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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.

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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 przedstawiają 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.

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<http://ojs.ukw.edu.pl/index.php/johs/article/view/5084>
<https://pbn.nauka.gov.pl/sedno-webapp/works/839683>

Krasuska Beata, Topyla Weronika, Bal Wioletta, Bąk Tomasz, Trojnar Michal. Late cardiac tamponade after pacemaker implantation in patient with third degree atrio-ventricular block - a case report. Journal of Education, Health and Sport. 2017;7(12):22-27. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1086299> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5086>

Puszkarcz Irena, Durnaś Bonita, Król Grzegorz, Bucki Robert. Knowledge about sexual transmitted disease (STDs) and risks involved amongst young people population living in south-eastern region of Poland. Journal of Education, Health and Sport. 2017;7(12):28-39. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1095153> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5092>

Topyla Weronika Sandra, Krasuska Beata, Bal Wioletta Anna, Bąk Tomasz Krzysztof, Staciwa Agnieszka Zofia. Non symptomatic atrial septal defect venosus type IVC – SV coexistent with non-obstructed foramen ovale in 78 years old patient – a case report. Journal of Education, Health and Sport. 2017;7(12):40-44. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1095604>
<http://ojs.ukw.edu.pl/index.php/johs/article/view/5098>

Dąbrowska Aneta, Zajkowska Dorota, Więk Adam, Rybaczek Sylwester. Safety of dairy products in the light of consumer surveys. Journal of Education, Health and Sport. 2017;7(12):45-52. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1098377>
<http://ojs.ukw.edu.pl/index.php/johs/article/view/5099>

Napierała Marek, Matuszak Jerzy, Zukow Walery. Congress of the Polish Chamber of Tourism - Egypt 2017. Journal of Education, Health and Sport. 2017;7(12):53-76. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1098447>
<http://ojs.ukw.edu.pl/index.php/johs/article/view/5103>

Bal Wioletta Anna, Bąk Tomasz Krzysztof, Krasuska Beata, Topyla Weronika Sandra, Wojciechowicz Jolanta Elżbieta. Osteomyelitis of the mandible in the patient with plasmocytoma – case report. Journal of Education, Health and Sport. 2017;7(12):77-82. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1098557> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5100>

Hżecka Joanna. Kinesitherapy in amyotrophic lateral sclerosis. Journal of Education, Health and Sport. 2017;7(12):83-93. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1098660> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5102>

Khlopets'ka Larysa I, Horkovenko Nataliya L, Zukow Walery. Electrical conductivity of some points of acupuncture correlates with age, blood pressure and heart rate variability. Journal of Education, Health and Sport. 2017;7(12):94-103. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1099154> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5107>

Koza Jaroslaw, Kwiatkowska Renata, Jurgoński Adam, Pujanek Małgorzata, Ameryk Monika, Sikorski Piotr, Meder Agnieszka, Świątkowski Maciej. The importance of serotonin in the gastrointestinal tract. Journal of Education, Health and Sport. 2017;7(12):104-110. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1102699>
<http://ojs.ukw.edu.pl/index.php/johs/article/view/5109>
<https://pbn.nauka.gov.pl/sedno-webapp/works/840668>

Terlecka Paulina, Grzywa Celińska Anna, Emeryk Maksymiuk Justyna, Szymgin Milanowska Katarzyna, Milanowski Janusz. Hiccup as an uncommon symptom of pneumonia. Journal of Education, Health and Sport. 2017;7(12):111-117. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1108599> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5108>

Krzyżanowska Ewa, Polska Magda, Luczyk Robert Jan, Wawryniuk Agnieszka, Sawicka Katarzyna, Olszak Cecylia, Daniluk Jadwiga. Subjective evaluation of health behaviour of patients with chronic kidney disease. Journal of Education, Health and Sport. 2017;7(12):118-132. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1108803> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5111>

Rajs Arkadiusz, Maszewski Miroslaw. Low-pass filtration using adaptive delta modulation. Journal of Education, Health and Sport. 2017;7(12):133-138. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1112371> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5112>

Wojdat Marta, Kanupriya Rawat, Janowska Patrycja, Wolska Beata, Stępnik Robert, Adam Marek. Comparative analysis of optimism and life satisfaction in Brazilian male and female Ju-Jitsu society. Journal of Education, Health and Sport. 2017;7(12):139- 154. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1069014> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5073>

- Olborska Anna, Osica Piotr, Janas Naze Anna. Iatrogenic fracture of the maxillary tuberosity – a case report. *Journal of Education, Health and Sport*. 2017;7(12):155-168. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1116387> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5122>
- Karolak Przemyslaw, Karolak Joanna, Wilczyński Igor, Wilczyński Jacek. Optoelectronic and electromyographic study of the erector spinae muscle in female patient aged 8 with scoliosis. *Journal of Education, Health and Sport*. 2017;7(12):169-183. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1117050> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5124> <https://pbn.nauka.gov.pl/sedno-webapp/works/841229>
- Shcherba Vitaliy, Miz Andriy, Kyryliv Mariia, Bekus Iryna, Krynytska Inna, Korda Mykhaylo. Correlative link ages between indices of bone metabolism and thyroid hormones in rats with periodontitis. *Journal of Education, Health and Sport*. 2017;7(12):184-196. eISSN 2391- 8306. DOI <http://dx.doi.org/10.5281/zenodo.1117074> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5119>
- Lipczyńska Lewandowska Małgorzata, Osica Piotr, Janas Naze Anna. Surgical management of a child suffering from osteogenesis imperfecta, treated with bisphosphonates - a case report. *Journal of Education, Health and Sport*. 2017;7(12):197-205. eISSN 2391- 8306. DOI <http://dx.doi.org/10.5281/zenodo.1117234> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5132>
- Ratajek Gruda Monika, Osica Piotr, Janas Naze Anna. Massive hard palate tumor removed with an electric knife. *Journal of Education, Health and Sport*. 2017;7(12):206-211. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1118106> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5137>
- Strojek Katarzyna, Karpińska Anna, Kaźmierczak Urszula, Zukow Walery, Radzińska Agnieszka. Rehabilitation of speech in Parkinson's disease. *Journal of Education, Health and Sport*. 2017;7(12):212-221. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1121079> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5161>
- Lubkowska Wioletta, Wiazewicz Aleksander, Eider Jerzy. The correlation between sports results in swimming and general and special muscle strength. *Journal of Education, Health and Sport*. 2017;7(12):222-236. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1125879> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5143>
- Bidzińska Gabriela, Sieroń Adrian. Research concepts use in the diagnosis and treatment of urinary incontinence. *Journal of Education, Health and Sport*. 2017;7(12):237-247. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1127704> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5153>
- Olszak Cecylia, Nowicka Elżbieta, Baczeńska Bożena, Luczyk Robert Jan, Kropornicka Beata, Krzyżanowska Ewa, Daniluk Jadwiga. Research concepts use in the diagnosis and treatment of urinary incontinence. *Journal of Education, Health and Sport*. 2017;7(12):248-261. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1127709> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5158>
- Sieroń Adrian, Bidzińska Gabriela. Comparative analysis of the physique of volleyball players selected from different volleyball clubs. *Journal of Education, Health and Sport*. 2017;7(12):262-270. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1128575> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5159>
- Koza Jaroslaw, Świątkowski Maciej. Diffuse infiltrative hepatocellular carcinoma or cirrhosis? *Journal of Education, Health and Sport*. 2017;7(12):271-273. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1129283> <http://ojs.ukw.edu.pl/index.php/johs/article/view/516>
- Chiżyński Adam, Stelmach Rafał, Osica Piotr, Janas-Naze Anna. Mucocele in a 35-year-old patient - a case report. *Journal of Education, Health and Sport*. 2017;7(12):274-279. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1129334> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5163>
- Stodółka Weronika, Filipowski Damian, Michalik Kamil, Palkiewicz Krzysztof, Stodółka Jacek. Running as a form of active leisure - running paths as a substantial element of local society development strategies. *Journal of Education, Health and Sport*. 2017;7(12):280-287. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1133284> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5170>
- Podhorecka Marta, Cytarska Magdalena, Gębka Dominika, Perkowski Radosław, Androsiuk-Perkowska Joanna, Jaroch Alina, Siedlecka-Główczeńska Emilia, Sokolowski Remigiusz, Zukow Walery, Kędziara-Kornatowska Kornelia. Can physical activity influence the quality of sleep among the elderly? *Journal of Education, Health and Sport*. 2017;7(12):288-305. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1133730> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5177>
- Podhorecka Marta, Turska Anna, Gębka Dominika, Perkowski Radosław, Perkowska Joanna, Jaroch Alina, Nicpoń-Nożewska Klara, Radzińska Michalina, Grzanka-Tykwińska Anna, Zukow Walery, Kędziara-Kornatowska Kornelia. Cognitive disorders and fitness of the elderly in residential homes in Bydgoszcz. *Journal of Education, Health and Sport*. 2017;7(12):306-321. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1133973> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5180>
- Podhorecka Marta, Cytarska Magdalena, Gębka Dominika, Perkowski Radosław, Jaroch Alina, Siedlecka-Główczeńska Emilia, Sokolowski Remigiusz, Radzińska Michalina, Zukow Walery, Kędziara-Kornatowska Kornelia. Sleep quality disorders among the people of old and presenile age. *Journal of Education, Health and Sport*. 2017;7(12):322-338. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1133977> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5181>
- Wróbel Grzegorz, Spalek Jakub, Zieliński Paweł. Neoangiogenesis - forming an effective network of blood vessels as a critical determinant of tumor development. *Journal of Education, Health and Sport*. 2017;7(12):339-348. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1139224> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5196>
- Wróbel Grzegorz, Zieliński Paweł, Spalek Jakub. Alzheimer's disease - etiology and pathogenesis. *Journal of Education, Health and Sport*. 2017;7(12):349-355. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1139312> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5198>

- Wilczyński Jacek, Sowińska Anita, Wilczyński Igor. The effects of sensory integration technique on equilibrium processes in children after prenatal exposure to alcohol. *Journal of Education, Health and Sport*. 2017;7(12):356-367. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1145826> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5206>
- Pawlowski Piotr, Łopuszyńska Marta, Korpornicka Beata, Jakubowska Klaudia, Nalepa Dorota. Asthma Nursing Care Management and Study Guide. *Journal of Education, Health and Sport*. 2017;7(12):368-377. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1146589> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5208>
- Malinowska Ilona, Dobosiewicz Anna Maria, Stalmirska Lucja, Pankanin Ewelina. Adaptive mechanisms of cardiovascular system in trained athletes. *Journal of Education, Health and Sport*. 2017;7(12):378-385. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1156210> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5213>
- Sikorski Piotr, Szamocka Małgorzata, Meder Agnieszka, Ameryk Monika, Świątkowski Maciej. Assessment of colonoscopy screening by elderly people. *Journal of Education, Health and Sport*. 2017;7(12):386-399. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1158472> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5216>
- Każmierczak Arkadiusz. Thoughts on physical education in the scientific creativity of Polish pedagogues and physicians of the modern era (1492-1918). *Journal of Education, Health and Sport*. 2017;7(12):400-411. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1158502> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5217>
- Wędrowski Mateusz, Waśniowski Paweł, Wędrowska Ewelina, Golińska Joanna, Piskorska Elżbieta, Zukow Walery. Mobile genetic elements – mechanism and consequences of transposition. *Journal of Education, Health and Sport*. 2017;7(12):412-428. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1161264> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5223>
- Wędrowska Ewelina, Wojciechowska Marzena, Goede Arkadiusz, Wędrowski Mateusz, Waśniowski Paweł, Chmielarski Maciej, Piskorska Elżbieta, Zukow Walery. Preliminary flagellin gene transfection into tumor cells - attempts of generating anti-tumor response in experimental model. *Journal of Education, Health and Sport*. 2017;7(12):429-444. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1161365> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5225>
- Brożyna Klaudia, Tkaczyk Jędrzej, Bąk Tomasz, Wojciechowicz Jolanta, Baran Marcin, Tomaszewski Tomasz. Dislocation of the mandible in a 47 year old patient. *Journal of Education, Health and Sport*. 2017;7(12):445-450. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1162348> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5227>
- Maryczkanicz Joanna, Weber–Nowakowska Katarzyna. Relations between the occurrence of hypermobility and gender in the group of children aged 6 - 10 years. *Journal of Education, Health and Sport*. 2017;7(12):451-460. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1162360> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5228>
- Sikorski Piotr, Szamocka Małgorzata, Meder Agnieszka, Ameryk Monika, Świątkowski Maciej. Simple sugars in fruit and the presence of colorectal cancers and polyps. *Journal of Education, Health and Sport*. 2017;7(12):461-474. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1162369> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5229>
- Sykuła Magdalena, Stelmach Aleksandra, Szacoń Monika, Kuśmierz Katarzyna, Sutula Małgorzata, Rząca Marcin, Kachaniuk Hanna. Taste disorders in the elderly. *Journal of Education, Health and Sport*. 2017;7(12):501-516. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1123528> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5136> <https://pbn.nauka.gov.pl/sedno-webapp/works/842243>
- Krzemińska Sylwia, Guzik Natalia, Borodzicz Adriana, Aendarczyk Marta. Assessment of mental workload of nurses anesthesia - preliminary study. *Journal of Education, Health and Sport*. 2017;7(12):517-530. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1123536> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5078> <https://pbn.nauka.gov.pl/sedno-webapp/works/842354>
- Zuń Katarzyna, Zych Magdalena, Rząca Marcin Stanisław, Kocka Katarzyna. The Internet addiction among students of primary schools and lower and upper secondary schools and its relation to their level of physical activity. *Journal of Education, Health and Sport*. 2017;7(12):531-544. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1127741> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5144>
- Osica Piotr, Osica Karolina, Janas Naze Anna. Surgical treatment of the patient with compound odontoma located in the mandible - a case report. *Journal of Education, Health and Sport*. 2017;7(12):545-552. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1133860> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5175> <https://pbn.nauka.gov.pl/sedno-webapp/works/843182>
- Kupcewicz Ewa, Kupcewicz Adam. Emotional intelligence and its importance in human life – case study. *Journal of Education, Health and Sport*. 2017;7(12):553-564. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1133944> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5176>
- Kabała Magdalena, Wilczyński Jacek. Evaluation of equivalent reactions in women after mastectomy using biodex balance system. *Journal of Education, Health and Sport*. 2017;7(12):565-578. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1133958> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5178>
- Budka Krzysztof, Tychoniec Alicja. The geopolitical situation of Ukraine after the „Orange Revolution”. *Journal of Education, Health and Sport*. 2017;7(12):579-601. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1134915> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5185>
- Wróbel Grzegorz, Spalek Jakub, Zieliński Paweł. Anthropometric aspects of the human skeleton. *Journal of Education, Health and Sport*. 2017;7(12):602-611. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1141141> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5199>

Baida Mariana Ljubomurivna, Sadljak Oksana Volodumurivna, Reheda Stepan Mykhailovuch. Changes in activity of some indicators of pro-oxidant and antioxidant systems in guinea pigs' lungs in experimental allergic alveolitis and their correction with thiotriazolin. Journal of Education, Health and Sport. 2017;7(12):612-618. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1162832>

<http://ojs.ukw.edu.pl/index.php/johs/article/view/5233>
<https://pbn.nauka.gov.pl/sedno-webapp/works/851629>

Boreichuk Anna. Pedagogical conditions as the main factor of the of future lawyers' educational competences formation. Journal of Education, Health and Sport. 2017;7(12):619-633. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1185980>
<http://ojs.ukw.edu.pl/index.php/johs/article/view/5316>

Kravchenko V. V. The feasibility of using public-private partnership mechanisms to improve the quality of secondary ambulatory care. Journal of Education, Health and Sport. 2017;7(12):634-643. eISSN 2391-8306.

DOI <http://dx.doi.org/10.5281/zenodo.1250483>
<http://ojs.ukw.edu.pl/index.php/johs/article/view/5514>
<https://pbn.nauka.gov.pl/sedno-webapp/works/865736>

Barinov E. F., Grigoryan Kh. V., Balykina A. O., Faber T. I. Why a pregnant age can be the risk factor in chronic obstructive pyelonephritis? Journal of Education, Health and Sport. 2017;7(12):644-655. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1295649>

<http://ojs.ukw.edu.pl/index.php/johs/article/view/5596>
<https://pbn.nauka.gov.pl/sedno-webapp/works/868135>

Sazonova Olga, Vovk Oleg, Hordiichuk Daria, Ikramov Volodimir, Onashko Yulia. Establishing the range of variability of the skull structures in adulthood. Journal of Education, Health and Sport. 2017;7(12):656-664. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1478808>

<http://ojs.ukw.edu.pl/index.php/johs/article/view/6280>
<https://pbn.nauka.gov.pl/sedno-webapp/works/886085>