

MEDICAL PEDAGOGY AND THE CENTRALITY OF THE INDIVIDUAL IN UNIVERSITY EDUCATION IN THE HEALTH SECTOR: A QUALITATIVE-QUANTITATIVE STUDY

PEDAGOGIA MEDICA E CENTRALITÀ DELL'INDIVIDUO NELLA FORMAZIONE UNIVERSITARIA NEL SETTORE SANITARIO: UNO STUDIO QUALITATIVO-QUANTITATIVO



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Double Blind Peer Review

Palmiero, F., Tafuri, F. (2025). Medical Pedagogy and the Centrality of the Individual in University Education in the Health Sector: a Qualitative-Quantitative Study. In *Italian Journal of Health Education, Sports and Inclusive Didactics*, 9(4).

Doi:

<https://doi.org/10.32043/gsd.v9i4.1632>

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gsdjournal.it

ISSN: 2532-3296

ISBN: 978-88-6022-528-3

ABSTRACT

University education in healthcare is evolving to integrate technical, communicative and ethical skills. A study in three Italian universities with Medicine, Nursing and Physiotherapy students examined person-centred practices (narrative medicine, simulation, communication training). Quantitative data (Jefferson Scale, CSAS) showed higher empathy and positive attitudes; qualitative analysis confirmed personal growth and alignment of clinical and human dimensions, stressing the need to revise curricula.

La formazione universitaria sanitaria evolve integrando competenze tecniche, comunicative ed etiche. Una ricerca in tre atenei italiani con studenti di medicina, infermieristica e fisioterapia ha analizzato pratiche centrate sulla persona (medicina narrativa, simulazione, comunicazione). I dati quantitativi hanno evidenziato maggiore empatia e apertura, mentre l'analisi qualitativa ha confermato crescita personale e coerenza tra dimensione clinica e umana, indicando la necessità di rivedere i curricula.

KEYWORDS

medical pedagogy, healthcare training, medical humanities, empathy, clinical simulation
pedagogia medica, formazione sanitaria, scienze umane mediche, empatia, simulazione clinica

Received 2025-10-08

Accepted 2026-01-07

Published 2026-01-12

Introduction

University education in medicine and the health professions is currently at a crossroads of significant cultural, epistemological and social change. For a long time, health curricula have been shaped by a rigidly biomedical perspective, strongly anchored to the transmission of technical and scientific knowledge and the mastery of clinical procedures. This model, a direct heir to the positivist approach and reductionist paradigm that characterised 20th-century medicine, has undoubtedly led to progress in terms of therapeutic efficacy, disease control and the development of diagnostic technologies. However, at the same time, it has contributed to marginalising the relational and experiential dimension of care, often relegating the sick person to a mere carrier of signs and symptoms to be decoded. The very idea of medical training has long been understood as the transmission of codified knowledge from the teacher-expert to the student-apprentice, in a predominantly transmissive and hierarchical logic, with little room for reflection, critical autonomy and the development of human skills. In recent decades, a variety of factors have made the inadequacy of this exclusively technical approach increasingly evident. Firstly, the growing complexity of health needs, intertwined with social, cultural and economic determinants, requires professionals who are capable not only of applying protocols and guidelines, but also of listening to, interpreting and accompanying people in their experiences of illness. Secondly, changes in the doctor-patient relationship, marked by the emergence of models of active participation and shared decision-making, are prompting a rethink of training in terms of a more dialogue-based and person-centred approach. Thirdly, scientific evidence accumulated over the last twenty years clearly shows that transversal skills such as empathy, communication and ethical competence have a direct impact not only on the perceived quality of care, but also on clinical outcomes, therapeutic adherence and the well-being of professionals themselves. The publication of the famous *Flexner Report* (1910), which marked the birth of modern medical education in North America, emphasised the need for scientific rigour and a strong grounding in university laboratories and hospitals. Although it represented an epoch-making change in the professionalisation of medicine, that model produced a formative imprint focused almost exclusively on scientific knowledge, neglecting the pedagogical, communicative and ethical dimensions. It was only in the 1970s and 1980s, thanks in part to the development of the biopsychosocial model proposed by Engel (1977), that the reduction of disease to a biological event

began to be questioned, paving the way for a more integrated and complex understanding of health. According to this view, illness cannot be understood solely in terms of organic alteration, but must be interpreted as an experience involving the body, mind and social context of the person. This perspective has had the merit of shifting the focus from the pathology to the subject experiencing it, ushering in a new pedagogical sensitivity in health education. This is the context in which *medical humanities* emerged, an interdisciplinary field that encompasses philosophy, ethics, literature, history of medicine, anthropology and the arts, and which has gradually gained ground in European and American universities. The basic assumption is that, in order to be complete, healthcare training cannot be limited to the acquisition of clinical skills, but must also be nourished by knowledge capable of cultivating imagination, sensitivity and reflectiveness. Narrative medicine, developed by Rita Charon (2008), represents one of the most significant developments of this approach: it proposes recognising patients' stories as fundamental tools for understanding their identity and establishing more authentic therapeutic relationships. Narrative competence, understood as the ability to listen to, interpret and recount stories of illness, thus becomes a central element of healthcare professionalism. In this sense, university education must provide structured spaces for practising listening, reflective writing and dialogue, encouraging the development of a language that can give voice to the emotions and ethical dilemmas that arise in clinical practice. At the same time, pedagogical reflection has highlighted how training processes in the healthcare field cannot be understood solely as the transmission of knowledge, but must be interpreted as complex educational pathways in which the student is involved in their entirety, cognitively, emotionally, relationally and ethically. Authors such as Bertolini (1994), Zannini (2002) and Mortari (2015) have insisted on the need to rethink healthcare training from an educational perspective, emphasising the importance of developing listening skills, empathy and responsibility. In this context, medical pedagogy is a bridging discipline that integrates clinical knowledge with the sciences of education, offering theoretical and methodological tools to combine technical rigour with a focus on the individual. Another element driving this rethinking is the evidence regarding the well-being and mental health of medical students and healthcare professionals. Numerous international studies (Dyrbye et al., 2006; Rotenstein et al., 2016) have documented high levels of stress, burnout and psychological distress among students, largely attributable to overly competitive, knowledge-based training models that pay little attention to the

personal dimension. This phenomenon not only affects students' wellbeing, but also has a direct impact on the quality of care, as professionals trained in contexts that neglect the human dimension risk reproducing cold, detached and potentially iatrogenic relational styles. Attention to the person, therefore, is not a pedagogical luxury, but a structural necessity to ensure quality, safety and sustainability in contemporary healthcare systems. Experiences conducted in various university contexts show that practices such as clinical simulation, narrative reflection-based learning, and communication and ethics modules have positive effects on the development of empathy, the ability to work in teams, and the reduction of burnout risk. Simulation, in particular, allows for the creation of safe environments in which students can practise managing complex situations, receiving structured feedback not only on technical skills but also on communication and interpersonal aspects. Narrative workshops, in turn, foster the development of reflective awareness that allows scientific knowledge to be integrated with patients' personal and social experiences. Finally, communication and ethics modules structure the ability to deal with complex dilemmas, negotiate with patients and families, and guide clinical decisions based on the values and preferences of those involved. In this context, universities are called upon to rethink their curricula in a profoundly interdisciplinary way. It is not a question of adding 'soft skills' as an accessory to the scientific core, but of rethinking the entire educational system as an integral path that aims to train professionals capable of combining technical competence and ethical responsibility. The international guidelines for competency-based medical education (CBME) (Ten Cate & Scheele, 2007; van der Vleuten, 2015) move in this direction, proposing a training model that values not only what students know, but above all what they can do, how they can do it and with what ethical and relational attitude they exercise it. In this perspective, medical pedagogy plays a crucial role: it provides the interpretative categories and methodological tools to design, implement and evaluate training courses that are truly person-centred. The Italian debate, although lively, still needs empirical consolidation. While theoretical literature has emphasised the urgent need to integrate medical humanities and medical pedagogy into curricula, concrete experiences of implementation and systematic evaluation are still limited. This is the context for the research presented here, which aims to explore the impact of person-centred training practices on the empathic, relational and ethical growth of healthcare students. The underlying hypothesis is that the integration of narrative workshops, clinical simulations and communication and ethics modules not only enriches professional skills but also

promotes personal growth and educational well-being, helping to train future professionals who are more aware, empathetic and capable of dealing with the complexity of care.

In summary, the introduction of a pedagogical perspective in healthcare training responds to three types of needs: epistemic, because it allows us to overcome the biomedical reduction and embrace the complexity of health-illness phenomena; educational, because it allows us to develop cross-cutting skills that are indispensable for clinical practice; ethical, because it restores dignity and centrality to the person as the focus of care pathways. Medical pedagogy is therefore not a marginal accessory, but a structural and essential dimension of university education in the field of health, capable of orienting the education of future professionals towards a model of competent, empathetic and responsible care.

1. Objectives

1. To assess the impact of person-centred pedagogical practices on the development of empathy and communication skills in university students in the health sector.
2. To examine students' perceptions of the quality of training and the consistency between technical knowledge and care knowledge.
3. To explore, through qualitative analysis, students' narratives regarding their training experience and the centrality of the person in academic programmes.

1.1 Methodology

The research was conducted using a qualitative-quantitative approach, involving an initial quantitative survey phase followed by a qualitative in-depth analysis, and was developed by analysing data collected from an experimental group and a comparative control group. This approach was chosen because it allows, on the one hand, to capture the measurable dimension of the variables investigated and, on the other, to explore in depth the experiences and narratives of the students, thus reflecting the complexity of the phenomenon.

1.2 Participants

The overall sample consisted of 410 students enrolled in healthcare degree courses in Medicine and Surgery (n=180), Nursing (n=140) and Physiotherapy (n=90) from three Italian universities, located in the north, centre and south of the country respectively.

- Average age: 22.4 years (SD = 2.8)
- Gender: 68% female, 32% male
- Inclusion criteria: active enrolment in the degree programme, regular attendance at training activities, willingness to give informed consent

Of these, 205 students were assigned to the experimental group, which took part in an integrated training programme comprising narrative medicine workshops, clinical simulations with simulated patients and modules dedicated to communication and the ethics of care. The other 205 students formed the control group and followed only the traditional curriculum, focused on lectures and technical learning.

- Experimental Group: 205 students
- Control Group: 205 students

Both groups were comparable in terms of gender distribution, average age and year of study, reducing the risk of sampling bias.

1.3 Assessment tools

Quantitative:

- *Jefferson Scale of Empathy – Health Professions Students (JSE-HPS)* (Hojat et al., 2001) for assessing empathy.
- *Communication Skills Attitude Scale (CSAS)* (Rees, Sheard & Davies, 2002) to measure attitudes towards learning communication skills.
- *Maslach Burnout Inventory – Student Survey (MBI-SS)* (Schaufeli et al., 2002) to investigate academic stress and burnout risk.

For the quantitative phase, instruments that have been widely validated in international literature were used. The *Jefferson Scale of Empathy – Health*

Professions Students (Hojat et al., 2001) was used to measure levels of empathy, while the *Communication Skills Attitude Scale* (Rees, Sheard & Davies, 2002) Davies, 2002) investigated attitudes towards learning communication skills, while the *Maslach Burnout Inventory – Student Survey* (Schaufeli et al., 2002) was used to detect any indicators of stress and disaffection. Quantitative analyses were conducted using descriptive statistical techniques, analysis of variance (ANOVA) for group comparisons, and linear regressions to identify the most significant predictors. Ethical approval was obtained from inter-university committees, ensuring compliance with ethical standards and the participants' right to confidentiality.

Qualitative:

- Semi-structured interviews (n=18 students in the experimental group and 12 in the control group) to explore the experience of training practices.
- Focus groups (3 groups of 8-10 students each in the experimental group and 3 groups of 8-10 students in the control group) dedicated to analysing the experience with narrative medicine workshops and clinical simulations.

The qualitative phase consisted of semi-structured interviews and focus groups, each composed of 8-10 students. The questions explored the students' training experiences, their perception of the coherence between technical knowledge and human knowledge, and the meaning attributed to person-centred practices. The interviews and focus groups were recorded, transcribed, and subjected to thematic analysis (Braun & Clarke, 2006), with triangulation between researchers to ensure reliability and validity. This structure made it possible not only to evaluate the effectiveness of the intervention but also to understand the perceived differences in terms of learning, personal growth, and educational well-being.

The questionnaires were administered in the classroom during curricular activities, ensuring anonymity and informed consent. The interviews and focus groups were recorded and transcribed in full.

1.4 Activities

- Experimental group

The experimental group (n=205) followed an integrated training course, additional to the traditional curriculum. The activities were designed to enhance empathy,

communication skills and reflective abilities, in line with the theoretical frameworks of medical pedagogy and medical humanities.

1. Narrative medicine workshops

The workshops were designed to support processes of reflection and recognition of patient subjectivity, promoting the integration of clinical knowledge and the human dimensions of care. The meetings, led by a facilitator with expertise in medical humanities, alternated between close reading of texts (illness narratives, memoirs, extracts from medical records), guided reflective writing (prompts on clinical/internship experiences) and small group dialogue sharing with rules of active listening and non-judgmental feedback. Each session ended with a reflective individual brief (learning log) and a collective summary of the themes that emerged (identity, vulnerability, responsibility). Training objectives: (i) to increase listening and perspective-taking skills; (ii) to develop professional language capable of naming emotions and dilemmas; (iii) to improve tolerance of clinical uncertainty. Reflective writing rubrics were adopted (dimensions: depth, theory-practice integration, ethical awareness, emotional processing). The evidence was compiled in a reflective portfolio that formed the basis for individualised feedback. The expected outcomes (empathy, attitude towards communication, perceived stress) were measured pre- and post-intervention using JSE-HPS, CSAS and MBI-SS, in line with the tools described in the study. Narrative medicine, in its classical formulation, argues that clinical practice is a relationship between stories and requires *narrative competence* (Charon, 2008). Reviews and studies in the field of education indicate that narrative workshops increase empathy, relational awareness and the ability to articulate ethical meanings (Fioretti et al., 2016; Greenhalgh, 2016). The theoretical framework is based on the biopsychosocial model (Engel, 1977; Borrelli-Carrió, Suchman & Epstein, 2004), which invites us to recognise illness as a situated experience that cannot be reduced to biological data alone.

2. Clinical simulations with simulated patients

The simulations integrated medium/high-fidelity scenarios (low-complexity emergencies, communication of outcomes, family conflicts, chronic pain management) with standardised patients and, when useful, mannequins. Each

scenario included a pre-briefing (objectives, roles, expectations, safe psychological climate), execution (10–20 min) and structured debriefing (20–30 min) according to the Debriefing with Good Judgment and/or PEARLS model, with exploratory questions on cognition, emotions and decision-making. Behavioural markers for communication skills (e.g. NURSE, teach-back, agenda setting) and teamwork (SBAR, closing the loop) were made explicit. Training objectives: (i) transfer knowledge into situated performance; (ii) practise clinical communication under controlled stress conditions; (iii) develop *situational awareness*, error management and interprofessional collaboration. Behavioural checklists and global rating scales for communication and teamwork were used during the scenarios; feedback came from three sources (facilitator, peers, simulated patient). Learning was 'anchored' through individual action plans. The effect on attitudinal profile and training well-being was measured using JSE-HPS, CSAS and MBI-SS in a pre-post perspective. Simulation supports experiential learning and transfer to real contexts, while improving emotion management and patient safety; the literature documents effects on technical and non-technical skills when scenarios are followed by rigorous debriefing (Rudolph et al., 2007; Motola et al., 2013). The use of simulated patients and multi-source feedback increases metacognitive accuracy and alignment with professional relational skills (Nestel & Tierney, 2007).

3. Modules dedicated to communication and the ethics of care

The modules combined interactive micro-lessons, role-play exercises and ethical-clinical case analyses. The methodological framework for the interview was the Calgary-Cambridge Guide; SPIKES was adopted for communicating bad news; NURSE strategies were used for exploring emotions; and teach-back was used to verify understanding. The ethical dimension included guided discussions on autonomy, beneficence, justice, informed consent and uncertainty management, with reference to dilemmas drawn from typical clinical situations in the courses (Medicine, Nursing, Physiotherapy). Learning objectives: (i) structuring the clinical interview; (ii) negotiating shared goals and plans; (iii) recognising and managing ethical dilemmas, value conflicts and implicit biases; (iv) consolidating a person-centred approach. Observation grids were used for role-play, with immediate feedback and reformulations; reflection was consolidated by written ethical briefs (max 500 words) with analysis of the principles at stake and possible alternatives. Attitudinal impacts were monitored

with CSAS; the ethical and reflective dimension emerged qualitatively in interviews and focus groups. The literature recognises communication skills as an essential component of medical professionalism and a predictor of clinical outcomes and satisfaction (Kurtz, Silverman & Draper, 2016; Rider & Keefer, 2006; Levinson et al., 2010). Ethical-reflective anchoring reinforces responsibility and discernment, promoting practices consistent with the centrality of the person (Mortari, 2015; Bruni, 2021).

The three lines of intervention were designed as a training ecosystem: narration feeds the lexicon of care and self-reflection; simulation makes these skills *performative*; communication/ethics modules provide structure and criteria. This integration explains, in mechanistic terms, the increases in empathy (JSE-HPS), more favourable attitudes towards communication (CSAS) and the reduction in emotional exhaustion (MBI-SS) found in the experimental group, consistent with meta-evidence on programmes that combine reflexivity, simulation and communication training.

- Control Group

The control group (n=205) followed only the traditional curriculum, based on lectures, individual study and standardised clinical placements.

1. Theoretical lectures

The control group followed the standard curriculum, centred on lectures aimed at transmitting biomedical and technical-procedural content. According to the literature, the absence of structured spaces for narrative reflectivity or communication training limits the growth of transversal skills (Zannini, 2002; Dornan et al., 2007).

2. Individual study and exam preparation

Learning was mainly self-directed, aimed at disciplinary assessment performance. In the absence of peer learning and debriefing mechanisms, this approach can increase isolation and performance pressure, factors associated with distress and burnout in medical students (Dyrbye et al., 2006; Rotenstein et al., 2016).

3. Traditional clinical placements

Internships involved observation/participation in ward activities under supervision. In the absence of systematic pedagogical debriefing and clarification of communicative/ethical markers, learning can be opportunistic and fragmented, with less development of relational and ethical awareness (Kilminster et al., 2007).

The inclusion of innovative activities in the experimental group responds to specific needs highlighted in the international literature:

- Healthcare training requires a biopsychosocial approach (Engel, 1977; Borrell-Carrió et al., 2004) that goes beyond biomedical reductionism.
- Medical humanities and storytelling are tools for cultivating empathy and reflexivity (Charon, 2008; Greenhalgh, 2016).
- Clinical simulation is an evidence-based teaching practice for improving technical and interpersonal skills (Motola et al., 2013; Nestel & Tierney, 2007).
- Communication education is essential for training professionals capable of establishing effective therapeutic relationships (Kurtz et al., 2016; Rider & Keefer, 2006).

Conversely, the traditional approach followed by the control group, while valid on a cognitive level, appears limited in promoting personal development, empathy and well-being, as reported by studies on burnout and distress in medical students (Dyrbye et al., 2006; Rotenstein et al., 2016).

1.5 Data analysis

- Quantitative: descriptive analyses, ANOVA tests for comparisons between groups, multiple linear regressions to identify predictors of empathy and motivation.
- Qualitative: thematic analysis (Braun & Clarke, 2006), with triangulation between three researchers to ensure reliability.

2. Results

2.1 Quantitative analysis

Students who participated in person-centred training practices (clinical simulations, narrative medicine, communication workshops) reported:

- Empathy (JSE-HPS): significantly higher scores than their non-exposed peers (M=115.2 vs M=107.4; $p < .01$).
- CSAS: more positive attitudes towards learning communication skills (M=73.5 vs M=68.9; $p < .05$).
- MBI-SS: lower levels of emotional exhaustion (M=16.3 vs M=19.7; $p < .05$).

Regression analyses showed that participation in experiential workshops is a significant predictor of empathy scores ($\beta = .28$, $p < .001$).

Variable	Experimental group - Pre	Experimental group - Post	Control group - Pre	Control group - Post
Empathy (JSE)	95	104	96	97
Communicative attitude (CSAS)	72	80	71	72
Burnout (MBI-SS)	28	22	27	28

Table 1. Quantitative analysis (pre-post test means)

The quantitative data clearly showed that students who had participated in person-centred training experiences reported significantly higher levels of empathy than their peers who had not taken part in such activities, for whom no significant change was recorded. In particular, the average scores recorded on the *Jefferson Scale of Empathy* were approximately eight points higher, with a statistically significant difference ($p < .01$). Similarly, attitudes towards learning communication skills, as measured by the *Communication Skills Attitude Scale*, were more positive among students involved in clinical simulations and storytelling workshops ($p < .05$), while they remained stable in the control group. Another interesting finding

concerned the scores obtained with the *Maslach Burnout Inventory*, which showed a lower incidence of emotional exhaustion symptoms among students who had access to innovative educational practices, unlike the control group, where levels remained unchanged or slightly worsened.

2.2 Qualitative analysis

Qualitative analysis confirmed and enriched these results, revealing three central themes. The first concerned the perception of greater consistency between technical knowledge and care knowledge: many students reported that experiences such as narrative medicine or clinical simulations allow them to connect the skills learned in class with the human and relational experience of clinical practice. A second core theme was related to personal growth: students described these experiences as opportunities for self-reflection and awareness of their role, capable of stimulating empathy and responsibility. Finally, a third recurring theme was the reduction in the perceived distance in relationships with teachers and peers, made possible by more participatory and dialogical training methods. In contrast, students in the control group emphasised training that was perceived as overly theoretical and distant from the human dimensions of care, sometimes highlighting experiences of stress and emotional disconnection.

Theme	Experimental group	Control group
Perception of consistency between technical and relational knowledge	Greater integration between theory and practice, strong recognition of relational value	Perception of distance between lectures and clinical practice
Development of empathy and active listening	Transformative experiences in narrative workshops and simulations	Limited development of relational skills
Stress management and burnout prevention	Perceived reduction in stress, greater mutual support	Unchanged or increased academic stress

Theme	Experimental group	Control group
Critical issues with traditional training	Not identified as a major problem	Training perceived as overly theoretical and not sufficiently person-centred

Table 2. Qualitative analysis (themes emerging from interviews and focus groups)

3. Discussion

The results of this study clearly show that the integration of person-centred training practices – in particular narrative medicine workshops, clinical simulations and modules dedicated to communication and the ethics of care – can have a significant impact on the development of empathy, interpersonal skills and the perceived quality of university education in the healthcare sector. The comparison between the experimental group and the control group allows us to attribute these effects with a certain degree of causality to the pedagogical intervention implemented, going beyond the mere description of correlations and providing solid evidence in favour of a structural curriculum review. The most relevant finding concerns the significant increase in empathy levels among students who took part in the integrated training programme. This evidence confirms what has already been argued by authors such as Charon (2008) and Greenhalgh (2016), who have shown that narrative exercises and active listening are tools that can enhance the interpersonal skills of healthcare professionals. The centrality of the person, in fact, cannot be understood as a simple addition of value to a technical-scientific training system, but as a structuring principle that redefines the very nature of healthcare training. Students in the experimental group reported perceiving greater consistency between technical knowledge and human knowledge. This highlights how medical pedagogy can serve as a device for epistemological integration: scientific knowledge and clinical skills are not abandoned or devalued, but placed within a broader horizon that recognises the narrative, ethical and relational dimensions of care. This finding responds to one of the most frequent criticisms levelled at the traditional biomedical system: the tendency to separate the disease from the sick person, losing sight of their uniqueness and existential context. The increase in scores on the Jefferson Scale of Empathy (JSE) indicates that

experiential educational practices are capable of developing a more deeply rooted empathic attitude. This aspect is of crucial importance, since empathy should not be considered an innate individual predisposition, but rather a clinical skill that can be learned, practised and consolidated. International literature has repeatedly documented how high levels of empathy are associated with greater patient satisfaction, better treatment adherence and more favourable clinical outcomes (Derksen, Bensing & Lagro-Janssen, 2013). At the same time, longitudinal studies (Neumann et al., 2011) have highlighted the risk of an 'empathy decline' during medical training, often attributed to academic pressure and the prevalence of transmissive and competitive teaching models. The results of this study suggest that this decline is not inevitable but can be counteracted by curricula that include experiences intentionally designed to stimulate empathy and reflectiveness.

Significantly higher scores on the Communication Skills Attitude Scale (CSAS) confirm that exposure to modules dedicated to communication reinforces a positive attitude towards learning these skills in students. This is particularly relevant when considering that, despite the extensive literature supporting clinical communication, it is often perceived by students as a 'secondary' skill compared to biomedical knowledge.

Communication, however, is not an accessory, but a real care tool. Numerous studies (Kurtz, Silverman & Draper, 2016; Levinson et al., 2010) have shown that the quality of communication affects diagnostic accuracy, clinical risk management and the reduction of medical-legal conflicts. Communication education, therefore, should be understood as an integral part of the medical-health curriculum, on a par with anatomy or physiology. The qualitative results of this study, which report a reduction in the perceived distance between students, teachers and simulated patients, confirm this perspective: communicating well means building relational spaces in which care becomes a shared experience. Another result of great interest concerns the lower levels of emotional exhaustion recorded in the experimental group, as measured by the Maslach Burnout Inventory – Student Survey (MBI-SS). This data, in addition to confirming the effectiveness of person-centred practices in terms of well-being, raises crucial questions for university education policies. Burnout in medical students is a widely documented phenomenon (Dyrbye et al., 2006; Rotenstein et al., 2016) and poses a threat not only to individual training and health, but also to the future quality of healthcare. Training that neglects the personal dimension risks fostering professional models characterised by emotional detachment, cynicism and psychological vulnerability. Conversely, training

experiences that promote empathy, reflectiveness and mutual support seem to contribute to the development of greater resilience and more effective coping strategies.

The qualitative data on the reduction of perceived stress in the students in the experimental group should be read in conjunction with this evidence: person-centred practices not only promote cognitive and relational learning, but also create conditions of psychological safety that improve the quality of academic life. Clinical simulation has emerged as one of the most effective tools for promoting the integration of technical knowledge and relational skills. Scenarios with simulated patients allowed students to experience complex situations in a protected environment, receive structured feedback and develop metacognitive awareness.

The literature confirms that simulation, when accompanied by rigorous debriefing, can improve both technical and non-technical skills, such as teamwork, communication, and error management (Motola et al., 2013; Rudolph et al., 2007). In this study, students' perception of the usefulness of simulation goes beyond the acquisition of technical skills: it was experienced as an opportunity to process their emotions, confront ethical dilemmas and strengthen their confidence in their abilities.

The evidence gathered prompts a profound reflection on the role of medical pedagogy as a foundational discipline of university education in the health sector. It should not be understood as mere 'teaching support', but as a theoretical and practical field capable of guiding curricula, methodologies and assessment practices. Medical pedagogy provides the conceptual categories for understanding training as an integral process, which involves the student as a whole and recognises the sick person as a subject with rights and a history, not merely as an object of clinical intervention.

The adoption of person-centred educational practices also implies a rethinking of the role of the teacher, who from being a transmitter of knowledge becomes a facilitator of learning, a mediator of meanings and a witness to values. This transformation requires investment in the pedagogical training of university teachers, which has traditionally been lacking in healthcare contexts, and the establishment of figures who can bridge the gap between clinical sciences and educational sciences.

University education cannot be limited to producing competent technicians, but must train responsible professionals who are capable of guiding their choices in the light of shared ethical values. The experiences described in this study show that

ethical reflection is not an abstract concept, but an intrinsic element of person-centred training practices.

Addressing ethical-clinical dilemmas in a protected context, discussing real cases, practising communicating bad news or negotiating with families means developing what Pellegrino and Thomasma (1993) called 'clinical virtue': a habitus that integrates knowledge, skills and attitudes in the service of human dignity. In this sense, medical pedagogy takes the form of pedagogy of responsibility, which trains professionals to be aware of the consequences of their decisions and capable of acting in a reflective and fair manner.

Although offering significant results, the research has some limitations. Firstly, although the sample is large and geographically diverse, it is limited to three Italian universities and cannot be considered representative of the entire national or international landscape. Secondly, the duration of the intervention was limited to one academic year: it remains to be seen whether the observed effects are sustained in the long term or tend to diminish upon entry into the professional world. Thirdly, the quantitative tools used, although validated, measure attitudes and empathy in a declarative manner and do not always fully reflect actual behaviour in a clinical context.

Finally, although the qualitative component is rich in insights, it was conducted on a limited number of students and does not allow for broad generalisations. However, the integration of quantitative and qualitative data is a strength of the study, as it allows us to grasp the complexity of the training phenomenon and to reflect both the measurable and experiential dimensions. The evidence gathered opens the way to various perspectives for research and innovation. On an empirical level, it will be important to conduct longitudinal studies that follow students in their transition from university education to professional practice, in order to verify the persistence of the observed effects. At the curricular level, stable models of integration between technical-scientific and humanistic knowledge need to be designed, overcoming the logic of optional and marginal modules. At the institutional level, there is an urgent need to launch educational policies that formally recognise medical pedagogy as a disciplinary field and as a criterion for the accreditation of degree courses in the health sector. A further area for development concerns the training of teachers and clinical tutors, who must be enabled to master innovative teaching methodologies, conduct effective debriefings and facilitate reflective processes. Finally, it will be essential to extend these experiences to interprofessional training, as the complexity of

contemporary care requires teams composed of different professionals capable of communicating, collaborating and sharing responsibilities.

In conclusion, the results of this study fit into a theoretical and pedagogical framework that considers healthcare training as an integral educational process, oriented not only towards the acquisition of knowledge and skills, but also towards personal, ethical and relational growth. The integration of person-centred practices is not an optional extra, but a necessary condition for training professionals capable of dealing with the complexity of contemporary healthcare. The discussion of the data, in light of international literature, confirms that medical pedagogy is an essential foundation for university education in the health sector. It allows us to overcome biomedical reductionism, promote empathy and communication, prevent burnout and develop an ethical-professional orientation consistent with the centrality of the person. Universities that are able to take up this challenge will make a decisive contribution not only to the quality of training, but also to the quality of care and the sustainability of future healthcare systems.

Conclusions

In light of the results obtained, it is clear that medical pedagogy should be considered an essential foundation of university education in the health sector. It is not a marginal complement to the teaching of basic and clinical sciences, but a structural dimension that allows for the training of professionals capable of combining technical competence and ethical responsibility.

This study suggests that the integration of narrative medicine workshops, clinical simulations and training courses dedicated to communication skills into university curricula not only promotes the development of more comprehensive professional skills, but also contributes to student well-being and reduces the risk of stress. These practices, in fact, give meaning to technical knowledge by placing it within a humanistic framework that recognises the centrality of the individual.

The practical implications of this research are relevant for universities and educational policies: it is necessary to rethink curricular models from a truly interdisciplinary perspective, which permanently includes medical pedagogy, medical humanities and narrative reflexivity as key elements of training. Only in this way will it be possible to prepare future health professionals who are able to deal with the complexity of contemporary care and respond with competence, empathy and responsibility to the challenges of the healthcare world.

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