

Actualités de la Fondation La Renaissance Sanitaire – 28 septembre 2021

## Publications médicales - Laboratoire de recherche La Musse, Saint- Sébastien-de-Morsent (Eure)

Nous vous informons de la publication de deux études de recherche, co-écrites par Maxime Gilliaux (*cf présentation ci-après*) :

- Ethical Issues Linked to the Development of Telerehabilitation: a Qualitative Study (20/05/2021) ;
- Effect of yoga on health-related quality of life in central nervous system disorders : a systematic review (29/05/2021).

La 1<sup>ère</sup> étude aborde les questions éthiques liées au développement de la télé réadaptation.

La 2<sup>ème</sup> a pour objectif d'étudier l'efficacité du yoga sur la qualité de vie liée à la santé chez les patients atteints de troubles du système nerveux central.



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Il a rejoint les établissements La Musse en 2017 et est notamment responsable du laboratoire de recherche adossé aux instituts de formation en ergothérapie, masso-kinésithérapie et d'audioprothésistes implantés sur le site hospitalier. Ces instituts d'enseignement supérieur forment 462 étudiants.

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### ETHICAL ISSUES LINKED TO THE DEVELOPMENT OF TELEREHABILITATION: A QUALITATIVE STUDY

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**ABSTRACT**  
 While telehealthcare (TH) makes it possible to respond to many significant health system problems, TH still gives rise to issues, particularly concerning ethical issues. This qualitative study collected the opinions of stakeholders with varied profiles. A guided interview focused on discussing strategies that might foster the ethical development of TH. Such strategies were found to be linked to the decision-making of the public authorities, the role of scientific and professional bodies, the training of health professionals, and the management of patient information. Ethical issues relating to the development of TH included universal accessibility, patients' free choice, respect of privacy, and professional confidentiality. The ethical development of TH can be hindered by the provision of information to stakeholders as well as existing conditions of the ethical framework that regulates medical practice.

**Keywords:** Ethics, Physical Therapy Modalities, Telemedicine, Telerehabilitation

Technologies applied to the world of health can be referred to as "e-health" (Haute Autorité de Santé, 2021). The development of e-health should promise to address European public health challenges such as the aging of the population, the increase and burden of chronic pathologies, and the uneven distribution of health care professionals (Giral, 2019). Neurotechnologies, biotechnologies, information and cognitive sciences (IBIC) are each showing the capacity to revolutionize our daily lives. The European Commission has therefore invited all member states to not only recognize the transformative potential of these technologies, but also to acknowledge the risks of such advances (Bourmann, 2004). It is understood that as e-health technologies expand, the management of rehabilitation patients will evolve.

Telerehabilitation (TR) employs information and communication technologies to conduct rehabilitation actions at a distance (Kaur et al., 2004). These include evaluations, tests, interventions, and follow-up activities. TR also makes it possible to offer consultations between professionals via remote expertise, and even to exchange clinical information about a patient between healthcare teams (Agence d'évaluation des technologies et des modes d'intervention en santé, 2006). The advantages of TR are closely linked to those of e-health and include the ability to provide access to healthcare in under-served areas.

TR can be used by many health professionals, including physicians in physical medicine and rehabilitation and general medicine, physiotherapists (i.e. physical therapists), occupational therapists, audiotutors, speech-language pathologists, and neuropsychologists (Schneier et al., 2006). TR is used by physiotherapists for various types of treatment such as neurological therapies (e.g. stroke, head trauma), chronic diseases (e.g. chronic obstructive pulmonary disease, diabetes), and also in preventive rehabilitation (e.g. post-operative surgery). Whether used in cases of trauma, paralysis, or respiratory rehabilitation, studies have shown the equal effectiveness of TR compared to care in in-person consultation (Chan et al., 2014) (Ratton et al., 2020) (Thomas et al., 2018).

TR can therefore be considered "virtually" equivalent to traditional rehabilitation care, taking into account the technical concerns involved by geographic distance (Agence d'évaluation des technologies et des modes d'intervention en santé, 2006) (Association Médicale Mondiale, 2017). It must not mean a break or distancing from the patient (Conseil National de l'Ordre des Médecins, 2014). There is a risk of a breakdown in the equality of care (Conseil National de l'Ordre des Médecins,

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Effect of yoga on health-related quality of life in central nervous system disorders: A systematic review

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**Abstract**  
**Objective:** Investigate the effect of yoga on health-related quality of life (HRQoL) in patients with central nervous system disorders.  
**Methods:** A systematic search was conducted on the PubMed-NCBI, EBSCO Host, Cochrane Library, Scopus and ScienceDirect databases until 05 April 2021. Only randomized control trials published in English or French were included and had to compare yoga to another intervention group or a control group. They also had to clearly measure HRQoL. Methodological quality was assessed with the revised Cochrane risk-of-bias tool for randomized trials and the quality of evidence was evaluated using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) criteria.  
**Results:** Sixteen studies were found, including six for multiple sclerosis, five for Parkinson's disease, two for stroke, one for dementia, one for epilepsy and one for brain tumour. Only 12 studies performed between-group statistics and 8 found a significant difference between groups after treatment. When yoga was compared to no intervention, the results were generally in favour of the yoga group, but when yoga was compared to another intervention programme, there was generally no significant difference between groups. There were many different HRQoL questionnaires, even within the same disease, which reduces the comparability of studies.  
**Conclusions:** With low to moderate quality of the evidence, yoga seems effective to improve HRQoL in people with Parkinson's disease. For multiple sclerosis, stroke, dementia, epilepsy and brain tumour, the quality of the evidence is still insufficient to conclude on the effectiveness of yoga.

**Keywords:** Stroke, Parkinson's disease, Multiple Sclerosis, Dementia, Epilepsy

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Ces travaux de recherche du plus grand intérêt, participent à l'évolution et l'adaptation des bonnes pratiques axées sur le service médical rendu aux usagers.

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