Editorial

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Beyond Disciplinary Silos: The Power of Interdisciplinary Care and Research

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Mario's history

Mario is 78 years old and has been living with type 2 diabetes for over 20 years. His most recent HbA1c is slightly above target, and his treatment plan appears straightforward on paper: metformin and an insulin injection each evening. But Mario's situation is a bit complex. He lives alone and has mild cognitive impairment, which sometimes makes it difficult for him to remember whether he has already taken his evening insulin; some days he takes it twice. He also suffers from peripheral neuropathy, which has reduced sensation in his feet, so a small blister from an ill-fitting shoe went unnoticed for days before becoming an open wound. One evening, Mario administered two insulin injections without realising it. The following day, he experienced an unrecognised episode of hypoglycemia and fell home. Since then, he has become anxious about walking outside, moving less and eating irregularly, making his glucose levels even more difficult to predict.

Disciplines around Mario

In this complex situation, we could think that nursing could help Mario cope. But Mario also needs the work of many other disciplines: Diabetology, to reassess his insulin regimen in light of his recent hypoglycemic episode; podiatry, to treat his foot wound; physiotherapy, to address his risk of fall and rebuild his confidence in moving safely; and social work, to reduce his isolation and connect him with the community support he needs.

Good prescriptions

In practice, all of these specialists may visit Mario, examine him carefully, and each issue their own "good prescription". The nurse could educate Mario to diabetes self-care, to properly administer insulin and be aware of the first symptoms of hypoglycemia; the diabetologist, mindful of Mario's recent hypoglycemic episode, could appropriately re-establishes his insulin dose and diet; the podiatrist could prescribe special shoes; the physiotherapist could prescribe resistance exercises and balance training, to rebuild the muscle strength and confidence he lost after becoming afraid to walk outside; finally, the social worker could suggest Mario to live less in isolation and to meet other people in the neighborhood. Mario has received good prescriptions from many disciplines, yet his problems remain. Together, without coordination, all these specialists have

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even made Mario's life more complex.

Controlling for confounders

In research, we find similar situations when different disciplines work alone. The result is not many prescriptions as in Mario's history, but incomplete evidence, each valid within its own frame but insufficient to explain the phenomenon as a whole.

Let us consider research on falls among older adults with diabetes, a problem that, much like Mario's case, does not belong to any single discipline. A nursing study may focus on medication adherence and self-care behaviours, examining how missed or duplicated insulin doses contribute to falls, with recommendations centred on monitoring and patient education. A diabetology study, working independently, can instead identify hypoglycemia and glycaemic variability as the main drivers of falls, designing its analysis, variables, and recommendations entirely around glucose control. A podiatry study, in turn, may indicate neuropathy and altered gait mechanics attributed to falls, to loss of sensation and impaired proprioception on the feet. Instead, a physiotherapy study may emphasise muscle weakness and poor balance, proposing strength and balance training as the primary solution. And a social work study can highlight living alone and social isolation as the underlying risk factors, with recommendations centred on community resources. Each of these studies, read on its own, offers a coherent and well-supported explanation. However, each is incomplete.

The danger is not that any of these findings is wrong. The reason is that none of them alone can account for how these factors interact in a real person's life. A patient like Mario does not fall because of hypoglycemia, or insufficient self-care, or because of cognitive impairment, or because of neuropathy: he falls because all these factors converge and amplify one another. When research is conducted in disciplinary silos, Mario's real, lived experience remains invisible. Each discipline measures its own variables, controls for the others as "confounders" to be adjusted away, and publishes within its own journals. Disciplines evolve, but Mario's problems remain.

The power of interdisciplinary approaches

An interdisciplinary approach in clinical practice and in science is different. A first example could be the study by Zhuang et al. (2025). In this trial, which enrolled 216 hospitalized older patients with type 2 diabetes, participants were randomly assigned to receive either standard care, with specialists working in silos, or interdisciplinary care with different specialists working together. After 26 weeks, the results were clear: patients in the interdisciplinary group showed significant improvements not only in glycaemic control, measured by fasting blood glucose and HbA1c, but also in body mass index, lipid profiles and renal function, compared to those who received standard care in silos. Almost as importantly, their quality of life improved in several dimensions, including emotional function, vitality, and social functioning.

A second example comes from Ireland (Cassarino et al., 2021), where researchers tested whether an interdisciplinary team could improve the care of older adults in a very different setting: the emergency department (ED). Older adults are frequent ED users and their visits are often marked by complex, overlapping needs that a single clinician has little time to fully address during an acute presentation. In this single-site randomised controlled trial, 353 patients aged 65 and older, with lower urgent complaints at a university hospital in Ireland, were randomly assigned to receive regular ED care or early assessment and intervention by a dedicated interdisciplinary team of health and social care professionals (a social worker, an occupational therapist, and a physiotherapist) working together rather than being consulted separately. The results showed that this coordinated interdisciplinary assessment reduced the length of stay in the emergency department, lowered the risk of hospital admission, and improved patient satisfaction, compared to standard care. As with Mario, the point was not that any single discipline was missing from usual care but that bringing these disciplines together, working jointly from the moment of assessment rather than in sequence, changed the outcome itself.

The above single studies are only two examples, but we have even stronger evidence synthesised in systematic reviews and meta-analyses (Xu et al., 2024). A 2024 systematic review and meta-analysis pooled data from 18

randomized controlled trials to evaluate the effect of comprehensive geriatric assessment, an interdisciplinary diagnostic and care-planning process, much like the one Mario would need, on older adults with frailty in hospital settings. The results showed that patients who received this coordinated multidimensional assessment had a significantly lower risk of death compared to those receiving standard care. They also showed a reduced risk of losing independence in daily activities compared to usual care.

All this evidence says that when disciplines assess and plan care together around the same person, rather than issuing separate, uncoordinated prescriptions, as happened initially with Mario, the benefit is not marginal or theoretical: it can be measured in lives saved and independence preserved.

Why is collaboration so hard?

If an interdisciplinary approach is so productive in terms of patient outcomes, why do disciplines struggle to work together? The literature itself offers an answer (Wei et al., 2022). A 2022 systematic meta-review, synthesising 36 systematic reviews on interprofessional collaboration in healthcare, identified barriers operating at three distinct levels: organisational, team, and individual. At the organisational level, rigid hierarchies, competing priorities, and a lack of institutional structures for shared decision-making make coordination difficult before clinicians even meet. At the team level, unclear role definitions and professional "silos", with each discipline sticking to its own function, limit the kind of ongoing communication that Mario's case would require. At the individual level, deeply ingrained professional hierarchies still shape everyday practice: a nurse may hesitate to question a physician's decision, a junior clinician may stay silent in front of senior colleagues, and each professional may simply assume that other disciplines are already aware of their reasoning, when in fact they could not. None of this reflects a lack of competence or goodwill. It reflects the fact that health systems and often the education that trains health professionals have historically been built around single disciplines working in parallel and not around a structured integration that patients like Mario actually need.

Building the conditions for collaboration

Fortunately, this is not an unaddressed problem. Several models and frameworks, developed over the past two decades, offer concrete guidance on how to move from disciplines working in parallel to disciplines working together. The World Health Organization's Framework for Action on Interprofessional Education and Collaborative Practice, published in 2010, remains the most widely referenced starting point (World Health Organization, 2010—Figure 1). It calls on policy-makers, educators, and health workers to embed interprofessional education and collaborative practice into the services they deliver, arguing that fragmented, single-discipline systems must be redesigned around teams if healthcare is to respond adequately to complex patient needs. At a more theoretical level, D'Amour and colleagues (2005) proposed a model of collaboration that identifies the conditions collaboration actually depends on: a shared vision of the patient's goals, mutual acknowledgment of each other's expertise, clear governance of how decisions are made, and formal structures, such as shared protocols and documentation, that make coordination possible rather than incidental. Applied to Mario's case, this model helps explain precisely what was missing: not clinical competence, which none of his specialists lacked, but the shared vision and formal structures that would have let his nurse, diabetologist, podiatrist, physiotherapist, and social worker build one coherent plan instead of six separate ones. These frameworks converge on the same conclusion: interdisciplinary collaboration is not simply a matter of goodwill or proximity. It is a competency that can be defined, taught, and structurally supported. Its absence, as Mario's case shows, is not a personal failing of any single clinician but a systemic gap that health systems, and the education that prepares health professionals, must deliberately close.

The Role of IJNH

When we developed the *Interdisciplinary Journal of Nursing and Health* (IJNH), our idea was that the product of more disciplines working together is more than the product of every single discipline. This is precisely the space for which

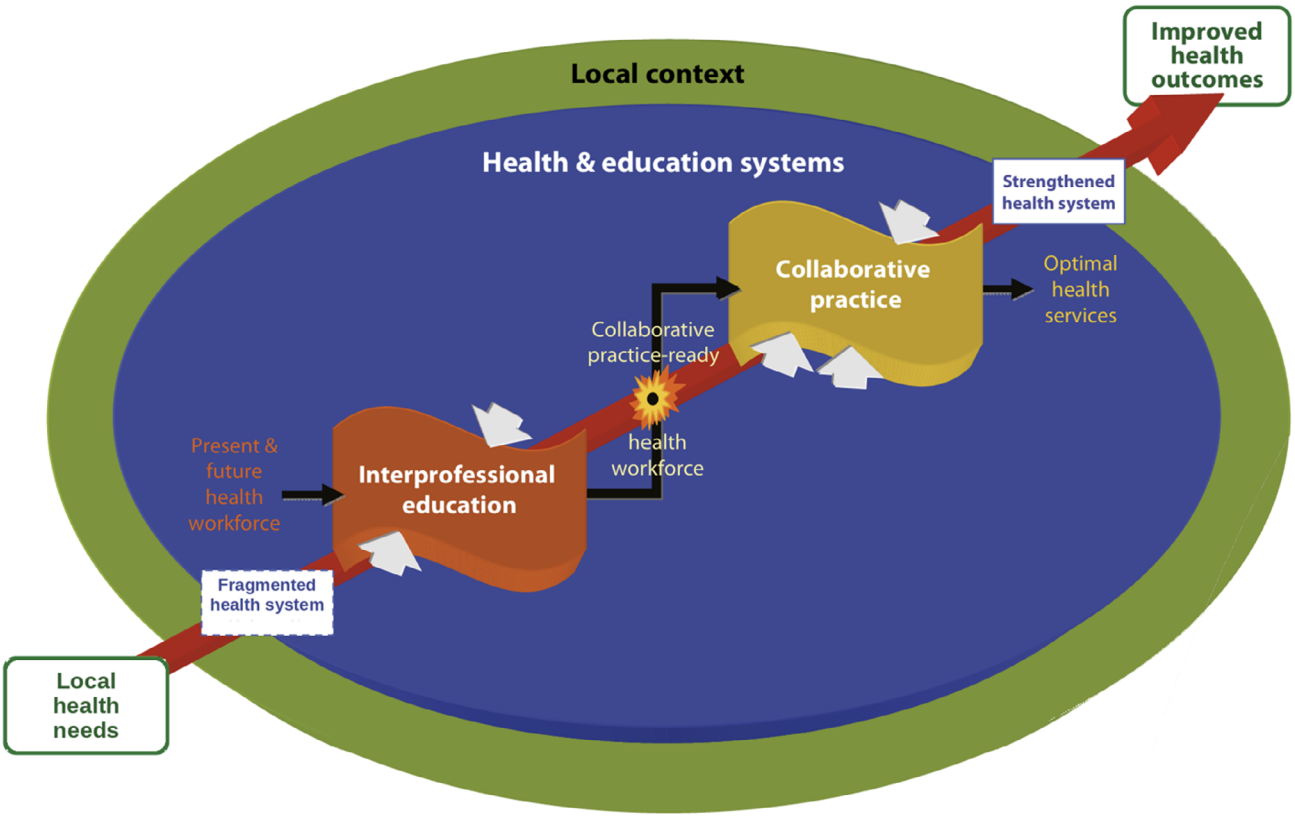


Figure 1. The WHO framework for interprofessional education and collaboration.
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the IJNH was created. When we launched this journal, our founding editorial (Vellone et al., 2025) stated that health is not the exclusive domain of any single profession, but the intersection of biological, psychological, social, cultural, economic and environmental factors, and that isolated disciplinary approaches are insufficient to address the challenges of our time. Mario's case is a concrete illustration of exactly this claim: his story could not be fully told, let alone resolved, within the pages of a single-discipline journal.

The contribution of IJNH's to the field lies precisely in refusing that fragmentation. We actively welcome and seek research that bridges nursing, medicine, psychology, sociology, public health, pharmacy, rehabilitation sciences, and beyond, not as separate submissions filed under separate headings, but as scholarship that speaks across these boundaries in a single integrated voice. This does not mean that we have already achieved this objective, but we are moving forward ...

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