



Editorial

Personalized Care and Treatment Compliance in Chronic Conditions

Júlio Belo Fernandes ^{1,2,*}, Fábio Teixeira ^{3,4,5,6} and Catarina Godinho ^{1,2}

- Escola Superior de Saúde Egas Moniz, 2829-511 Almada, Portugal; cgodinho@egasmoniz.edu.pt
- ² Grupo de Patologia Médica, Nutrição e Exercício Clínico (PaMNEC), Centro de Investigação Interdisciplinar Egas Moniz (CiiEM), 2829-511 Almada, Portugal
- ³ Life and Health Sciences Research Institute (ICVS), School of Medicine, University of Minho, 4710-057 Braga, Portugal; fabiogrodri@gmail.com
- ⁴ ICVS/3B's Associate Lab, PT Government Associated Laboratory, 4710-057 Braga, Portugal
- Medical and Industrial Biotechnology Laboratory (LABMI), Porto Research, Technology, and Innovation Center (PORTIC), Porto Polytechnic Institute, 4200-465 Porto, Portugal
- 6 I3S—Instituto de Investigação e Inovação em Saúde, Universidade do Porto, 4200-135 Porto, Portugal
- * Correspondence: juliobelo01@gmail.com

Chronic diseases are commonly defined as conditions that last one year or more and require ongoing medical attention, limit activities of daily living, or both [1]. These include, for example, diabetes, cancer, and cardiovascular and neurodegenerative disorders. Such diseases are growing at an alarming rate, especially in the aging population, and are the leading causes of death and disability for adults in developed countries [2].

Living with a chronic condition can be stressful because it changes patients' lives, distressing their physical or/and mental health or threatening their survival [3]. Nevertheless, people are able to take steps to cope with these new situations, manage their condition, and maintain a good quality of life.

People who have chronic diseases spend a significant amount of time in self-management in out-of-hospital environments, in their homes, and in their community settings. These patients have different disease statuses and management requirements.

Medicine and healthcare have been profoundly transformed as a result of technological progress along with clinical research achievements, resulting in an increased disease-management capacity [4].

Over time, medicine and healthcare models have evolved towards a practice that is technically feasible, economically valuable [4,5], and culturally, ethically, and socially accepted. In this evolution, personalized care could be the key. It represents an opportunity to improve care for all individuals from a singular or collective point of view that holds promise for the prevention and treatment of diseases.

The development of personalized care implies strong involvement and commitment from society. Researchers and policymakers must analyze the potential effect of personalized care approaches within healthcare and recommend reorganization of services, infrastructures, regulations, and policies for personalized care to become truly embedded/implemented in healthcare systems [4]. Additionally, patients, caregivers, family, and healthcare providers identify and discuss problems caused by or related to the patient's condition and then develop plans and goals to empower patients and their families.

A personalized care approach could greatly benefit patients with chronic conditions given its impact on aspects of physical health, mental health, and the ability to self-manage conditions. New approaches that allow for the development of personalized care and improvement of overall treatment adherence should be strongly encouraged by health-care providers.

With this editorial and Special Issue focusing on personalized care and treatment compliance in chronic conditions, we aimed to stimulate the research community to continue



Citation: Fernandes, J.B.; Teixeira, F.; Godinho, C. Personalized Care and Treatment Compliance in Chronic Conditions. *J. Pers. Med.* **2022**, *12*, 737. https://doi.org/10.3390/jpm12050737

Received: 28 April 2022 Accepted: 29 April 2022 Published: 1 May 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

J. Pers. Med. **2022**, 12, 737

producing evidence that supports the positive effects of a personalized care approach on the diagnosis and treatment of chronically ill patients.

The accepted topics included a variety of research studies, from study protocols [6] to original qualitative [7–9] and quantitative studies [10–17]. Additionally, review protocols [18,19] and literature reviews [20–23] were included, covering different areas of care, from studies addressing ageism [6] or stigma [17] to a personalized approach to diagnosing and managing ischemic stroke [16]. We highlighted the importance of recognizing that in order to enhance healthcare delivery, all stakeholders involved in providing care must actively partner with patients and families to enable changes in the care process, obtaining higher patient satisfaction and better health outcomes. Therefore, studies involving family caregivers, which are central to delivering better healthcare, were also considered and published in the Special Issue.

Several internationally renowned research groups contributed with research. We highlight two studies in particular. The first study reported on a novel boot-camp program to help guide personalized exercise in people with Parkinson's disease. This study shows the program's acceptability and usefulness regarding participation in a PD-personalized educational and exercise boot-camp program. This program was considered a valuable example of personalized care used to better influence patients' exercise habits [15]. Second, we highlight a study aiming to assess the effect of virtual-reality-based therapy to reduce the impact of fibromyalgia syndrome in outcomes such as pain, dynamic balance, aerobic capacity, fatigue, quality of life, anxiety, and depression. The findings demonstrated that virtual-reality-based therapy can effectively reduce pain, fatigue, anxiety, and depression and increase dynamic balance, aerobic capacity, and quality of life in women with fibromyalgia syndrome [21].

Overall, 19 articles were published, all with a common aim of increasing knowledge in the field of personalized care.

Funding: This research received no external funding.

Acknowledgments: The authors would like to thank the support of Santa Casa Neurociências Prize Mantero Belard for Neurodegenerative Diseases Research (MB-28-2019), and Prize BPI Fundação "la Caixa" Seniores 2021 and Fundação para a Ciência e Tecnologia (FCT-EXPL/SAL-SER/0761/2021).

Conflicts of Interest: The authors declare no conflict of interest.

References

- Centers for Disease Control and Prevention: About Chronic Diseases. Available online: https://www.cdc.gov/chronicdisease/ about/index.htm#:~{}:text=Chronic%20diseases%20are%20defined%20broadly,disability%20in%20the%20United%20States (accessed on 31 March 2022).
- World Health Organization. Facts and Figures. Available online: https://www.who.int/whr/2003/en/Facts_and_Figures-en.pdf (accessed on 31 March 2022).
- 3. Benkel, I.; Arnby, M.; Molander, U. Living with a chronic disease: A quantitative study of the views of patients with a chronic disease on the change in their life situation. *SAGE Open Med.* **2020**, *8*, 2050312120910350. [CrossRef] [PubMed]
- 4. Nardini, C.; Osmani, V.; Cormio, P.G.; Frosini, A.; Turrini, M.; Lionis, C.; Neumuth, T.; Ballensiefen, W.; Borgonovi, E.; D'Errico, G. The evolution of personalized healthcare and the pivotal role of European regions in its implementation. *Per. Med.* 2021, 18, 283–294. [CrossRef] [PubMed]
- 5. Doble, B.; Lorgelly, P. Clinical players and healthcare payers: Aligning perspectives on the cost-effectiveness of next-generation sequencing in oncology. *Per. Med.* **2015**, *12*, 9–12. [CrossRef]
- 6. Fernandes, J.B.; Ramos, C.; Domingos, J.; Castro, C.; Simões, A.; Bernardes, C.; Fonseca, J.; Proença, L.; Grunho, M.; Moleirinho-Alves, P.; et al. Addressing Ageism—Be Active in Aging: Study Protocol. *J. Pers. Med.* **2022**, 12, 354. [CrossRef]
- 7. Ferreira, R.; Baixinho, C.L.; Ferreira, Ó.R.; Nunes, A.C.; Mestre, T.; Sousa, L. Health Promotion and Disease Prevention in the Elderly: The Perspective of Nursing Students. *J. Pers. Med.* **2022**, *12*, 306. [CrossRef] [PubMed]
- 8. Tu, P.; Smith, D.; Clark, R.; Bayzle, L.; Tu, R.; Lin, C. Patients' Characterization of Medication, Emotions, and Incongruent Perceptions around Adherence. *J. Pers. Med.* **2021**, *11*, 975. [CrossRef] [PubMed]
- 9. Pedrosa, R.; Ferreira, Ó.; Baixinho, C.L. Rehabilitation Nurse's Perspective on Transitional Care: An Online Focus Group. *J. Pers. Med.* **2022**, *12*, 582. [CrossRef] [PubMed]
- 10. Ferreira, B.; Diz, A.; Silva, P.; Sousa, L.; Pinho, L.; Fonseca, C.; Lopes, M. Bibliometric Analysis of the Informal Caregiver's Scientific Production. *J. Pers. Med.* **2022**, *12*, 61. [CrossRef]

J. Pers. Med. **2022**, 12, 737 3 of 3

11. Plotogea, O.-M.; Gheorghe, G.; Stan-Ilie, M.; Constantinescu, G.; Bacalbasa, N.; Bungau, S.; Diaconu, C.C. Assessment of Sleep among Patients with Chronic Liver Disease: Association with Quality of Life. *J. Pers. Med.* **2021**, *11*, 1387. [CrossRef]

- 12. Moleirinho-Alves, P.M.M.; Cebola, P.M.T.C.; dos Santos, P.D.G.; Correia, J.P.; Godinho, C.; Oliveira, R.A.N.d.S.; Pezarat-Correia, P.L.C. Effects of Therapeutic and Aerobic Exercise Programs on Pain, Neuromuscular Activation, and Bite Force in Patients with Temporomandibular Disorders. *J. Pers. Med.* **2021**, *11*, 1170. [CrossRef]
- 13. De Barros, G.M.; Melo, F.; Domingos, J.; Oliveira, R.; Silva, L.; Fernandes, J.B.; Godinho, C. The Effects of Different Types of Dual Tasking on Balance in Healthy Older Adults. *J. Pers. Med.* **2021**, *11*, 933. [CrossRef] [PubMed]
- 14. Varallo, G.; Scarpina, F.; Giusti, E.M.; Suso-Ribera, C.; Cattivelli, R.; Guerrini Usubini, A.; Capodaglio, P.; Castelnuovo, G. The Role of Pain Catastrophizing and Pain Acceptance in Performance-Based and Self-Reported Physical Functioning in Individuals with Fibromyalgia and Obesity. *J. Pers. Med.* 2021, 11, 810. [CrossRef] [PubMed]
- 15. Domingos, J.; Dean, J.; Cruickshank, T.M.; Śmiłowska, K.; Fernandes, J.B.; Godinho, C. A Novel Boot Camp Program to Help Guide Personalized Exercise in People with Parkinson Disease. *J. Pers. Med.* **2021**, *11*, 938. [CrossRef] [PubMed]
- 16. Śmiłowska, K.; Śmiłowski, M.; Partyka, R.; Kokocińska, D.; Jałowiecki, P. Personalised Approach to Diagnosing and Managing Ischemic Stroke with a Plasma-Soluble Urokinase-Type Plasminogen Activator Receptor. *J. Pers. Med.* **2022**, *12*, 457. [CrossRef]
- 17. Fernandes, J.B.; Família, C.; Castro, C.; Simões, A. Stigma towards People with Mental Illness among Portuguese Nursing Students. J. Pers. Med. 2022, 12, 326. [CrossRef]
- 18. Sousa, L.; Gemito, L.; Ferreira, R.; Pinho, L.; Fonseca, C.; Lopes, M. Programs Addressed to Family Caregivers/Informal Caregivers Needs: Systematic Review Protocol. *J. Pers. Med.* **2022**, *12*, 145. [CrossRef]
- 19. Rocha, P.; Baixinho, C.L.; Marques, A.; Henriques, A. Safety-Promoting Interventions for the Older Person with Hip Fracture on Returning Home: A Protocol for a Systematic Review. *J. Pers. Med.* **2022**, *12*, 654. [CrossRef]
- 20. Tilinca, M.C.; Tiuca, R.A.; Tilea, I.; Varga, A. The SGLT-2 Inhibitors in Personalized Therapy of Diabetes Mellitus Patients. *J. Pers. Med.* **2021**, *11*, 1249. [CrossRef]
- Cortés-Pérez, I.; Zagalaz-Anula, N.; Ibancos-Losada, M.d.R.; Nieto-Escámez, F.A.; Obrero-Gaitán, E.; Osuna-Pérez, M.C. Virtual Reality-Based Therapy Reduces the Disabling Impact of Fibromyalgia Syndrome in Women: Systematic Review with Meta-Analysis of Randomized Controlled Trials. J. Pers. Med. 2021, 11, 1167. [CrossRef]
- 22. Loureiro, F.; Ferreira, M.; Sarreira-de-Oliveira, P.; Antunes, V. Interventions to Promote a Healthy Sexuality among School Adolescents: A Scoping Review. *J. Pers. Med.* **2021**, *11*, 1155. [CrossRef]
- Zaharia, A.-C.; Dumitrescu, O.-M.; Radu, M.; Rogoz, R.-E. Adherence to Therapy in Glaucoma Treatment—A Review. J. Pers. Med. 2022, 12, 514. [CrossRef] [PubMed]