

INDIA'S CONTRIBUTION TO HEALTH SCIENCE IN RANKING WEB OF WORLD REPOSITORY: A CASE STUDY

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ABSTRACT

The present study attempts to evaluate the India's contribution to Health Science Ranking Web of World Repositories by making it main source from data collection to highlight the present scenario of these repositories. There are 19 Health Science Universities, 10 Hospitals & 01 Health Science Research Centers repository developed so far in the World. The Openmed National Informatics Centre-India is occupied 118th place in top 800 world repositories.

Keywords: Open Access Initiative, Ranking Web of World Repositories

INTRODUCTION

The aim of this Ranking is to support Open Access initiatives and therefore the free access to scientific publications in an electronic form and to other academic material. The web indicators are used here to measure the global visibility and impact of the scientific repositories. We encourage the web publication as a way to communicate both formal and informal scholar material, maintaining the high standards of quality of the peer review processes. Web sites reach much larger potential audiences, offering access to scientific knowledge to researchers and institutions located in developing countries and also to third parties (economic, industrial, political or cultural stakeholders) in their own community.

We intend to motivate both institutions and scholars to have a web presence that reflect accurately their activities. If the web performance of an institution is below the expected position according to their academic excellence, institution authorities should reconsider their web policy, promoting substantial increases of the volume and quality of their electronic publications. The Ranking of Repositories should be considering jointly with the sister rankings of Universities, Research Centers, Business Schools and Hospitals.

OBJECTIVE OF THE STUDY

The main objective of the study is to evaluate India's contribution to health science in Ranking Web of World Repositories, Rank of Hospitals by country in India, Rank of Health Science Universities by country in India and Ranking Web of World Health Research Centers by country in India.

METHODOLOGY

The study was carried out in following steps:

Steps 1: Ranking Web of World Repositories was selected as the main source for data collection

Steps 2: The search was confirmed to India's contribution to health science in Hospitals, Universities & Research Centers

Steps 3: The data was analyzed and conclusion were drawn and presented in the form of tables & charts

RANKING WEB OF WORLD REPOSITORIES

The "Ranking Web of World repositories" is an initiative of the Cybermetrics Lab, a research group belonging to the Consejo Superior de Investigaciones Científicas (CSIC), the largest public research body in Spain.

The Cybermetrics Lab part of the CCHS – CSIC, is devoted to the quantitative analysis of the Internet and Web contents specially those related to the processes of generation and scholarly communication of scientific knowledge. The Cybermetrics Lab using quantitative methods has designed and applied indicators that allow us to measure the scientific activity on the web. CSIC is among the first basic research organizations in Europe. The CSIC consisted in 2006 of 126 centers and institutes distributed throughout Spain. The Cybermetric indicators are useful to evaluate science and technology and they are the perfect complement to the results obtained with bibliometric methods in Scientometric studies.

THE SPECIFIC AREAS OF RESEARCH INCLUDE

- Quantitative studies about the scientific communication through electronic journals and repositories, and the impact of the Open Access initiatives.
- Development of indicators about resources in the Society of Information
- Indicators and social networks visualization on the web with friendly, dynamic and interactive graphic interfaces
- Designing and evaluation of documental analysis techniques of web resources

- Genre studies applied to the scholar activity on the web
- Development of applied cybermetrics techniques based on the positioning on search engines of web domains
- Analysis of the information usage through web data mining of log files

REPOSITORIES METHODOLOGY

Our declared objective is to promote the Open Access Initiatives. One of the most promising ways to distribute the research output of the universities and research centers is to deposit scientific papers and related material at institutional or disciplinary repositories. Using as basis the data from the Registry of Open Access Repositories (**ROAR**) and the Directory of Open Access Repositories (**OpenDOAR**).

With the aim to improve visibility of repositories and good practices in their web publication we have extracted the following quantitative **web indicators** from the most important search engines.

- ✓ **Size (S)**. Number of pages recovered from the four largest engines: Google, Yahoo, Live Search and Exalead.
- ✓ **Visibility (V)**. The total number of unique external links received (in links) by a site can be only confidently obtained from Yahoo Search and Exalead.
- ✓ **Rich Files (R)**. Only the number of text files in Acrobat format (.pdf) extracted from Google and Yahoo are considered.
- ✓ **Scholar (Sc)**. Using Google Scholar database we calculate the mean of the normalized total number of papers and those (recent papers) published between 2001 and 2008.

WEBOMETRICS RANK		
VISIBILITY (external inlinks) 50%	SIZE (web pages)	20%
	RICH FILES	15%
	SCHOLAR	15%

RANKING WEB OF WORLD HOSPITALS

The Cybermetrics Lab is publishing this Webometrics Ranking of World Hospitals from a purely academic point of view and as such it should be used. The Web indicators applied does not measure at all the quality of patient's treatment and health care offered by the hospitals included.

So please be aware that if you are looking for the best place to treat a health condition this ranking is not appropriated for such a search.

The Directory has been updated and increased (there is now almost **18000 hospitals** worldwide). To calculate the composite index (World Ranking) we have combined normalized values instead of ranks to improve the measurement of the academic impact.

Name of the Continent	Countries	Hospitals	%
Africa	58	512	3.92
America	52	5022	38.41
Asia, Middle East	47	3456	26.43
Europe	57	3988	30.50
Oceania	26	96	0.74
Total	240	13,074	100

For each country all the institutions ranked below **2,000** positions are included.

RANK OF HOSPITALS BY COUNTRY IN INDIA

Sl. No.	World Rank	Hospital	Position			
			Size	Visibility	Rich Files	Scholar
1	306	Laparoscopy Hospital	517	636	700	136
2	408	Amrita Institute of Medical Sciences and Research Centre	682	623	1,117	236
3	522	Aravind Eye Care System	1,026	1,240	619	162
4	709	Sankara Nethralaya Hospital	1,866	533	1,342	862
5	955	Sir Ganga Ram Hospital	2,416	1,428	1,955	270
6	1199	L.R.S. Institute of Tuberculosis & Respiratory Diseases	3,105	6,287	890	32
7	1205	Tata Memorial Centre	1,482	2,184	395	1,349
8	1216	Apollo Hospitals	1,495	813	4,120	2,103
9	1246	Sri Ramachandra University & Medical Centre	1,102	3,147	2,680	212
10	1305	Fortis Healthcare	743	2,460	1,483	862

For each country **only** the institutions ranked below the **2,000th** position are included

RANKING OF WORLD HOSPITALS

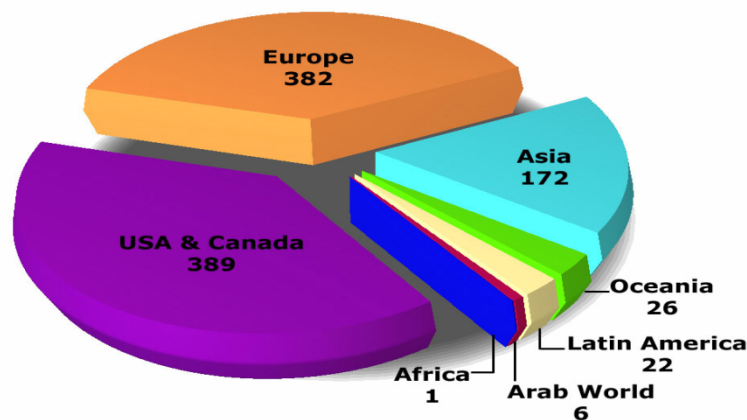
This graph shows the proportion of hospitals grouped by country that has been included in the **Top 200** of the Webometrics Ranking of World Hospitals. It is clear the predominant position of the North American Hospitals and their commitment to the publication on the web.

Hospitals Distribution by Country



When we grouped the hospitals from the **Top 1000** according to the continent they belong to, USA & Canada share the same percentage of hospitals as Europe, which shows that the latter ones are improving their results and contents in the web.

**Hospitals Distribution by Region
Top 1000**



RANK OF HEALTH SCIENCE UNIVERSITIES IN INDIA

It covers more than **20,000 Higher Education Institutions worldwide**. It is motivates both institutions and scholars to have a web presence that reflect accurately their activities. If the web performance of an institution is below the expected position according to their academic excellence, university authorities should reconsider their web policy, promoting substantial

increases of the volume and quality of their electronic publications. We have covered only health science institutions.

Sl. No.	World Rank	Universities	Position			
			Size	Visibility	Rich Files	Scholar
1	5052	Amrita Institute of Medical Sciences	5,394	4,888	8,355	4,470
2	5620	All India Institute of Medical Sciences	5,233	4,980	4,986	10,216
3	6030	Tamil Nadu Dr M G R Medical University	7,817	8,207	6,070	2,467
4	7255	Rajiv Gandhi University of Health Sciences	4,492	8,677	5,669	9,063
5	7559	Sikkim Manipal University of Health Medical & Technological Sciences	12,458	3,775	15,488	10,216
6	7946	Christian Medical College Vellore *	10,590	5,577	10,529	10,216
7	8203	Sri Ramachandra University (Sri Ramachandra Medical College and Research Institute) *	6,686	9,955	10,969	4,305
8	8223	R V S College of Pharmaceutical Sciences	8,091	6,232	14,863	10,216
9	8276	Postgraduate Institute of Medical Education & Research Chandigarh	9,132	7,116	8,707	10,216
10	8452	Maharashtra University of Health Science	6,951	10,050	6,622	6,780
11	8924	Sree Chitra Tirunal Institute for Medical Sciences and Technology	7,622	11,165	8,855	4,499
12	9583	National Institute of Pharmaceutical Education and Research *	11,695	9,650	7,052	7,749
13	9841	Sanjay Gandhi Postgraduate Institute of Medical Sciences	9,026	10,094	7,770	10,216
14	10049	Gujarat Ayurved University	12,010	10,345	11,445	5,309
15	10397	King George Medical University	8,631	11,235	7,232	10,216
16	10503	Sinhgad College of Pharmacy	9,661	10,070	11,399	10,216
17	10969	Maulana Azad Medical College	9,630	11,912	6,680	10,216
18	11300	Government Medical College & Hospital Chandigarh	8,904	11,956	9,799	10,216
19	11991	Al-Ameen College of Pharmacy	12,956	11,176	12,525	10,216

For each country only the Higher Education Institutions ranked till the 12,000th position are included. Complete coverage is over 20,000 organizations.

RANK WEB OF WORLD HEALTH RESEARCH CENTERS BY COUNTRY IN INDIA

It was offered the classification of the Top 4,000 institutions ranked according to their activities and visibility in the web which is an indicator of their impact and prestige. Rank summarizes the global performance of the institutes and centers, provides information for candidate researchers, and reflects the commitment to the dissemination of scientific knowledge.

Sl. No.	World Rank	Research Centers	Position			
			Size	Visibility	Rich Files	Scholar
1	702	Indian Council of Medical Research	940	1,250	1,089	161

For each country only the research centers ranked below the **2,500th** position are included.

CONCLUSION

India becomes an active contributor to global Open Access Initiatives by establishing Open Access archives, institutional repositories, document specific repositories, and subject specific repositories, and India's have been contributed to 19 health science universities included in Ranking Web of World Repositories (Amrita Institute of Medical Sciences is 5052 place in World Rank), 10 Hospitals (Laparoscopy Hospital is 306 place in World Rank), 01 Health Science Research Center (Indian Council of Medical Research is 702 place in World Rank) and lastly 18th place India's Size of Domain (National Domain is 1,35,000).

REFERENCES

1. Jan, Rosy & Khan, Nadim Akhtar, (2010). Development of Disciplinary Repositories: A Case Study of OpenDOAR, 7th Convention PLANNER - 2010, Tezpur University, Assam, ©INFLIBNET Centre, Ahmedabad, 18-20th February.
2. Srinivasa, V., Hemanth Kumar, G.H. & B.N., Yethiraju (2010). Open Access Resources: A case study of India's contribution to Health Science in DOAJ & OpenDOAR, First International Conference LIBER 2010, Rev. Jacob Memorial Christian College, Ambiliakkai (Dindigul), 07 & 08th October.
3. <http://repositories.webometrics.info> (Accessed 15th September 2010).

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