

The ERPHAN research unit: pioneering pluridisciplinary research in rehabilitation in France

Céline Bonnyaud ^{1,2}, Loïc Josseran ^{3,4}, François Genêt ^{5,6,7}, Djamel Bensmail ^{6,8}, Christophe Kassel⁹, Erik Domain¹⁰ and Samuel Pouplin ^{2,11}

¹Motion analysis laboratory, Functional explorations, Raymond Poincaré hospital, GHU Paris Saclay, APHP, France, ²Paris-Saclay University, UVSQ, Erphan Research unit, 78000, Versailles, France, ³Paris-Saclay University, UVSQ, Inserm, CESP, 94807, Villejuif, France, ⁴Public health department, Raymond Poincaré hospital Garches, GHU Paris Saclay, APHP, France, ⁵Physical Medicine and Rehabilitation Department, Perioperative Operating of Handicap Unit, Parasport Health Centre, Raymond Poincaré hospital, Garches, GHU Paris Saclay, APHP, France, ⁶Paris-Saclay university, UVSQ, Inserm, END-ICAP, Versailles, France, ⁷ISPC Synergies, Paris, France, ⁸Physical Medicine and Rehabilitation Department, Raymond Poincaré hospital Garches, GHU Paris Saclay, APHP, France, ⁹GHU Paris Saclay, APHP, France, ¹⁰Clinical Research and Innovation Department, APHP, France, ¹¹New Technologies Platform, Physical Medicine and Rehabilitation Department, Raymond Poincaré hospital Garches, GHU Paris Saclay, APHP, France.

DOI: 10.52057/erj.v4i1.49

ISSN: 2823-989X

Context

Compared to their foreign counterparts, the contribution of French allied health professionals (physiotherapists, occupational therapists, speech therapists, podiatrists, nursing staff...) to research output has been rather poor. Engaging professionals in research, however, remains essential to question clinical practice, disseminate knowledge and favour the ongoing development of rehabilitation sciences. Research should provide the foundation for high quality, evidence-based interventions. The aim of clinical research is to improve understanding of disease, to identify effective evaluation and therapeutics. It is a way to optimize function and address the situation which incurs disability [1].

The absence of university career pathways for allied health professionals (concerning aforementioned professions, not doctor in physical medicine and rehabilitation - PMR) in France has led to many rehabilitation professionals to complete doctorates in other disciplines including movement science, educational science, public health and psychology. While doctorates in rehabilitation science have existed for several years in other countries (USA, Canada, Portugal...), this is not the case in France. Nonetheless, the context has recently changed following a ministerial report by Stéphane Le Bouler on the integration of allied health studies into the French university system. The National Council of Universities (CNU), a consultative and decision making body in the qualification, recruitment and career development of academics, created then three new sections for the rehabilitation and readaptation sciences (CNU 91), midwifery sciences (CNU 90) and nursing sciences (CNU 92) inaugurated in 2019 [2].

These newly created sections within the CNU offer opportunities for rehabilitation professionals already holding doctoral qualifications to transition to associated academic positions in rehabilitation science within

faculties across France. And while concerns regarding the decreased attractiveness of medical careers in university hospitals has been recently reported, research in rehabilitation, midwifery and nursing sciences appear to be gaining popularity [3]. This national context is thus favorable and an opportunity for promoting the needed research in these disciplines.

The creation of interdisciplinary research teams working on themes of rehabilitation and nursing sciences appears a logical extension of these developments. Such units may further assist to structure relations between actors within the clinical and research domains in France. Interdisciplinary research teams might thus contribute to the scientific literature and help in meeting the evolving healthcare needs of patients and their caregivers [4].

Creation of the ERPHAN research unit

University hospitals have a role in health and higher education sectors. Bridging both domains, they serve patient needs, promote research, stimulate innovation in healthcare, as well as furthering educational opportunities for students and clinicians alike. As such, university hospitals are a logical environment for developing research units focused on rehabilitation and nursing sciences.

In 2020, under the leadership of the Simone Veil Health Science Faculty of Versailles Saint Quentin University (UVSQ-Paris Saclay University), the ERPHAN Research Unit (Pluridisciplinary Research Unit on the Neurologic and motor Handicap - UR 20201) was created. ERPHAN emerged from the collaboration between UVSQ and the public hospital service of Paris (Assistance Publique Hôpitaux de Paris), and particularly the work conducted in the field of neurological rehabilitation at the Raymond Poincaré Hospital where healthcare providers, patients and researchers profit from daily interactions. The objective was to create a research unit led by occupational therapists, physiotherapists, doctors of science and researchers in rehabilitation, dedicated to fostering innovation across their different disciplines. The ERPHAN research unit has been formally accredited by the High Council for Evaluation of Research and Higher

Samuel Pouplin, OT, PhD, Université Paris-Saclay, UVSQ, Erphan Research unit, 78000, Versailles, France, PR Email: samuel.pouplin@aphp.fr

Education (HCERES), which recognized the opportunity to promote and structure allied health research within the university hospital environment. The HCERES acknowledged ERPHAN as the first team of its kind in France, focusing on Rehabilitation and Nursing Sciences, despite the extensive development of such research internationally (e.g., in Canada and Australia).

The ERPHAN unit has since expanded with new members further developing the scope of the research undertaken (e.g. respiratory care, orthopaedics). Now comprising ten researchers (excluding masters and PhD students), the team includes clinical researchers from disciplines including occupational therapy, physiotherapy, podiatry and nursing. Specific research themes include evaluating diagnostic and therapeutic interventions (rehabilitative, medical, surgical), characterizing patient behaviours within their environments, developing new assessment and rehabilitation approaches, and fostering technological innovation.

ERPHAN is currently an university unit based in Raymond Poincaré Garches university hospital with the short term perspective to establish a dual supervisory with UVSQ and APHP institutions (institutional attachment of ERPHAN Unit to APHP, not only to the university). Based in the hospital, the unit serves as a resource for clinicians who seek to explore the foundations of their assessment and rehabilitation practices, enriching their skill set in research methodologies and supporting their capacity to develop clinical research projects. This encouraging environment motivates professionals to engage in research and become actors in scientific projects.

ERPHAN is also actively involved in the Department of Rehabilitation and Readaptation (DU2R) of the university. In particular, ERPHAN members contribute to the development of the newly created undergraduate diploma in rehabilitation and participate in courses of a master's program in neurological disability.

The involvement of this unit in academic, clinical and educational environments creates an opportunity to develop, promote and structure research in Rehabilitation Sciences and Nursing Sciences.

Evolution and perspectives

ERPHAN is the first research unit initiated by clinical researchers without academic status at university, dedicated to Rehabilitation and Nursing Sciences in France. In short terms perspectives, ERPHAN unit is in the process of welcoming other researcher profiles such as engineers, further developing national and international collaborations and establishing a co-supervision agreement with APHP.

Moving forward, it will nonetheless be crucial to explore and establish specific statutory models for clinical researchers in rehabilitation and nursing such that they might combine teaching and research responsibilities in the university hospital, directly in relation with the patients they care for. While possibilities for lecturing and academic roles for those holding doctoral qualifications in rehabilitation, midwifery and the nursing sciences are a positive step forward, the exclusive affiliation to the university which this entails may hinder progress in applied clinical research. In effect, the existence of combined university and hospital affiliation (such as that which exists for certain medical professionals in France) might significantly facilitate research progress at this interface between the clinical and academic domains. The establishment of such positions is both supported and expected by those in the rehabilitation research community in France [5].

In this context, the Paris Saclay University Hospital Group (APHP and UVSQ) was among leader in France, proposing an associate professor status specific to clinical researchers in rehabilitation science. Following habilitation, Céline Bonnyaud and Samuel Pouplin now benefit from this, holding both associate professor positions within the Simone Veil Health Science Faculty (UVSQ, Paris Saclay), in addition to their clinical titles within the APHP. However, such arrangements are yet to be fully ratified

within the academic landscape, as funding for these roles have only been allocated for a limited duration.

To promote research in rehabilitation and nursing sciences, further reflection regarding shared clinical and academic research positions within the French health and university systems will be required. Such measures would assist with providing decision makers with evidence-based recommendations for patient care, in line with the recommendations of the World Health Organization [6]. These benefits might thus have an impact both on healthcare consumers and society. Several reports have recently been ordered by different government ministries in France to examine these issues of clinical research, university curricula for health sciences and their relationship to the public hospital system [7]. It is hoped that actions made following these reports might assist in expanding research capacity in France and consolidate evidence for rehabilitation practice as outlined by the World Health Organization [8]. French rehabilitation professionals might thus be well positioned to meet the challenges of contributing to research in the international arena.

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