

# Athens Journal of Health and Medical Sciences

Quarterly Academic Periodical, Volume 13, Issue 2

Published by the Athens Institute

URL: <https://www.athensjournals.gr/ajh> Email: [journals@atiner.gr](mailto:journals@atiner.gr)

e-ISSN: 2241-8229 DOI: 10.30958/ajhms

June 2026

# Athens Journal of Health and Medical Sciences

Quarterly Academic Periodical, Volume 13, Issue 2, June 2026

Published by the Athens Institute

URL: <https://www.athensjournals.gr/ajh> Email: [journals@atiner.gr](mailto:journals@atiner.gr)

e-ISSN: 2241-8229 DOI: 10.30958/ajhms

## Front Pages

*KURT KLEIN, STAVROULA MALLA & DAVID FORESTELL*

[Is it Time for Canada to Institute Mandatory Labelling for Genetically Engineered foods? Assessing the Evidence](#)

*ABDULLAH ALI SALAMAI*

[Risk Management for Smart Healthcare System: A Hybrid MCDM Framework](#)

*ANNE PIENIMAA, ELINA HAAVISTO, MAIJA HUPLI,*

*JONNA VIERULA, ARI KOISTINEN & KIRSI TALMAN*

[Undergraduate Social Care and Healthcare Applicants' Emotional Intelligence and Factors Related to it: A Cross-sectional Study](#)

*JOSEPH O. ADELUSI, MERCY T. FATOBA & SOLOMON B. OGUNTUASE*

[Psychological Determinants of Digital Health Literacy among Older Adults in Nigeria: A Cross-Sectional Study](#)

# Athens Journal of Health and Medical Sciences

*Published by the Athens Institute*

## Editor-in-chief

- **Dr. George Zahariadis**, Director, Health & Medical Sciences Division, Athens Institute & Associate Professor, Faculty of Medicine, Memorial University of Newfoundland, Canada.

## Associate Editors

- **Dr. Zoe Boutsoli**, Research Fellow & Vice President of Publications, Athens Institute.
- **Dr. Adel Zeglam**, Deputy Director, [Health & Medical Sciences Division](#), Athens Institute and Consultant Neurodevelopment Pediatrician & Professor of Pediatric and Child Health, Tripoli University Hospital & Faculty of Medicine Tripoli University, Libya.
- **Dr. Apostolos Tsiachristas**, Academic Member, Athens Institute & Senior Researcher, Health Economics Research Centre, Nuffield Dept. of Population Health, University of Oxford, UK.
- **Dr. Paul Contoyannis**, Head, [Health Economics and Management Unit](#), Athens Institute & Associate Professor, Faculty of Social Sciences, Department of Economics, McMaster University, Canada.

<https://www.athensjournals.gr/ajh/eb>

## Administration of the Journal

1. Vice President of Publications: Dr Zoe Boutsoli
2. General Managing Editor of all Athens Institute's Publications: Ms. Afrodete Papanikou
3. ICT Managing Editor of all Athens Institute's: Mr. Kostas Spyropoulos
4. Managing Editor of this Journal: Ms. Eirini Lentzou

*Athens Institute is an Athens-based World Association of Academics and Researchers based in Athens. Athens Institute is an independent and non-profit Association with a Mission to become a forum where Academics and Researchers from all over the world can meet in Athens, exchange ideas on their research and discuss future developments in their disciplines, as well as engage with professionals from other fields. Athens was chosen because of its long history of academic gatherings, which go back thousands of years to Plato's Academy and Aristotle's Lyceum. Both these historic places are within walking distance from Athens Institute's downtown offices. Since antiquity, Athens was an open city. In the words of Pericles, Athens "...is open to the world, we never expel a foreigner from learning or seeing". ("Pericles' Funeral Oration", in Thucydides, The History of the Peloponnesian War). It is Athens Institute's mission to revive the glory of Ancient Athens by inviting the World Academic Community to the city, to learn from each other in an environment of freedom and respect for other people's opinions and beliefs. After all, the free expression of one's opinion formed the basis for the development of democracy, and Athens was its cradle. As it turned out, the Golden Age of Athens was in fact, the Golden Age of the Western Civilization. Education and (Re)searching for the 'truth' are the pillars of any free (democratic) society. This is the reason why Education and Research are the two core words in Athens Institute's name.*

The *Athens Journal of Health and Medical Sciences* (AJHMS) is an Open Access quarterly double-blind peer reviewed journal and considers papers from all areas of medicine (including health studies and nursing research). Many of the papers published in this journal have been presented at the various conferences sponsored by the [Health & Medical Sciences Division](#) of the Athens Institute for Education and Research (ATINER). All papers are subject to ATINER's [Publication Ethical Policy and Statement](#).

Athens Journal of Health and Medical Sciences  
ISSN NUMBER: 2241-8229 - DOI: 10.30958/ajhms  
Volume 13, Issue 2, June 2026  
Download the entire issue ([PDF](#))

**Front Pages** i-viii

[Is it Time for Canada to Institute Mandatory Labelling for Genetically Engineered foods? Assessing the Evidence](#) 79

*Kurt Klein, Stavroula Malla & David Forestell*

[Risk Management for Smart Healthcare System: A Hybrid MCDM Framework](#) 95

*Abdullah Ali Salamai*

[Undergraduate Social Care and Healthcare Applicants' Emotional Intelligence and Factors Related to it: A Cross-sectional Study](#) 113

*Anne Pienimaa, Elina Haavisto, Maija Hupli,  
Jonna Vierula, Ari Koistinen & Kirsi Talman*

[Psychological Determinants of Digital Health Literacy among Older Adults in Nigeria: A Cross-Sectional Study](#) 129

*Joseph O. Adelusi, Mercy T. Fatoba  
& Solomon B. Oguntuase*

# Athens Journal of Health and Medical Sciences

## **Editorial and Reviewers' Board**

### Editor-in-chief

- **Dr. George Zahariadis**, Director, Health & Medical Sciences Division, Athens Institute & Associate Professor, Faculty of Medicine, Memorial University of Newfoundland, Canada.

### Associate Editors

- **Dr. Zoe Boutsoli**, Research Fellow & Vice President of Publications, Athens Institute.
- **Dr. Adel Zeglam**, Deputy Director, [Health & Medical Sciences Division](#), Athens Institute and Consultant Neurodevelopment Pediatrician & Professor of Pediatric and Child Health, Tripoli University Hospital & Faculty of Medicine Tripoli University, Libya.
- **Dr. Apostolos Tsiachristas**, Academic Member, Athens Institute & Senior Researcher, Health Economics Research Centre, Nuffield Dept. of Population Health, University of Oxford, UK.
- **Dr. Paul Contoyannis**, Head, [Health Economics and Management Unit](#), Athens Institute & Associate Professor, Faculty of Social Sciences, Department of Economics, McMaster University, Canada.

### Editorial Board

- Dr. Steven M. Oberhelman, Vice President of International Programs, Athens Institute & Professor of Classics, Holder of the George Sumey Jr Endowed Professorship of Liberal Arts, and Interim Dean, Texas A&M University, USA, s-oberhelman@tamu.edu.
- H R Chitme, Academic Member, Athens Institute & Professor, Oman Medical College, Sultanate of Oman, hrchitme@rediffmail.com.
- Dr. Mihajlo Jakovljevic, Academic Member, Athens Institute & Professor, University of Kragujevac, Serbia, sidartagothama@gmail.com.
- Dr. Elizabeth Poster, Professor, College of Nursing and Health Innovation, University of Texas Arlington, USA, poster@exchange.uta.edu.
- Dr. Paolo Ricci, Professor, University of Bologna, Italy, apricci@earthlink.net.
- Dr. Iga Rudawska, Head and Professor, Chair of Health Economics, Faculty of Economics and Management, University of Szczecin, Poland, igita@wneiz.pl.
- Dr. Donald Rob Haley, Associate Professor, Health Administration Program Department of Public Health, Brooks College of Health, University of North Florida, USA, rhaley@unf.edu.
- Dr. Jarmila Kristová, Associate Professor, Slovak Medical University in Bratislava, Slovakia, jarmila.kristova@szu.sk.
- Dr. Amardeep Thind, Academic Member, Athens Institute & Professor and Director, Western University, Canada, athind2@uwo.ca.
- Dr. Yanzhong Huang, Senior Fellow for Global Health, Council on Foreign Relations, USA & Professor and Director for Global Health Studies, School of Diplomacy and International Relations, Seton Hall University, USA, YHuang@cfr.org.
- Dr. David P. Keys, Associate Professor, Department of Criminal Justice, New Mexico State, USA, davekeys@nmsu.edu.
- Dr. Emmanouil Mentzakis, Academic Member, ATINER & Associate Professor, Department of Economics, University of Southampton, UK, E.Mentzakis@soton.ac.uk.
- Dr. Laurence G. Rahme, Associate Professor, Department of Surgery, Microbiology and Immunobiology, Harvard Medical School, Boston, Massachusetts & Director of Molecular Surgical Laboratory, Burns Unit, Department of Surgery, Massachusetts General Hospital, USA, rahme@molbio.mgh.harvard.edu.
- Dr. Blazej Lyszczarz, Assistant Professor, Department of Public Health, Nicolaus Copernicus University, Poland, blazej@cm.umk.pl.
- Dr. Melina Dritsaki, Academic Member, Athens Institute & Senior Health Economist, Oxford Clinical Trials Unit, Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences, University of Oxford, UK, melina.dritsaki@ndorms.ox.ac.uk.

- **Vice President of Publications:** Dr Zoe Boutsoli
- **General Managing Editor of all Athens Institute's Publications:** Ms. Afrodete Papanikou
- **ICT Managing Editor of all Athens Institute's Publications:** Mr. Kostas Spyropoulos
- **Managing Editor of this Journal:** Ms. Eirini Lentzou

### **Reviewers' Board**

[Click Here](#)

# President's Message

All Athens Institute's publications including its e-journals are open access without any costs (submission, processing, publishing, open access paid by authors, open access paid by readers etc.) and is independent of presentations at any of the many small events (conferences, symposiums, forums, colloquiums, courses, roundtable discussions) organized by Athens Institute throughout the year and entail significant costs of participating. The intellectual property rights of the submitting papers remain with the author. Before you submit, please make sure your paper meets the [basic academic standards](#), which includes proper English. Some articles will be selected from the numerous papers that have been presented at the various annual international academic conferences organized by the different divisions and units of the Athens Institute for Education and Research. The plethora of papers presented every year will enable the editorial board of each journal to select the best, and in so doing produce a top-quality academic journal. In addition to papers presented, Athens Institute will encourage the independent submission of papers to be evaluated for publication.

The current issue is the second of the thirteenth volume of the *Athens Journal of Health and Medical Sciences (AJHMS)*, published by the [Health & Medical Sciences Division](#) of ATINER.

Gregory T. Papanikos  
President  
Athens Institute



## Athens Institute for Education and Research *A World Association of Academics and Researchers*

**25<sup>th</sup> Annual International Conference on Health Economics, Management & Policy,  
22-26 June 2026, Athens, Greece**

The [Health Economics & Management Unit](#) of Athens Institute will hold its **25<sup>th</sup> Annual International Conference on Health Economics, Management & Policy, 22-26 June 2026, Athens, Greece** sponsored by the [Athens Journal of Health and Medical Sciences](#). The aim of the conference is to bring together academics, researchers and professionals in health economics, management and policy. You may participate as stream leader, presenter of one paper, chair of a session or observer. Please submit a proposal using the form available (<https://www.atiner.gr/2026/FORM-HEA.doc>).

### **Academic Members Responsible for the Conference**

- **Dr. Paul Contoyannis**, Head, [Health Economics & Management Unit](#), Athens Institute & Associate Professor, McMaster University, Canada.
- **Dr. Vickie Hughes**, Director, [Health & Medical Sciences Division](#), Athens Institute & Assistant Professor, School of Nursing, Johns Hopkins University, USA.

### **Important Dates**

- Abstract Submission: **DEADLINE CLOSED**
- Acceptance of Abstract: 4 Weeks after Submission
- Submission of Paper: **DEADLINE CLOSED**

### **Social and Educational Program**

The Social Program Emphasizes the Educational Aspect of the Academic Meetings of Athens Institute.

- Greek Night Entertainment (This is the official dinner of the conference)
- Athens Sightseeing: Old and New-An Educational Urban Walk
- Social Dinner
- Mycenae Visit
- Exploration of the Aegean Islands
- Delphi Visit

### **Conference Fees**

Conference fees vary from 400€ to 2000€  
Details can be found at: <https://www.atiner.gr/fees>



## Athens Institute for Education and Research

### *A World Association of Academics and Researchers*

#### 16<sup>th</sup> Annual International Conference on Health & Medical Sciences 3-8 May 2027, Athens, Greece

The [Medicine Unit](#) of Athens Institute is organizing its 16<sup>th</sup> Annual International Conference on Health & Medical Sciences, 3-8 May 2027, Athens, Greece sponsored by the [Athens Journal of Health and Medical Sciences](#). The aim of the conference is to bring together academics and researchers from all areas of health sciences, medical sciences and related disciplines. You may participate as stream leader, presenter of one paper, chair a session or observer. Please submit a proposal using the form available (<https://www.atiner.gr/2027/FORM-HSC.doc>).

#### Important Dates

- Abstract Submission: **6 October 2026**
- Acceptance of Abstract: 4 Weeks after Submission
- Submission of Paper: **5 April 2027**

#### Academic Member Responsible for the Conference

- **Dr. Vickie Hughes**, Director, Health & Medical Sciences Research Division, Athens Institute & Assistant Professor, School of Nursing, Johns Hopkins University, USA.
- **Dr. Carol Anne Chamley**, Head, Nursing Research Unit & Associate Professor, School of Health and Social Care, London South Bank University UK.
- **Dr. Andriana Margariti**, Head, Medicine Research Unit, Athens Institute & Lecturer, Centre for Experimental Medicine, Queen's University Belfast, U.K.

#### Social and Educational Program

The Social Program Emphasizes the Educational Aspect of the Academic Meetings of Athens Institute.

- Greek Night Entertainment (This is the official dinner of the conference)
- Athens Sightseeing: Old and New-An Educational Urban Walk
- Social Dinner
- Mycenae Visit
- Exploration of the Aegean Islands
- Delphi Visit
- Ancient Corinth and Cape Sounion

More information can be found here: <https://www.atiner.gr/social-program>

#### Conference Fees

Conference fees vary from 400€ to 2000€  
Details can be found at: <https://www.atiner.gr/fees>