

# Journal of Education, Health and Sport

**Vol 10 No 3  
2020**

formerly Journal of Health Sciences

Open Access

**From 2011**

**eISSN 2391-8306**

**Formerly ISSN 1429-9623 / 2300-665X**

## Scientific Council

prof. zw. dr hab. geo. Z. Babiński (Poland), prof. zw. dr hab. med. T. Chumachenko (Ukraine), prof. zw. dr hab. techn. R. Cichon (Poland), prof. zw. dr hab. med. N. Dragomiretskaya (Ukraine),  
prof. zw. dr hab. med. V. Ezhov (Ukraine), prof. zw. dr hab. geo. J. Falkowski (Poland), prof. zw. dr hab. med. A. Gozhenko (Ukraine), prof. zw. dr hab. geo. M. Grodzynski (Ukraine),  
prof. zw. dr hab. I. Grygus (Ukraine), prof. zw. dr hab. med. A. Gudyma (Ukraine), prof. zw. dr hab. med. S. Gulyar (Ukraine), prof. zw. dr hab. med. W. Hagner (Poland), prof. dr med. M. Hagner-Deregowka (Poland),  
prof. zw. dr hab. med. I. Karwat (Poland), prof. zw. dr hab. med. M. Kyrlyuk (Ukraine), prof. zw. dr hab. med. Y. Limansky (Ukraine), prof. zw. dr hab. geo. A. Melnik (Ukraine), prof. zw. dr hab. med. V. Mizin (Ukraine),  
prof. zw. dr hab. med. B. Nasibullin (Ukraine), prof. zw. dr hab. geo. O. Obodovsky (Ukraine), prof. zw. dr hab. med. L. Shafran (Ukraine), prof. zw. dr hab. med. I. Shmakova (Ukraine),  
prof. zw. dr hab. O. Sokolov (Ukraine), prof. zw. dr hab. med. V. Stebliuk (Ukraine), prof. zw. dr hab. S. Yermakov, (Ukraine),  
prof. dr hab. med. A. Avramenko, doc. PaedDr. Elena Bendiková, PhD. (Slovakia), prof. dr hab. K. Busko (Poland), dr hab. med. E. Gozhenko (Ukraine), prof. dr hab. H. Knapik (Poland), dr hab. R. Muszkietka (Poland),  
prof. dr hab. med. W. Myśliński (Poland), prof. dr hab. M. Napierała (Poland), prof. dr hab. M. Pastuszko (Poland), prof. dr hab. K. Prusik (Poland), prof. dr hab. M. Zasada (Poland), prof. dr hab. W. Zukow (Poland),  
dr med. L. Batskaia (Ukraine), dr I. M. Batyk (Poland), dr M. Cieślicka (Poland), dr med. M. Charynska-Gula (Poland), doc. dr n. med. V. Cherny (Ukraine), dr med. K. Cywinski (Poland),  
dr med. I. Czerwinska Pawluk (Poland), dr biol. S. Dolomatov (Ukraine), dr med. M. Dzierzanowski (Poland), dr med. B. Jędrzejewska (Poland),  
dr med. U. Kazmierczak (Poland), dr med. K. Kiczuk (Poland), dr A. Kostenka (Poland), dr Z. Kwaśnik (Poland), dr med. T. Madej (Poland), dr med. E. Mikołajewska (Poland), dr D. Mikołajewski (Poland),  
dr med. B. Muszkieta (Poland), dr med. A. Nalazek (Poland), dr med. N. Novikov (Ukraine), dr med. K. Nowacka (Poland), dr M. Podhorecka (Poland), dr med. G. Polak (Poland), dr med. P. Prokopczyk (Poland),  
dr med. A. Radzimska (Poland), dr med. L. Sierpiska (Poland), dr Daves Sinch (Republic of India), doc. dr A. Skaliy (Ukraine), dr T. Skaliy (Ukraine),  
dr B. Stankiewicz (Poland), dr med. E. Trela (Poland)

## Editorial Board

Stefan Adamcak (Slovakia), Pavol Bartik (Slovakia), Elena Bendiková (Czech Republic), Janusz Bielski (Poland), Krzysztof Buśko (Poland), Mirosława Cieślicka (Poland), Jerzy Eksterowicz (Poland), Włodzimierz Erdmann (Poland),  
Tomasz Frolowicz (Poland), Attila Gilanyi (Hungary), Igor Grygus (Ukraine), Halina Gula-Kubiszewska (Poland), Paweł Izdebski (Poland), Sergii Iermakov (Ukraine), Tetyana Iermakova (Ukraine), Jana Jurikova (Czech Republic),  
Vlastimila Karaskova (Czech Republic), Jacek Klawe (Poland), Mariusz Klimczyk (Poland), Alicja Kostenka (Poland), Frantisek Langer (Czech Republic), Eligiusz Madejski (Poland), Jiri Michal (Slovakia), Ludmila Miklankova  
(Czech Republic), Emilia Mikołajewska (Poland), Viktor Mishchenko (Ukraine), Stanisław Mocek (Poland), Mirosław Mrozkowiak (Poland), Radosław Muszkietka (Poland), Anna Nalazek (Poland), Marek Napierała (Poland),  
Jerzy Nowocien (Poland), Piotr Oleśniewicz (Poland), Władysław Pańczyk (Poland), Wiesława Pilewska (Poland), Mirosława Pridalova (Czech Republic), Krzysztof Prusik (Poland), Krzysztof Sas-Nowosielski (Poland), Aleksandr Skaliy  
(Ukraine), Tetyana Skaliy (Ukraine), Ewa Sokolowska (Poland), Błażej Stankiewicz (Poland), Robert Stępiak (Poland), Aleksander Stula (Poland), Naoki Suzuki (Japan), Mirosława Szark-Eckardt (Poland), Maciej Świątkowski (Poland),  
Hychoriy Tereschuk (Ukraine), Hryhoriy Vasjanowicz (Ukraine), Mariusz Zasada (Poland), Tetyana Zavoronodnya (Ukraine), Walery Zukow (Poland), Hanna Żukowska (Poland)

## Advisory Board

Zygmunt Babiński (Poland), Yuriy Briskin (Ukraine), Laszlo Csernoch (Hungary), Kazimierz Denek (Poland), Mirosław Dutchak (Ukraine), Karol Gorner (Slovakia), Kazimierz Kochanowicz (Poland), Jerzy Kosiewicz (Poland),  
Stanisław Kowalik (Poland), Tadeusz Maszczak (Poland), Mikołaj Nosko (Ukraine), Jerzy Pośpiech (Poland), Eugeniusz Prystupa (Ukraine), Robert Szeklicki (Poland), Jitka Ulrichova (Czech Republic).

## Reviewers:

prof. zw. dr hab. geo. Z. Babiński (Poland), doc. PaedDr. Elena Bendiková, PhD. (Slovakia), prof. zw. dr hab. med. T. Chumachenko (Ukraine), prof. zw. dr hab. techn. R. Cichon (Poland),  
prof. zw. dr hab. med. N. Dragomiretskaya (Ukraine), prof. zw. dr hab. med. V. Ezhov (Ukraine), prof. zw. dr hab. geo. J. Falkowski (Poland), prof. zw. dr hab. med. A. Gozhenko (Ukraine),  
prof. zw. dr hab. geo. M. Grodzynski (Ukraine), prof. zw. I. Grygus (Ukraine), prof. zw. A. Gudyma (Ukraine), prof. zw. dr hab. med. S. Gulyar (Ukraine), prof. zw. dr hab. med. W. Hagner (Poland),  
prof. zw. dr hab. med. I. Karwat (Poland), prof. zw. dr hab. med. M. Kyrlyuk (Ukraine), prof. zw. dr hab. med. Y. Limansky (Ukraine), prof. zw. dr hab. geo. A. Melnik (Ukraine), prof. zw. dr hab. med. V. Mizin (Ukraine),  
prof. zw. dr hab. med. B. Nasibullin (Ukraine), prof. zw. dr hab. geo. O. Obodovsky (Ukraine), prof. zw. dr hab. med. L. Shafran (Ukraine), prof. zw. dr hab. med. I. Shmakova (Ukraine),  
prof. zw. dr hab. O. Sokolov (Ukraine), prof. zw. dr hab. med. V. Stebliuk (Ukraine), prof. zw. dr hab. S. Yermakov, (Ukraine),  
prof. dr hab. med. A. Avramenko, prof. dr hab. K. Busko (Poland), dr hab. med. E. Gozhenko (Ukraine), prof. dr hab. H. Knapik (Poland), prof. zw. dr hab. geo. A. Melnik (Ukraine),  
prof. dr hab. R. Muszkietka (Poland), prof. dr hab. med. W. Myśliński (Poland), prof. dr hab. M. Napierała (Poland), prof. dr hab. M. Pastuszko (Poland), prof. dr hab. K. Prusik (Poland),  
prof. dr hab. M. Zasada (Poland), prof. dr hab. med. W. Zukow (Poland),  
dr I. M. Batyk (Poland), dr med. L. Batskaia (Ukraine), doc. dr n. med. V. Cherny (Ukraine), dr M. Cieślicka (Poland), dr med. I. Czerwinska Pawluk (Poland), dr biol. S. Dolomatov (Ukraine), dr A. Kostenka (Poland),  
dr med. N. Novikov (Ukraine), dr M. Podhorecka (Poland), dr med. A. Radzimska (Poland), doc. dr A. Skaliy (Ukraine), dr T. Skaliy (Ukraine), dr B. Stankiewicz (Poland), dr med. E. Trela (Poland)

## Editors-in-Chief

Anatoliy Gozhenko

Marek Napierała

Walery Zukow

## Co-editors

## Associate Editors

Iwona Czerwinska Pawluk

Mariusz Klimczyk

Mirosława Cieślicka

Adam Szulc

## Secretary

Barłomiej Niespodziński

## © The Author(s) 2020.

This articles is published with Open Access at Journal of Education, Health and Sport formerly Journal of Health Sciences  
of Nicolaus Copernicus University in Toruń, Poland

Open Access This articles is distributed under the terms of the Creative Commons Attribution Noncommercial License which permits any noncommercial use, distribution, and  
reproduction in any medium, provided the original author(s) and source are credited.



Attribution — You must attribute the work in the manner specified by the author or licensor (but not in any way that suggests that they endorse you or your use of the work).

Noncommercial — You may not use this work for commercial purposes. Share Alike — If you alter, transform, or build upon this work, you may distribute the resulting work only under  
the same or similar license to this one.

Declaration on the original version. Because of the parallel version of the magazine publishing traditional (paper) and of electronic (online), Editors indicates that the main version of the  
magazine is to issue a "paper"

Zawartość tegoż czasopisma jest objęta licencją Creative Commons Uznanie autorstwa-Użycie niekomercyjne-Na tych samych warunkach 3.0

Redaction, Publisher and Editorial Office

Publisher and Editorial Office

Department of Physical Education,

Faculty of Earth Sciences and Spatial Management,

Nicolaus Copernicus University in Toruń, Poland

Address: Str. Lwowska 1, 87-100 Toruń, Poland

ISSN 2391-8306

Formerly ISSN:1429-9623 / 2300-665X

# SUBMISSIONS

- » [Online Submissions](#)
- » [Author Guidelines](#)
- » [Copyright Notice](#)
- » [Privacy Statement](#)
- » [Author Fees](#)

## ONLINE SUBMISSIONS

Already have a Username/Password for Journal of Health Sciences?

[GO TO LOGIN](#)

Need a Username/Password?

[GO TO REGISTRATION](#)

Registration and login are required to submit items online and to check the status of current submissions.

## AUTHOR GUIDELINES

### Instructions for authors

The quarterly **Journal of Health Sciences** carries and publishes peer-reviewed scientific original articles, review papers and case studies in all areas of medical and biological sciences from basic research to clinical and experimental study in English.

The Journal aims at establishing itself as the leading international journal in medical and biological sciences. We publish original scientific studies, review and educational articles, and papers commenting on the clinical, scientific, social, political, and economic factors affecting health. The journal will also publish information materials from the national consultants, materials discussing the activities of the medical Clubs, and news from the medical community.

We also accept conference reports, book reviews and letters to the editor. Each submission is subject to review by selected experts in the subject area. The review process is fully anonymous.

**Papers should be submitted to the Editorial Office by online system:**

<http://journal.rsw.edu.pl/index.php/JHS/login>

### Online Submissions

Already have a Username/Password for Journal of Health Sciences (J Health Sci)?

[Go to Login](#)

Need a Username/Password?

[Go to Registration](#)

Registration and login are required to submit items online and to check the status of current submissions.

A cover letter should be included with the manuscript, containing a declaration to the effect that the manuscript has not been previously published or submitted to another journal, signed by all the authors. It should also include written approval from the head of the institution in which the study was conducted.

The text should use a font not smaller than 12 points, and should be double-spaced, with a margin of 2.5 cm on all sides (left, right, top, bottom). The pages should be numbered consecutively.

The **title page** should contain the title of the paper (in English), the full names of the authors, and their full affiliations. At the bottom of the page, the full name, academic degree, and address of the corresponding author should be given (including the telephone number, fax number and/or e-mail address).

The **abstract** (in English) should be 200-250 words in original papers, or up to 150 words in review papers and case studies. The abstract of an original paper should be adequately structured, i.e. contain the following parts: introduction, aim, materials and methods, results and conclusions. Below the abstract, no more than 5 keywords should be given in English in accordance with the Index Medicus (Medical Subject Reading).

The **body text** should be organised as follows:

1) in original papers: introduction and aim, materials and methods, results, discussion and conclusions;

2) in review papers: free structure;

3) in case studies: introduction (motivation for the study), case description, discussion of the characteristic symptoms, treatment results etc.

**References.** References to the works cited should be placed between square brackets, e.g. [1–4, 10, 14]. Do not use automatic numbering for references. The reference section at the end of the paper should be arranged according to the sequence of citations in the body text. In original and review papers, there should be no more than 100, and in case studies – no more than 50 references. References must only contain published works. References to journal articles should give the surnames and first name initials of the first three authors, followed by "et al." if there are more than three authors, the title of the paper, abbreviated journal title (according to Index Medicus), publication date, volume and issue number, and page numbers. Punctuation should adhere strictly to the example below:

1. Hamano H, Kawa S, Horiuchi A et al. High serum IgG4 concentrations in patients with sclerosing pancreatitis. *N Engl J Med* 2001; 344: 732-8.

2. Pijs NH, De Bruyne B. Coronary pressure. Kluwer Academic Publishers, London 2000.

3. Perri P, Cavaliere F, Boti C i wsp. Epidemiology of gastroenteropancreatic neuroendocrine tumors. In: Update in Neuroendocrinology. Baldelli R, Casanue va FF, Tamburano G (wyd.). Udine Centro UD 2004; 483-512.

**Tables and figures.** Tables and figures must not be included in the body text; please only indicate where they should appear in the final printed version. Tables should each be placed on separate pages and numbered consecutively using Roman numerals. Tables should be captioned in English, and should be accompanied by adequate explanatory notes.

Figures and photographs should be submitted:

1) as hard copies (numbered using Arabic numerals, and identified using the names of the authors, paper title, and a "top" marking);

2) in one of the following electronic formats: \*.cdr, \*.tif, \*.eps or \*.jpg (at a resolution of 300 dpi). Figure captions, in English, should be placed on separate pages. Please do not submit figures in MS Word \*.doc files.

When publishing their work, the author(s) should bear in mind the requirements of the Declaration of Helsinki (an international medical ethics act, signed in 1975, which stipulates that it is prohibited to name the patients, give their initials or hospital record numbers). The relevant ethical committee's statement of approval for the study, along with the patients' conscious agreement to participate, should be included in the Materials and Methods section for all papers in which the diagnostic and therapeutic actions do not follow from standard procedures.

For photographs, the patient's written permission to publish must always be obtained.

Please specify the sources of funding for the study (e.g. grants, private sponsors) in a short acknowledgement note below the Discussion section.

Authors of studies presenting results of clinical studies of drugs and medical procedures are expected to describe in detail how the study was financed, what the sponsor's role was in the planning and execution of the study and in the analysis of the results, and what the influence was of the sponsoring institution on the contents of the paper.

Irrespective of the topic of the submission, international drug names should be used in the text.

Abbreviations used in the text should be explained at first mention (this also applies to the abstract). Other than in exceptional situations, abbreviations should not be used in the title of the submission.

The results of laboratory studies and the relevant standards and standard deviations should be expressed using SI units.

The editors shall bear no responsibility for the contents of any advertisements or announcements published.

Authors receive no payment for publishing in *Journal of Health Sciences*. Offprints for authors are not produced.

Upon receiving the proofs, the first author (or one of the co-authors) should clear it for publication within 48 hours by contacting the Publisher by electronic means (or by fax). In case a clearance is not submitted within this deadline, the Publisher will assume that the authors endorse the text as is.

For authors the bibliographic and formatting standards used for items submitted to the journal (e.g., *Publication Manual of the American Psychological Association*, 5th edition, 2001). It is often helpful to provide examples of the common citation formats for journals and books to be used in submissions. Also identify the types of appropriate Supplementary Files (e.g., data-sets, research instruments, etc.) which authors should be encouraged to upload, in addition to their submission, to enhance readers' engagement with their work.

<http://www.icmjie.org>

## SUBMISSION PREPARATION CHECKLIST

1. As part of the submission process, authors are required to check off their submission's compliance with all of the following items, and submissions may be returned to authors that do not adhere to these guidelines.
2. The submission is published, nor is it before another journal for consideration (or an explanation has been provided in Comments to the Editor).
3. The submission file is in LibreOffice, OpenOffice, Microsoft Word, RTF, or WordPerfect document file format.
4. Where available, URLs for the references have been provided.
5. The text is single-spaced; uses a 12-point font; employs italics, rather than underlining (except with URL addresses); and all illustrations, figures, and tables are placed within the text at the appropriate points, rather than at the end.
6. The text adheres to the stylistic and bibliographic requirements outlined in the *Author Guidelines*, which is found in About the Journal. To the stylistic and bibliographic requirements outlined by the International Committee of Medical Journal Editors (available at <http://www.icmjie.org>).
7. If submitting to a peer-reviewed section of the journal, the instructions in *Ensuring a Blind Review* have been followed.
8. **Suggest Reviewers**

9. Suggesting 3 reviewers are Required for Submission.

Please suggest potential reviewers for this submission.

Use the fields below to give us contact information for each suggested reviewer, and please provide specific reasons for your suggestion in the comments box for each person. Please note that the editorial office may not use your suggestions, but your help is appreciated and may speed up the selection of appropriate reviewers.

A\* indicates a required field.

First Name\* Last Name\* Academic Degree(s) Position Department Institution E-mail Address\*

**COPYRIGHT NOTICE**

**CREATIVE COMMONS license.**

To that end, it provides **SAMPLE COPYRIGHT NOTICE WORDING** that can be cut and pasted into the space below for journals that

(a) offer open access.

## PRIVACY STATEMENT

The names and email addresses entered in this journal site will be used exclusively for the stated purposes of this journal and will not be made available for any other purpose or to any other party.

## AUTHOR FEES

Article Publication Fee - Journal of Education, Health and Sport: **200,- PLN**

If the paper is accepted for publication, you will be asked to pay an Article Publication Fee. Please find payment information

Dane szkoły i konta bankowego:

Uniwerytet Kazimierza Wielkiego

ul. Chodkiewicza 30

85-064 Bydgoszcz, Poland PL

NIP 554 26 47 568 REGON 340057695

Przedstawiciel Kwestury UKW Angelika Kuczyńska

Tel.: +48 52 34 19 209

<angelika.kuczyńska@ukw.edu.pl>

Rachunek bankowy w BANK ZACHODNI WBK S.A.

PL.92 1500 1360 1213 6001 8602 0000 SWIFT WBKPLPPP

W tytule przelewu należy podać nazwisko korespondującego autora i otrzymany numer identyfikacyjny artykułu (**Manuscript JoEH&S Amosova 2705**).

Scan dokumentu opłaty prosimy wysłać na adres Email:

Przedstawiciel Kwestury Angelika Kuczyńska

Tel.: +48 52 34 19 209

<angelika.kuczyńska@ukw.edu.pl>

i

<w.mikow@wp.pl>

**Po otrzymaniu opłaty Kwestura UKW wystawi Fakturę VAT (Kwestura UKW).**

Aby uczelnia mogła wystawić Fakturę Vat za publikację Artykułu w czasopiśmie musi wiedzieć dokładnie dane jak :

- dla kogo ? Imię Nazwisko albo nazwa firmy jeżeli ktoś prowadzi działalność gospodarczą !

- dokładny adres siedziby czy miejsca zamieszkania osoby która chce fakturę na opłatę **200 zł** za publikację.

- numer identyfikacji podatkowej NIP

- adres do korespondencji - gdyż sama wpłata nie wystarczy do tego aby wystawić fakturę.

Journal of Education, Health and Sport formerly Journal of Health Sciences

Declaration on the original version.

Because of the parallel version of the magazine publishing traditional (paper) and of electronic (online), Editors indicate that the main version of the magazine is to issue a "electronic".

The journal has had 7 points in Ministry of Science and Higher Education parametric evaluation.

Part B item 755 (23.12.2015).

755 Journal of Education, Health and Sport (mult) 2391-8306 7

Deklaracja.

Specyfika i zawartość merytoryczna czasopisma nie ulega zmianie.

Zgodnie z informacją MNSW z dnia 2 czerwca 2014 r., że w roku 2014 nie będzie przeprowadzana ocena czasopism naukowych; czasopismo o zmienionym tytule otrzymuje tyle samo punktów co na wykazie czasopism naukowych z dnia 31 grudnia 2014 r.

ISSN 2391-8306

formerly ISSN: 1429-9623 / 2300-665X

Archives 2011 - 2014

Redaction, Publisher and Editorial Office

Publisher and Editorial Office

Department of Physical Education,

Faculty of Earth Sciences and Spatial Management,

Nicolaus Copernicus University in Toruń, Poland

Address: Str. Lwowska 1, 87-100 Toruń, Poland

Open Access

ISSN 2391-8306

formerly ISSN: 1429-9623 / 2300-665X

Archives 2011 - 2014

<http://journal.rsw.edu.pl/index.php/JHS/issue/archiv>

The formerly journal has had 5 points in Ministry of Science and Higher Education parametric evaluation. Part B item 1089 (31.12.2014).

The formerly journal has had 5 points in Ministry of Science and Higher Education parametric evaluation. Part B item 1107 (17.12.2013).

The journal has had 4 points in Ministry of Science and Higher Education of Poland parametric evaluation, Part B item 683 (21.12.2012).

The journal has been approved for inclusion in ERIH PLUS.

The ERIH PLUS listing of the journal is available at <https://dbh.nds.ni.b.no/publisering/skamaler/erihplus/periodical/info/?id=485984>

Indexed in Index Copernicus Journals Master List.

<http://journals.indexcopernicus.com/Journal-of-Education-Health-and-Sport,p24782242,3.html>  
ICV 2014: 89.51 **Standardized Value: 8.27**

ICV 2013: 7.32

ICV 2012: 6.41

ICV 2011: 5.48

The InfoBase Index IBI Factor for the year 2015 is 3.56 in InfoBase Index.com.  
Website: [www.infobaseindex.com](http://www.infobaseindex.com)

Universal Impact Factor 1.78 for year 2012. (<http://www.impactfactor.org/AppliedJournals.aspx>)

Indexed in Polish Scholarly Bibliography (PBN) (PBN Polska Bibliografia Naukowa) (<https://pbn.nauka.gov.pl/journals/36616>)

is a portal of the Polish Ministry of Science and Higher Education, collecting information on publications of Polish scientists and on Polish and foreign scholarly journals. Polish Scholarly Bibliography is a part of POL-on - System of Information on Higher Education. It is operated by the Interdisciplinary Centre for Mathematical and Computational Modelling, University of Warsaw.



Russian Science Citation Index



Indexed in Index Copernicus Journals Master List.

IC Value 2011  
IC Value 2012

5.48  
6.41

The journal is indexed in:  
InnoSpace - SJIF Scientific Journal Impact Factor

SJIF 2012: 3.83



ARIANTA  
POLISH SCIENTIFIC AND PROFESSIONAL ELECTRONIC JOURNALS  
Aneta Drabek i Arkadiusz Pulikowski

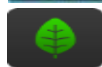


Główna Biblioteka Lekarska



Czasopisma pełnotekstowe w bazach GBL

<http://atoz.ebsco.com/Title/SearchResults/4915?SearchType=0&Find=journal+of+health+sciences&GetResourcesBy=QuickSearch&resourceType=allTitles&resourceType=&radioButtonChanged=>



ScienceAlerts.com

#### POPULAR ARTICLES

»EFFECTS OF TRANSCRANIAL ELECTROANALGESIA ON CONDITION OF CEREBRAL HEMODYNAMICS IN PATIENTS WITH THE SYNDROME OF VEGETATIVE DYSTONIA DIFFERENT GENESIS. Влияние транскраниальной электроанальгезии на состояние церебральной гемодинамики у больных с синдромом

13836 views since: 2013-06-15

»ROLE OF BRAINS TEM WITHIN HUMAN BODY SYSTEMS – COMPUTATIONAL APPROACH

9360 views since: 2012-01-19

»THE INFLUENCE OF PACLITAXEL TREATMENT ON SELECTED BIOCHEMICAL AND MORPHOLOGICAL BLOOD PARAMETERS IN PATIENTS DIAGNOSED WITH BREAST CANCER

8413 views since: 2011-08-21

»ASSESSMENT OF THE PNF METHOD INFLUENCE ON GAIT PARAMETERS IMPROVEMENT IN PERSONS WITH CEREBRAL PALSY

6799 views since: 2012-01-04

»ELECTIC VS. SPHERIC APPROACH WITHIN CONTEMPORARY NEUROLOGICAL PHYSIOTHERAPY

3829 views since: 2012-01-30

»BIOFEEDBACK AS THE ELEMENT OF THE NEUROREHABILITATION

3662 views since: 2012-01-30

»PATHOMORPHOLOGICAL CHANGES ACUTE LUNG INJURY

3062 views since: 2012-05-02

»FUZZY ONTOLOGICAL KNOWLEDGE REPRESENTATION FOR THE TRAINING OF MEDICAL TERMINOLOGY

2929 views since: 2013-02-24

»INCIDENCE OF NEUROGENIC HETEROTOPIC OSSIFICATIONS IN PATIENTS WITH NEUROLOGICAL DEFICITS

2700 views since: 2012-05-17

»EFFECT OF AEROBIC TRAINING ON THE HEALTH OF WOMEN FREQUENTING TO FITNESS CLUBS. Wpływ treningu aerobowego na zdrowie kobiet uczęszczających do klubów fitness

2304 views since: 2013-06-06

## Introduction

We hope that a varied program of the **Journal of Education, Health and Sport formerly Journal of Health Sciences** will answer your expectations. We believe that the **Journal of Education, Health and Sport formerly Journal of Health Sciences** will contribute to raising the knowledge, skills and abilities of doctors, therapists, physiotherapists, nurses, psychologists, biologists, researchers, practitioners and health workers interested in rehabilitation, physiotherapy, tourism and recreation.

**Journal of Education, Health and Sport formerly Journal of Health Sciences**, corresponding to the modern challenges of global health specialists collect articles from those areas of the leading centers of renowned foreign and domestic. Many of them present state of art in their field. This will be particularly valuable for young doctors in the specialization, and students.

Welcome to familiarize yourself with this issue all relevant hazards and health, life and safety at work in tourism, recreation, rehabilitation, physiotherapy, nursing organization to work safely and missions in these conditions, the influence of environmental conditions on public health.

Authors from abroad and the country will present an overview of contemporary challenges and solutions in these areas. The issue concerns the text of the wider work for human health, tourism, recreation, physiotherapy, nursing, wellness and rehabilitation, including the economics of health care.

© The Author(s) 2020.

Faculty of Earth Sciences and Spatial Management,  
Nicolaus Copernicus University in Toruń, Poland

## Wstęp

Wyrażamy nadzieję, że zróżnicowany program **Journal of Education, Health and Sport formerly Journal of Health Sciences** będzie odpowiadał Państwa oczekiwaniom. Wierzymy, że **Journal of Education, Health and Sport formerly Journal of Health Sciences** przyczyni się do podnoszenia wiedzy, kwalifikacji i umiejętności lekarzy, rehabilitantów, fizjoterapeutów, pielęgniarek, psychologów, biologów, praktyków i badaczy zainteresowanych ochroną zdrowia pracowników rehabilitacji, fizjoterapii, turystyki i rekreacji.

**Journal of Education, Health and Sport formerly Journal of Health Sciences**, odpowiadająca na współczesne światowe wyzwania zdrowotne, gromadzi artykuły specjalistów z tych dziedzin z wiodących, renomowanych ośrodków zagranicznych i krajowych. Wielu z nich przedstawia state of art w swojej dziedzinie. Będzie to szczególnie cenne dla młodych lekarzy w trakcie specjalizacji, oraz studentów.

Mile widziani do zapoznania się z tą problematyką wszystkich zainteresowanych zagrożeniami i ochroną zdrowia, życia i bezpieczeństwa w pracy w turystyce, rekreacji, rehabilitacji, fizjoterapii, pielęgniarstwie organizacją bezpiecznej pracy i misji w tych warunkach, wpływem warunków środowiska na stan zdrowia publicznego.

Autorzy z zagranicy i kraju przedstawią przegląd współczesnych wyzwań i proponowanych rozwiązań w tych dziedzinach. Problematyka tekstów prac dotyczy szeroko rozumianego zdrowia człowieka, turystyki, rekreacji, fizjoterapii, pielęgniarstwa, odnowy biologicznej i rehabilitacji, również ekonomiki ochrony zdrowia.

Zawartość tego czasopisma jest objęta licencją  
Creative Commons Uznanie autorstwa-Użycie niekomercyjne-Na tych samych warunkach 4.0

# Content:

## Introduction ..... 010-010

Machaj Dominik, Jastrzębska Sandra, Cyboran Katarzyna, Placzek Alicja, Flaumenhaft Wiktoria. The incidence of infection, diagnosis and treatment of H. pylori in developing countries on the example of Kenya. Journal of Education, Health and Sport. 2020;10(3):11-17. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2020.10.03.001>  
<https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2020.10.03.001>  
<https://zenodo.org/record/3696977>

Zhukov Anatoliy, Gushcha Sergey. Stop Global Warming. Journal of Education, Health and Sport. 2020;10(3):18-33. eISSN 2391- 8306. DOI <http://dx.doi.org/10.12775/JEHS.2020.10.03.002>  
<https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2020.10.03.002>  
<https://zenodo.org/record/3703106>

Voloshyna Olena, Samorukova Viktoriia, Dychko Tetiana, Balashova Iryna, Naidyonova Olena, Chaika Anna, Voloshyn Andrii, Gushcha Sergey. Adherence to home blood pressure monitoring depending on the frequency of blood pressure measurements during the day. Journal of Education, Health and Sport. 2020;10(3):34-41. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2020.10.03.003>  
<https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2020.10.03.003>  
<https://zenodo.org/record/3709240>

Brestovci Shqipe Bajcinca, Morina Besnik, Berisha Mentor. Urban-rural differences offree activitiesin children of age 11-14. Journal of Education, Health and Sport.2020;10(3):42-56. eISSN2391-8306. DOI<http://dx.doi.org/10.12775/JEHS.2020.10.03.004>  
<https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2020.10.03.004>  
<https://zenodo.org/record/3711237>

Cholewa Krystian, Mitas Kinga, Zaremba Bartłomiej, Artykiewicz Klaudia, Kozyra Magdalena, Milanowska Joanna. Current review of conections between lichen planus and mental disorders. Journal of Education, Health and Sport. 2020;10(3):57-65. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2020.10.03.005>  
<https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2020.10.03.005>  
<https://zenodo.org/record/3711712>

Evans Vaughan. Trends in Fatalities in Motorcycle Accidents in Great Britain With Reference to the Studies by Hugh Cairns. Journal of Education, Health and Sport. 2020;10(3):66-75. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2020.10.03.006>  
<https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2020.10.03.006>  
<https://zenodo.org/record/3712134>

Zawiślak Magdalena, Zaniuk Marcin, Karakula Kaja, Krysa Tomasz, Zimmnicki Patryk. Awareness of dangers of using e-cigarettes among society. Journal of Education, Health and Sport. 2020;10(3):76-82. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2020.10.03.007>  
<https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2020.10.03.007>  
<https://zenodo.org/record/3712150>

Zhukov Anatoliy, Zukow Walery. Silver Against the Coronavirus Epidemic = Серебро против эпидемии коронавируса. Journal of Education, Health and Sport. 2020;10(3):83-97. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2020.10.03.008>  
<https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2020.10.03.008>  
<https://zenodo.org/record/3712835>

Zlobin O. O. Psychotherapeutic support for persons with vascular dementia suffering from non-cognitive psychopathological symptoms of non-psychotic level. Journal of Education, Health and Sport. 2020;10(3):98-107. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2020.10.03.009>  
<https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2020.10.03.009>  
<https://zenodo.org/record/3724826>

Gębska Magdalena, Weber-Nowakowska Katarzyna. Physiotherapeutic procedures used in patients after surgical treatment of maxillofacial and occlusal disorders. Journal of Education, Health and Sport. 2020;10(3):108-111. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2020.10.03.010>  
<https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2020.10.03.010>  
<https://zenodo.org/record/3726421>

Maziarz Barbara, Makarewicz Magdalena, Kubicka Magdalena, Łapa Katarzyna, Nieradko-Iwanicka Barbara. Health problem resulting from the use of e - cigarettes. Journal of Education, Health and Sport. 2020;10(3):112-119. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2020.10.03.011>  
<https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2020.10.03.011>  
<https://zenodo.org/record/3726425>

- Reba Patricia. Role of food and nutrition and prevention in pathogenesis of the arterial occlusive disease. Journal of Education, Health and Sport. 2020;10(3):120-125. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2020.10.03.012>  
<https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2020.10.03.012>  
<https://zenodo.org/record/3726428>
- Szumna Klaudia, Piędel Faustyna, Rocka Agata, Madras Dominika, Jasielski Patryk. Targeted therapy in age-related macular degeneration (AMD). Journal of Education, Health and Sport. 2020;10(3):126-132. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2020.10.03.013>  
<https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2020.10.03.013>  
<https://zenodo.org/record/3729789>
- Piędel Faustyna, Rocka Agata, Szumna Klaudia, Madras Dominika, Jasielski Patryk. Targeted therapy with Poly(ADP-ribose) polymerase (PARP) inhibitors for the treatment of solid tumours. Journal of Education, Health and Sport. 2020;10(3):133-139. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2020.10.03.014>  
<https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2020.10.03.014>  
<https://zenodo.org/record/3729953>
- Fatya Kamil, Tarczyńska Marta, Gawęda Krzysztof, Mazur Rafał, Głodek Łukasz. Entesopathy of the lateral epicondyle of the humeral bone – current treatment options. Journal of Education, Health and Sport. 2020;10(3):140-147. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2020.10.03.015>  
<https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2020.10.03.015>  
<https://zenodo.org/record/3730081>
- Kucharczuk Magda, Sikorska Hanna, Juraszek Karolina, Wyżowski Przemysław, Leksowski Krzysztof. Physical activity as one of the elements of a comprehensive obesity treatment. Journal of Education, Health and Sport. 2020;10(3):148-157. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2020.10.03.016>  
<https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2020.10.03.016>  
<https://zenodo.org/record/3730387>
- Kusz Monika, Alzubedi Adam, Polski Paweł, Pawluczuk Paulina, Maślak Agnieszka. Metabolic disorders in kidney stone disease in children. Journal of Education, Health and Sport. 2020;10(3):158-163. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2020.10.03.017>  
<https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2020.10.03.017>  
<https://zenodo.org/record/3731129>
- Tomaszewska Katarzyna, Majchrowicz Bożena, Hejsak Grażyna. Workload of nurses working in the operating theatre. Journal of Education, Health and Sport. 2020;10(3):164-172. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2020.10.03.018>  
<https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2020.10.03.018>  
<https://zenodo.org/record/3732185>
- Kolyubakina L. V., Khilchevska V. S. Simulation training of interns-pediatricians: assessment and stabilization of urgent conditions in neonatology. Journal of Education, Health and Sport. 2020;10(3):173-176. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2020.10.03.019>  
<https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2020.10.03.019>  
<https://zenodo.org/record/3749336>
- Lukyanchenko Oleksandr I., Mel'nyk Oksana I., Gozhenko Olena A., Zukow Walery, Popovych Igor L. Features of the HRV, endocrine and metabolic parameters in persons whose immune status is susceptible or resistant to chronic stress. Journal of Education, Health and Sport. 2020;10(3):177-187. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2020.10.03.020>  
<https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2020.10.03.020>  
<https://zenodo.org/record/3753225>
- Savitsky I. V., Kryukova G. V., Myastkivska I. V. Endothelial dysfunction due to sodium nitrite. Journal of Education, Health and Sport. 2020;10(3):188-198. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2020.10.03.021>  
<https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2020.10.03.021>  
<https://zenodo.org/record/3759621>
- Zhernovnykova Oksana, Kovalenko Oksana, [Mkrtychian](#) Oksana, Zelenska Liudmyla. Evaluation of the professional teaching competence: chinese experience. Journal of Education, Health and Sport. 2020;10(3):199-207. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2020.10.03.022>  
<https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2020.10.03.022>  
<https://zenodo.org/record/3757294>
- Krul Volodymyr, Diachuk Alina. Concentration of Population on the Territory of Physic-Geographical Rayons of the Chernivtsi Oblast. Journal of Education, Health and Sport. 2020;10(3):208-218. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2020.10.03.023>  
<https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2020.10.03.023>  
<https://zenodo.org/record/3822580>

Kilinskaya K., Yavorskaya V., Lopushnyak L. Road landscapes - recreation and tourism sphere segment (on the example of Chernivtsi city). Journal of Education, Health and Sport. 2020;10(3):219-229. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2020.10.03.024>  
<https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2020.10.03.024>  
<https://zenodo.org/record/3822617>

Shorobura Inna. State-public administration of education as the main direction of democratization. Journal of Education, Health and Sport. 2020;10(3):230-237. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2020.10.03.025>  
<https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2020.10.03.025>  
<https://zenodo.org/record/3822648>

Yaroshenko Zh., Prykashchykova K. Epidemiological assessment of the peculiarities of the development of non-tumor diseases residents of the radioactively contaminated areas aged 18-47 years old, born before the Chernobyl accident. The observation period 1988-2016. Journal of Education, Health and Sport. 2020;10(3):238-251. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2020.10.03.026>  
<https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2020.10.03.026>  
<https://zenodo.org/record/3834761>

Hevko Ihor Vasilievich. Preparation of future geography teachers for professional activity on a basis competence approach. Journal of Education, Health and Sport. 2020;10(3):252-264. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2020.10.03.027>  
<https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2020.10.03.027>  
<https://zenodo.org/record/3843317>