

**The scientific fields of interests are** problems of pediatric neurorehabilitation, postural re-education of children and youth, pathological gait analysis, the quality of life of people with disabilities and their families, preventive aspects of various types of physical activity in people over 30 years of age, telerehabilitation

**The research project contribution:**

2003 So called inhibiting casts as additional gait rehabilitation means

2005 Impact of abnormal muscle tone distribution in children with various types of cerebral palsy on dynamic gait parameters in the light of the tests of automatic kinematic analysis

2005 Possibilities of the reduction of functional blockades in the course of treatment CP children in the light of three-dimensional gait analysis

2009 Possibilities of measurable assessment of the results of rehabilitation cerebral palsied children

2009 Postural and motor stereotypes of children with central motor movement disorders,

2010 Quality of life of families with children with cerebral palsy,

2015 Supporting the process of rehabilitation of children with cerebral palsy by modern technical means

2018 The innovative rehabilitation methods by verifying the effectiveness of the most modern diagnostic and therapeutic methods in patients with cerebral palsy

2018-2019 Creation the laboratory for innovative diagnostic and therapeutic methods of gait education in people with cerebral palsy using modern technological solutions and clinical verification of their effectiveness

2019 Quality of life and burnout syndrome of nurses and physiotherapists - causes and differentiation depending on the type of work

2019 Spine and shoulder pain syndromes as health consequences of work occurring in nurses and physiotherapists

2019 Various aspects of team work and safety in medical professions

2019 Interdisciplinary approach to the study of quality of life of people with disabilities

2019 Some posture-locomotion patterns in people of different ages and functional condition

## **Publications:**

### Full-text scientific papers before obtaining PhD degree:

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Saulicz E, Nowotny J, Kokosz M, Nowotny-Czupryna O, Czupryna K. The effect of autoelongation on the behavior of some body posture parameters in the sagittal plane among children and adolescents at different age ranges. *Fizjoterapia*.1995; 3 (4): 13-17.

Saulicz E, Nowotny J, Kokosz M, Czupryna K, Nowotny-Czupryna O. Differentiation in the possibilities of active correction of pelvic spatial disturbances in girls and boys. *Fizjoterapia*. 1996; 4 (1-2): 83-85.

Nowotny J, Kwaśna K, Nowotny-Czupryna O, Czupryna K. Relief belt as an aid in the prevention and therapy of lower back pain syndromes. *Fizjoterapia* 1995; 3 (4): 21-23

Nowotny J., Czupryna K., Matyja M. The most common mistakes made during the rehabilitation of children with cerebral palsy. *Fizjoterapia* 1997; 5, 2:22-27

Czupryna K, Matyja M, Nowotny J, Ptaszek K. Evaluation possibilities of gait efficiency in children with cerebral palsy using the Parotec System. *Science Annual (Rocznik Naukowy – 28), AWF Katowice (ISSN 0860-0090)*. 2000; 28: 85-91.

Rudzińska A, Nowotny J, Cieśla T, Kwaśny K, Czupryna K. Body posture disturbances among children and youth in light of environmental pollution. *Science Annual, (Rocznik Naukowy – 28), AWF Katowice (ISSN 0860-0090)*. 2000; 28: 77-84.

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Matyja M, Krzysztof Czupryna K, Kokosz K, Golba J. AAn analysis of rehabilitation outcome for infants with torticollis, based on an original examination sheet *Fizjoterapia Polska* 2001; 1(4):354-360

### Full-text scientific papers after obtaining PhD degree:

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Nowotny J, Czupryna K, Pietruszewski J, Matyja M. Some possibilities for alleviating gait disturbances in children undergoing rehabilitation for cerebral palsy, in the light of baropedographic tests: a preliminary report). *Fizjoterapia Pol.* 2003; 3,3:217-223.

Nowotny J, Nowotny-Czupryna O, Czupryna K. Possibilities of using the Lehnert-Schroth concept during corrective exercises in a station system. *Fizjoterapia Polska*. 2003; 3 (4): 412-419.

Nowotny J, Czupryna K, Sołtys J. An evaluation of gait disturbances in children undergoing rehabilitation for cerebral palsy. *Fizjoterapia Pol.*2003; 3,2:189-196.

Nowotny J, Czupryna K, Domagalska M. The needs and possibilities of quantification of rehabilitation effects in cerebral palsy children. *Rehab.Med.* 2004; 8,4:11-20.

Nowotny-Czupryna O, Nowotny J, Sołtys J, Brzęk A, Czupryna K, Dąbrowska J. Possibilities of one leg relief while walking on crutches *Fizjoterapia*.2005; 13 (3): 48-56.

Nowotny J, Nowotny-Czupryna O, Brzęk A, Czupryna K. Muscle strength in the anti-gravitational and dorsal extensor muscles of children with scoliosis. *Ortopedia Traumatologia Rehabilitacja*. 2005; 7 (1): 15-22.

Czupryna K, Szopa A, Pietruszewski J Bąk K, Siedlecka M, Moskała H. Risk factors and gait disturbances in children with cerebral palsy. *Fizjoterapia Pol.* 2005; 5, 2: 235-240.

Domagalska M, Szopa A, Czupryna K, Nowotny J. Compensatory body segments dislocations in frontal planes children with cerebral palsy. *Fizjoterapia Pol.* 2005; 5, 2: 127-133.

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Gnat R, Cieśla T, Kwaśny K, Czupryna K. The body posture in children and teenagers in the environment of different extent of pollution with lead and cadmium. *Med.Środow.* 2005; 8, 1: 31-38.

Domagalska M, Czupryna K, Szopa A, Nowotny J. Specific and alternative therapies for children with cerebral palsy. *Neurol.Dziec.* 2005;14,27: 7-15.

Matyja M, Czupryna K, Nowotny J. Compliance with the developmental principle as a problem of choosing the approach to therapy of children with cerebral palsy. *Rehab.Med.*2005;9, 4: 24-30.

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Domagalska M, Szopa A, Czupryna K, Nowotny J, Matyja M. "The inhibiting casts" used in cerebral palsied children. *Ortop.Traumat.Rehab.* 2006; 8 3: 291-299.

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Matyja M, Czupryna K, Anna A. Using plaster in the treatment of children with cerebral palsy. *Fizjoterapia/Physiotherapy*. 2007; 15, 4: 11-19.

Domagalska M, Czupryna K, Szopa A, Nowotny J, Płaszewski M. The postural and locomotional patterns in CP children in treatment planing. *Fizjoterapia Pol.* 2007; 7, 3: 320-331.

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Czupryna K, Nowotny-Czupryna O, Nowotny J: Theoretical view on neuropathological aspects of conservative treatment of scoliosis.

*Ortopedia Traumatologia Rehabilitacja*. 2012; 2, 6 (14): 103-113.

Nowotny-Czupryna O, Czupryna K, Bąk K, Wróblewska E, Rottermund J. Postural habits of young adults and the possibilities of their change. *Ortopedia Traumatologia Rehabilitacja*. 2013, 15, 1 (6): 9-21.

Czupryna K, Nowotny J: Zachowanie się stóp i kolan podczas chodu pod wpływem dodatkowych środków usprawniania dzieci z M.P.Dz. (Feet and knees behavior during walking under the influence of additional means of treatment in cerebral palsied children) *Ortopedia Traumatologia Rehabilitacja* 2012; 4(6),14:371-383.

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Czupryna K, Nowotny-Czupryna O, Szymańska J, Szczepaniak R. *Quality of life of the family of a child with psychomotor disability in the context of solving everyday problems*. *Fizjoterapia Polska* **2019**; 19(3); 54-61;

#### Articles sent to journal editor office:

Czupryna K, Nowotny-Czupryna O: The occurrence of pain and the change of daily life activity in people over the age of 30, continuing practicing judo.

Nowotny-Czupryna O, Czupryna K: Is the body height and weight disparity the reason for pain in physiotherapists?

#### Monographs and chapters in monographs published before obtaining PhD degree:

Saulicz E, Nowotny J, Czupryna K, Kokosz M, Nowotny-Czupryna O Science of physical culture and the challenges of modern civilization. Post-conference materials for the 25th anniversary of AWF Katowice. Katowice. Ed. Academy of Physical Education in Katowice, 1996. ISBN 83-902927-3-4. Spatial disturbances in the position of the pelvis and the possibility of active correction in the scoliotic posture, p. 182.

Saulicz E, Nowotny J, Kokosz M, Nowotny-Czupryna O, Czupryna K: Sciences of physical culture in the face of challenges of modern civilization. Post-conference materials for the 25th anniversary of AWF Katowice. Katowice. Ed. Academy of Physical Education in Katowice, 1996. ISBN 83-902927-3-4. Behavior of some body posture parameters in the sagittal plane during autoelongation, p. 186.

Czajkowska-Goldschmidt G, Czupryna K, Nowotny-Czupryna O: Sciences of physical culture in the face of challenges of modern civilization. Post-conference materials for the 25th anniversary of AWF Katowice. Katowice. Ed. Academy of Physical Education in Katowice, 1996. ISBN 83-902927-3-4. Physical activity in the prevention of disability in Germany and Poland, p. 201.

Czupryna K., Nowotny J., Matyja M. (2001): Photogrammetry and pedobarography as a control of influence value of exercises in hemiparetic cerebral palsied children. In: M.V.Perat (ed.) *Cerebral palsy at the turn of the Millenium*. Monduzzi Editore: Bologna, Italy; 2001: 173-178.

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Rudzińska A, Nowotny-Czupryna O, Nowotny J, Czupryna K: Defects in body posture in children and adolescents. (red.: J. Nowotny). Bielsko-Biała: Wyd. PAN-WSA, 2009. ISBN 978-83-60430-32-3. Przegląd metod o znaczeniu historycznym i współcześnie wykorzystywanych w terapii wad postawy ciała, str. 173.

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#### Sent to Editors:

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#### Co-author of books for students and physiotherapists:

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