. e Ferro Allodola V.. Esperienze estensive. La Formazione riflessiva nella Facoltà di Medicina di Firenze. Pensa Multimedia. Lecce: 2013.

³ Schraw G., Robinson D.H.. Assessment of higher order thinking skills. Information Age Publishing: 2014

⁴Schön D.A. Il professionista riflessivo. Dedalo. Bari: 1993.

⁵ Mezirow J. (2000), Learning as transformation. Critical perspectives on a theory in progress , Jossey - Bass, San Francisco.

experiences knowledge not as *a product* but as *a process* , and thus enables himself to search as an interior habitus ⁶.

2. TRANSFORMATIVE LEARNING AND "INTERNAL DIALOGUE"

The training that therefore involves the passage from an experience of "knowledge as accumulation" to one of "knowledge as transformation" ⁷ is the research space in which a question concerning the competences of compassion in medicine can be placed with full scientific rigor.

Starting from the evidence that compassion correlates not only with the increase in patient compliance but also with the enhancement of diagnosis and treatment skills, it is possible to recognize how it represents a constitutive dimension of medical competence, so much so that it can therefore speak, in the intertwining between scientific training and "human" based training, between evidence medicine and narrative based medicine ⁸, of the doctor's "*bio-professional curriculum*" ⁹.

More specifically, training oriented towards it takes the form of "*reflective practices*", or settings in which participants can not only study the disease and patients but also themselves ¹⁰,

⁶ Argyris C., Schön D., Theory Practice Prof Effectiveness: Increasing Professional Effectiveness . Jossey-Bass 1992.

⁷Formenti L. Narrazione e trasformazione, Raffaello Cortina, Milano: 2017.

⁸ Charon R. Reading, writing, and doctoring: literature and medicine. Am J Med Sci. 2000; 319 (5): 285–91. [https://doi.org/10.1016/S0002-9629\(15\)40754-2](https://doi.org/10.1016/S0002-9629(15)40754-2) .

Charon R. The patient-physician relationship. Narrative medicine: a model for empathy, reflection , profession , and trust. JAMA. 2001; 286 (15): 1897–902. <https://doi.org/10.1001/jama.286.15.1897> .

⁹ Scardicchio A.C. Curare Guardare. Epistemologia ed estetica dello sguardo in medicina. Franco Angeli. Milano: 2020.

¹⁰ Boenink AD, Oderwald AK, De Jonge P, Van Tilburg W, Smal JA. Assessing student reflection in medical practice. The development of an observer-rated instrument: Reliability, validity and initial experiences. Med Educ 2004; 38: 368-77.

Chambers S, Brosnan C, Hassell A. Introducing medical students to refl active practice. Educ Prim Care 2011; 22: 100 -5.

Fish D, de Cossart L. Developing the Wise Doctor. A Resource for Trainers and Trainees in MMC. London, UK: Royal Society of Medicine Press Ltd .; 2007.

Howe A, Barrett A, Leinster S. How medical students demonstrate their professionalism when refl ecting on experience. Med Educ 2009; 43: 942-51.

Johnson C, Bird J. How to...: Teach reflective practice. Educ Prim Care 2006; 17: 640-2.

Mann K, Gordon J, MacLeod A. Reflection and reflective practice in health professions education A systematic review. Adv Health Sci Educ Theory Pract 2009; 14: 595-621.

Mamede S., Schmidt HG . and Penaforte JC . Effects of reflective practice . on the accuracy of medical diagnoses. Medical Education. 2008. 42: 468-475.

Moon JA. A Handbook of Reflective and Experiential Learning. Theory and Practice. Routledge. Oxford: 2004.

that it to say taking care of their own way of being close to the experiences of Limit to which medical profession summons irreducibly.

This therefore implies that clinical training work is closely linked with the physician's work of self-awareness and mindsight ¹¹, rather the development of critical thinking and creative thinking skills ¹² which, in the form of self reflection and "internal dialogue" ¹³, allow every care professional not to fall into the trap of the equations *objectivity=science* and "*neutrality*" = *professionalism* ¹⁴.

3. COMPASSION AND SYSTEMIC POSTURE

Copious scientific literature has been dealing with physician "relational skills" for many years, which always include empathy and sometimes compassion, but from a systemic perspective it is possible to overcome the split that juxtaposes - and sometimes contrasts - technical and "human" competences in medical professionalism and put them back together in a paradigm in which *compassion is studied as necessary for clinical reasoning*.

The systemic posture - which scientifically takes the form of openness to complexity - properly involves a gaze that does not objectify the patient and not "robotize" the encounter experience, as if the guarantee of science were given by the elimination of the "human element".

In concrete terms, a systemic posture is a compassionate posture, since it considers the patient as an *interlocutor* and therefore as a bearer of knowledge ¹⁵.

The systemic opening to the complexity of the encounter with the "chaotic unknown" that is the Other - which is always an experience of "mystery", not only when it has an unclear symptomatological picture but also when its categorization seems clear from the reports - it is a

Sobral DT. Medical students' mindset for reflective learning: A revalidation study of the reflection-in-learning scale. *Adv Health SciEduc Theory Pract* 2005; 10: 303-14.

¹¹ Sandars J. The use of reflection in medical education: AMEE Guide No. 44. *Med Teach* 2009; 31: 685-95.

¹² Fook, J. and Gardner F. (2007), *Practicing critical reflection: a resource handbook*, McGraw Hill, London.

¹³ Hughes G. *Reflective Practice International and Multidisciplinary Perspectives*. Volume 10, 2009 - Issue 4: 451-463.

¹⁴ Roberts C, Stark P. Readiness for self-directed change in professional behaviors: Factorial validation of the Self-Reflection and Insight Scale. *Med Educ* 2008; 42: 1054-63.

Schön DA. *Educating the Reflective Practitioner*. San Francisco, CA: Jossey-Bass; 1987.

Fish D, de Cossart L. *Developing the Wise Doctor. A Resource for Trainers and Trainees in MMC*. London, UK: Royal Society of Medicine Press Ltd.; 2007.

¹⁵ Bert G. e Quadrino S. *Parole di medici, parole di pazienti*. Il Pensiero Scientifico. Torino: 2002.

Bert G. *Medicina narrativa. Storie e parole nella relazione di cura*. Il Pensiero Scientifico. Roma: 2007.

Bert G. *Medicina narrativa e sistemi umani: dar voce all'incertezza*. *Riflessioni Sistemiche*. 2009. 1: 171-178.

Bert G. *Vertigine sistemica. Appunti di un medico perplesso*. *Riflessioni Sistemiche*, 2015. 7: 147-154.

type of generative knowledge on a double level: that linked to crucial information for diagnosis and treatment and that connected to the existential dimension that always summons, in the experience of illness, both the patient and the doctor ¹⁶.

4. MEDICAL PROFESSIONALISM AS OPENING TO THE COMPLEXITY OF RECIPROCAL LEARNING

In this perspective, every patient is a *convocation* for the doctor into a relationship in which every single and always singular clinical manifestation is *always a formative experience: mutual learning*, transformation of every human being that in that encounter draw new *human experience*, and new *scientific experience*.

Inserting this inner habitus into medical training means placing compassion at the roots of the *anthropological competence of the healthcare professional* and which takes the form of the most ancient form of one's vocation: *philosophical identity* ¹⁷. Rohr *et al* write to this effect of "*physician as visionary*" considering the ability of "visionary thinking" as a crucial competence of the doctor whose professionalism is also intertwined with the "visionary system transcendent" ¹⁸.

Although culturally we have a tendency to consider the adjective "philosophical" as own of those who *abstracts*, the philosophical posture corresponds to medical vocation to be a rigorous thinker ¹⁹and not only an applicator of protocols, executor, "technician".

¹⁶Russo M.T. «Nullus medicus nisi philosophus», La formazione filosofica del personale sanitario e i nuovi modelli di salute e malattia. In Morsello B., Cilona C. Misale F. a cura di. Medicina narrativa. Temi, esperienze e riflessioni, Roma-Tre Press, Roma: 2017.

¹⁷ Zannini L. Salute, malattia e cura. Teoria e percorsi di clinica della formazione per gli operatori sanitari. FrancoAngeli. Milano: 2013.

¹⁸ Rohr SO, Gerhard A, Schmidt F, et al. Thinking outside the box: students positive about visionary elective curricula in medical school. GMS J Med Educ . 2021; 38 (7): Doc 119. Published 2021 Nov 15. doi: 10.3205 / zma001515.

¹⁹Mamede S, Schmidt HG. The structure of reflective practice in medicine. Med Educ 2004; 38: 1302-8.

Epstein RM. Reflection, perception and the acquisition of wisdom. Med Educ 2008; 42: 1048-50.

Medical professionalism is therefore training work that integrates *scientific and human*²⁰, and which is substantiated in the care of the "*presence*" not only to other but also to oneself : the ²¹ opposite of a reductionist image according to which a good doctor has to "*disembodied himself*" to guarantee science.

5. COMPASSION AS POSTURE *ET* SCIENTIFIC *ET* POETIC

Good international practices take care of integrating soft skills into curricula of medical degree courses by combining "*knowledge by description*" and "*knowledge by acquaintance*" and thus enabling uncertainty crossing and reducing clinical error not only through the delegation to technology but by enhancing critical and conscious thinking skills ²².

In fact, the forms of transformative learning correspond to the learning of cognitive flexibility that reverberates in relational openness ²³and that require *disciplinary crossing* : "if you know only about medicine, you know nothing about medicine" is the synthesis expression of a series of training experiments international that allow medical students and doctors already to "work on the self" and on the questions that the experiences of failure, pain, death open in their *bio-professional* path, through conjugation of science with arts as reflective practices ²⁴.

²⁰London RCoPo . Doctors in society: medical professionalism in a changing world. London: Royal college of Physicians of London. 2005.

Cruess SR, Cruess RL. Teaching professionalism - why, what and how . Facts Views Vis Obgyn. 2012; 4 (4): 259–65. 11.

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Monrouxe LV, Rees CE. Healthcare professionalism: improving practice through reflections on workplace dilemmas. Oxford: Wiley; 2017. <https://doi.org/10.1002/9781119044475>.

Cruess RL, Cruess RS, Steinert Y. Teaching medical professionalism: supporting the development of a professional identity. Cambridge: Cambridge University Press; 2016. <https://doi.org/10.1017/CBO9781316178485>.

Monrouxe L. Identity, identification and medical education: why should we care? Med Educ. 2010; 44 (1): 40-9. <https://doi.org/10.1111/j.1365-2923.2009.03440.x>.

²¹Wald HS, Reis SP. Beyond the margins. Reflective writing and development of reflective capacity in medical education. J Gen Intern Med 2010; 25: 746-9.

²²Frank J. The CanMEDS physician competency framework. Better standards. Better physicians. Better care. Ottawa: The Royal College of Physicians and Surgeons of Canada; 2005. Zugänglich unter. available from: <http://www.royalcollege.ca/rcsite/canmeds/canmeds-framework-e>.

²³ Aukes LC, Geertsma J, Cohen- Schotanus J, Zwierstra RP, Slaets JP. The development of a scale to measure personal reflection in medical practice and education. Med Teach 2007; 29: 177-82.

²⁴ Bardes CL, Gillers D. and Herman AE. Learning to Look: Developing Clinical Observational Skills at an Art Museum. Medical Education. 2005. 35.12: 1157-1161.

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Promoting compassion in medicine therefore means not renouncing science but enhancing it, recognizing the systemic posture as *et scientific et poetic* pattern of skills: the conjunction point between science and poetry is research as an interior habitus and knowledge as openness to the mystery.

Caeiro C., Cruz EB and Pereira CM. Arts, literature and reflective writing as educational strategies to promote narrative reasoning capabilities among physiotherapy students. *Physiotherapy Theory and Practice*. 2014. 30 (8): 572-80.

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