Open Access at UZSM – where do we stand according to PubMed?

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Introduction

OA in Biomedicine

- Importance of OA in biomedicine
- Reliable and efficient model of communication, dissemination and deposit of medical information
- Rooted deeper than in any other science and technology discipline
  - 21.7% articles in OA (Björk et al. 2010)

- Support and practice in Croatia: National declaration on OA, Hrčak archive and UZSM repository
most widely used bibliographic database in the field of biomedicine

- Developed and maintained by the US National Center for Biotechnology Information and the National Library of Medicine
- Freely available online since 1997
- Contains more than 25 million references which include the MEDLINE database
- Approximately 3 million searches per day (+3 million searches done by APIs)
- Provides links to full-text articles found in PubMed Central or at publisher web sites, and other related resources

- Covers more than 5600 medical journals, among them 12 Croatian:
Two thirds of the globe is covered by water.

The rest is covered by PubMed
University of Zagreb, School of Medicine

- Prominent school founded in 1917
- 3 graduate study programmes, 3 PhD and over 45 specialist studies
- Number of teaching staff ≈ 450
- UZSM Institutional repository:
  - established by CML in 2007
  - when compliant with copyright terms provides OA to:
    - materials published by members of the School, including peer-reviewed journal articles, published conference papers, books and book chapters
    - PhD thesis awarded by the School
Aims

Identify the share of OA articles in the total journal publications output authored by the members of UZSM and indexed by PubMed in 2014.
Methodology

1st stage – Gold OA

Database search: PubMed
Affiliation search: 1) University of Zagreb School of Medicine and 2) University Hospital Zagreb

Period: January 1 – December 31, 2014
Manual data check:
  • Authors’ names crosschecked with UZSM teaching staff list
Limit: „free full-text”
*Additional check of Croatian OA biomedical journals
  • Without „free full-text” icon or direct link

2nd stage – Green OA
Manual search for papers that can be archived in institutional repository
Results – 1st stage

- 455 papers

- 50% Free full-text
- 27% OA papers without link to full-text
- 23% Non-OA papers

9 Croatian biomedical journals
Results of extracorporeal life support implementation in routine clinical practice: single center experience.

Borio B¹, Petrinčić N, Bašina D, Gašparović H, Svetina L, Konović S, White A, Ivančan V, Kopier T, Mihik D

Abstract

AIM: To describe our experience in the clinical application of extracorporeal life support (ECLS) and analyze whether ECLS leads to acceptable clinical outcomes in patients with cardiac failure.

METHODS: Data from clinical database of University Hospital Center Zagreb, Croatia, on 75 patients undergoing ECLS support from 2009 to 2014 due to cardiac failure were retrospectively analyzed. Outcomes were defined as procedural and clinical outcomes. ECLS as a primary procedure and ECLS as a postcardiomyopathy procedure due to inability to wean from cardiopulmonary bypass were analyzed.

RESULTS: ECLS was used in 75 adult patients, and in 24 (32%) of those procedural success was noted. ECLS was implemented as a primary procedure in 36 patients and as a postcardiomyopathy procedure in 39 patients. Nine out of 39 (23.08%) patients had postcardiomyopathy ECLS after heart transplantation. Bleeding complications occurred in 30 (40%) patients, both in primary (11/36 patients) and postcardiomyopathy group (19/39 patients). ECLS was established by peripheral approach in 46 patients and by central cannulation in 27 patients. In 2 patients, combined cannulation was performed, with an inflow cannula placed into the right atrium and an outflow cannula placed into the femoral artery. Eleven patients treated with peripheral approach had ischemic complications.

CONCLUSION: ECLS is a useful tool in the treatment of patients with refractory cardiac failure and its results are encouraging in patients who otherwise have an unfavorable prognosis. Patient outcomes may be further improved by technological advances, more clinical experience in application of the technique, careful patient selection, and multidisciplinary approach in patient management.
Free full-text in PubMed

- Non-OA papers
- Croatian OA biomedical journals
- International OA journals
- Hybrid journals
- Under embargo of 6 months
- OA papers without link to full-text
# Availability of Croatian journals indexed in PubMed

<table>
<thead>
<tr>
<th>Category</th>
<th>Journals</th>
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| PubMed Central, Journal Web with link from PubMed & Hrčak | • Croatian Medical Journal  
• Biochemica medica |
| Journal Web with link from PubMed & Hrčak       | • Psychiatria Danubina                                                  |
| Journal Web & Hrčak                          | • Acta Dermatovenerologica Croatica  
• Acta Medica Croatica  
• Acta Pharmaceutica  
• Arhiv za higijenu rada i toksikologiju  
• Collegium Antropologicum  
• Reumatizam                                    |
| Hrčak                                       | • Acta Clinica Croatica  
• Acta Medico-Historica                                                   |
| Journal Web                                 | • Liječnički vjesnik                                                   |
2nd stage - Green OA

**Aims:** to determine the number of papers that can be deposited at UZSM repository

**Methodology:** Manual search for papers that can be archived:

- **OA papers** that can be archived
  - Publishers’ policies
  - Agreements with Journal Editorial Boards
  - Appropriate versions for deposit
- Number of **non-OA papers potentially available for archiving** in IR
  - Publishers’ policies
  - Appropriate versions
  - Author cooperation
Results – 2nd stage

- Non-OA journals
  - Author provided appropriate versions (52/94)

- International OA Journals
  - PDFs with authors’ permission and appropriate publisher copyright policies

- Cro OA Journals 47%
  - Agreements with Journal Editorial Board

- Non-OA Journals 28%
  - Croatian Medical Journal
  - Collegium Antropologicum
  - Liječnički vjesnik

183 papers available for deposit in IR

September 25, 2015
So, where do we stand according to PubMed?

- Unavailable: 39%
- PubMed (free full-text): 27%
- PubMed (without link): 23%
- Institutional Repository: 11%
Conclusions

**Journals:**
- All Croatian biomedical journals indexed in PubMed employ OA
- Benefits for journal visibility:
  - Direct OA full-text link from PubMed
  - Full-text accessibility on a range of platforms: PubMed Central, publisher's websites and institutional repositories

**UZSM:**
- Authors priorities: journals’ indexing status and their metric indicators -> based on official criteria for academic advancement
- Since there is no OA mandate at UZSM, with over 60% of papers available through various methods of OA, UZSM publication output is a proof of the viability and power of OA publishing
Thank you!