

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

Winter 11-23-2020

Collaborative Approach to Medical Information resources access for Education and Research

Dr. Rajendra Babu H
hrajendra.babu@gmail.com

Dr. Mohan T A
Siddaganga Institute of Technology, tamohanta@gmail.com

Follow this and additional works at: <https://digitalcommons.unl.edu/libphilprac>



Part of the [Health Sciences and Medical Librarianship Commons](#)

Babu H, Dr. Rajendra and T A, Dr. Mohan, "Collaborative Approach to Medical Information resources access for Education and Research" (2020). *Library Philosophy and Practice (e-journal)*. 4604.
<https://digitalcommons.unl.edu/libphilprac/4604>

Collaborative Approach to Medical Information resources access for Education and Research

Dr. Rajendra Babu H

Assistant Professor

Dept. of Studies and Research in LIS

Tumkur University, Tumkur - 03

hrajendra.babu@gmail.com

<https://orcid.org/0000-0002-6061-3584>

Dr. Mohan T A

Librarian

Siddaganga Institute of Technology (SIT)

Tumkur, Karnataka, India

tamohanta@gmail.com

Abstract

The present study assesses the effectiveness of medical consortium HELINET established in 2003 by Rajiv Gandhi University of Health Sciences (RGUHS). The use, productivity and impact of HELINET subscriptions to the electronic sources were analysed. 1207 responses obtained from 39 medical institutions includes 60.3% male and 39.7% female respondents includes the respondents include doctors, medical professionals, and other medical and para-medical, Clinical study practitioners, research scholars and students on HELINET resources from medical and super speciality subjects. 23.4% used e-resources for teaching and learning, 18.3% for research purpose, 10.3% and 10.2% used resources for patient care and course work respectively, and 9.3% used for continuing education. The usefulness of the e-resources was analysed and found significant Chi-Square value of 1.680E2 with a P-value of 0.001. E-resource usage data for 10 years has shown increasing trend year-on-year, the year 2012 witnessed 685680 articles download at the rate of 1131.07% in comparison to the previous year. The publication data shows that the top 10 institutions above 100 publications cumulative have started to show the increasing trend in terms of research output such as research articles in reputed journals on an international scope.

KEYWORDS: HELINET, HELINET Consortia, Medical Education, Medical Library Consortia

INTRODUCTION

Rapid growth in Information Technologies and the increasing needs of the users in the library have challenged the abilities of the libraries to cooperate (Li et al., 2019). The emergence of information technology has drastically changed information handling activities at all levels, viz. publishers, intermediaries, librarians and users (Ahire, 2018).

No institution could afford to be self-sufficient, however, rich its financial resources that made available for library purchase (Anderson et al., 2016). Coming together of like-minded institutes is a dire necessity. Thus, the consortium is an institutional concept which has come into vogue. The consortium is an institutional alliance bringing like-minded institutions with common aims, policies and collective agenda (Minde & Monson, 2019). Indeed, it is for meeting across a table between willing buyers/ sellers directly or through intermediaries/ aggregators with a “win-win situation” to all parties involved.

Any library consortia form with similar libraries for coordinating their activities, for sharing their resources, and collaborate their institutional expertise (Babarinde & Onifade, 2019) for the common good. It offers breathing spaces for disadvantaged libraries in terms of access to quality information (Rey-Garcia et al., 2020).

Notable Indian medical consortiums

- ERMED Consortium
- National Medical Library Consortium
- National Medical Library's Electronic Resources in Medicine (ERMED) Consortium
- HELINET
- NTRMEDNET (Pal, 2016)

HELINET CONSORTIUM

HELINET Consortium is the first Health Science Library consortium launched in the country on 15 March 2003 by The Rajiv Gandhi University of Health Sciences (RGUHS), Karnataka (Verma & Bhandari, 2020). The consortium was extended to all health science institutions from the year 2005. The HELINET Consortium was started with a vision to improve the quality of education and research in the colleges affiliated to RGUHS in the state of Karnataka through enhanced access to high-quality medical literature (Ramesha et al., 2020). It has developing e-journal and e-book resources to serve a network of over 660 health institutions (Shukla, 2018). There are over 600 international journals, 2000+ e-books, 1500+ videos and databases are being subscribed/ procured and provided access through HELINET to deliver information to user's desk-top and round-the-clock-access (RGUHS, 2020).

The HELINET was started to develop a good information resource base and provide access to quality research literature through cooperative purchasing and licensing (Arora et al., 2004) on behalf of a group of libraries operating in the same space. A similar effort was initiated among the Medical libraries as a pilot project then, can be extended to all other institutions under RGUHS a decade and a half ago. Today, almost all the affiliated medical institutions are members of the HELINET consortium. The statistics provided by the consortium administration has been encouraging and productive. Hence the present study to assess the awareness, utility and impact of resources provided by the HELINET consortium.

Research Questions

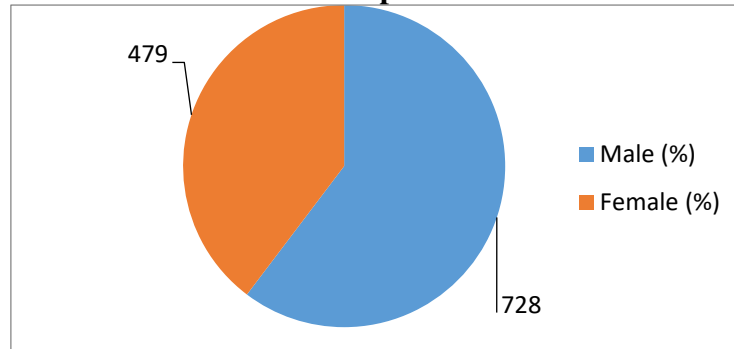
- Do the medical consortia resources satisfy the medical practitioners' information need
- Are the consortium resources fulfil the objectives of the medicine Teaching-Learning programmes
- Does the medical consortia resources help enable research productivity

The study scope confines to the Medical Institutions in the state of Karnataka, India where postgraduate and doctoral courses are being offered affiliated to RGUHS. The respondents were the users of HELINET consortium from 39 medical colleges who are HELINET consortium members.

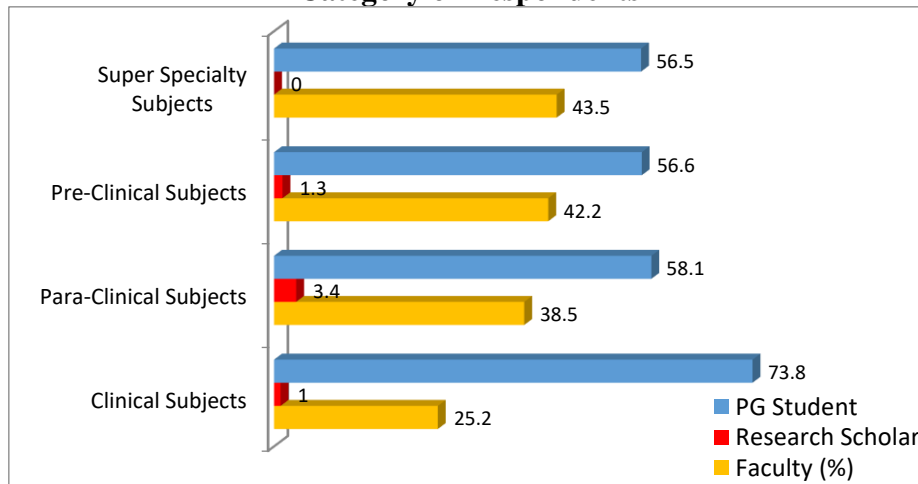
DATA ANALYSIS AND RESULTS

A total of 1400 questionnaire distributed to all faculties, doctoral and postgraduate students from among 39 medical institutions who are members of HELINET consortium. We could obtain 1207 responses at 86.21%. The responses are tabulated and analysed; results obtained are presented with detailed inferences. Many of the aspects had no cent per cent response, and some aspects had multiple responses.

Gender wise respondents

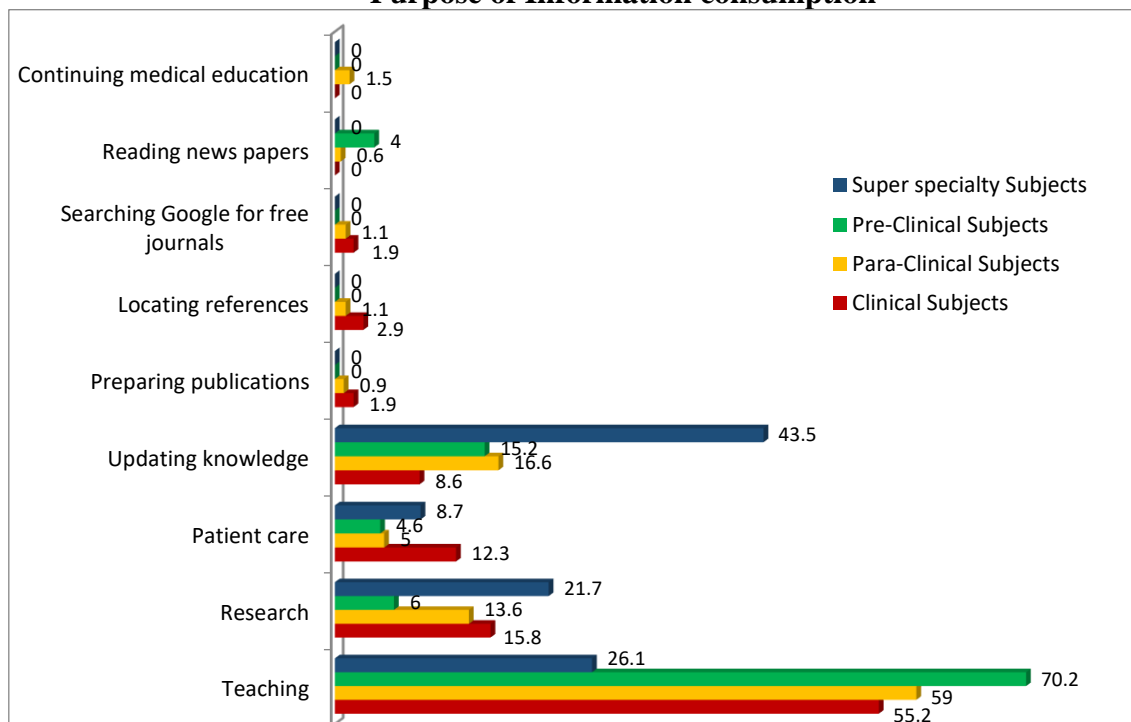


Category of Respondents



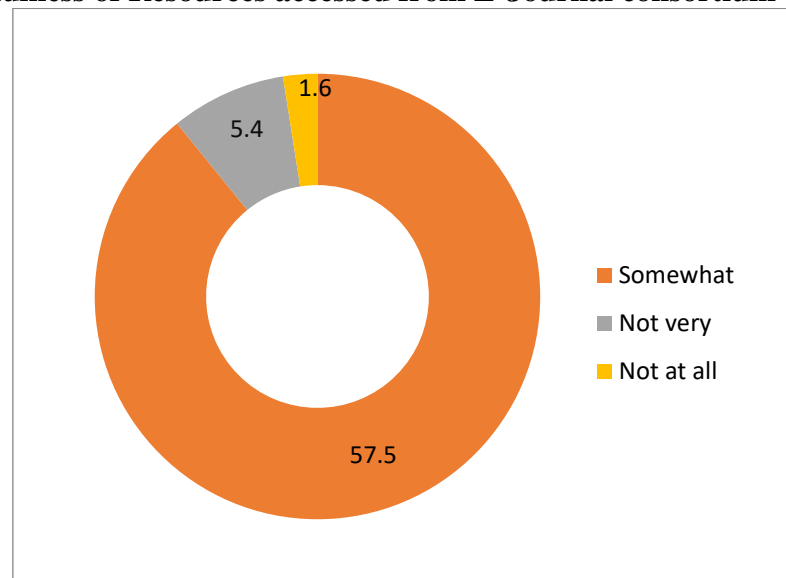
When considered overall broad medical science subjects such as Clinical Subjects, Para-Clinical Subjects, Pre-Clinical Subjects and Super Specialty Subjects, more than fifty per cent respondents were PG students from all disciplines. The highest faculty responses were from Super speciality subjects and pre-clinical subjects.

Purpose of Information consumption



Considering the purpose of using library resources among respondents, 23.4% respondents used resources for teaching and learning purpose followed by research purpose (18.3%), paper presentation (15.6%), and project work (12.8%). Almost equal respondents i.e. 10.3% and 10.2% used resources for patient care and course work respectively. Lastly and the least i.e. 9.3% respondents used resources for continuing medical education. Among the broad category subjects, respondents from Super Specialty subjects were not more than 43.5 per cent who used the library for updating knowledge the highest other than any purpose with a Chi. Square of 132.90 and significance is .000.

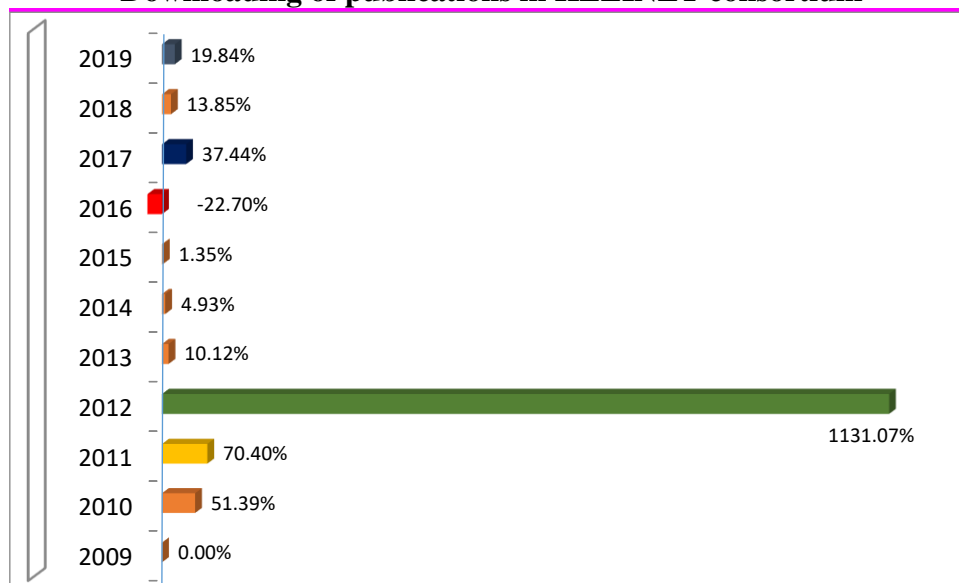
Usefulness of Resources accessed from E-Journal consortium



A significant number of responses (57.5%) opined that E-Resources accessed from HELINET as ‘somewhat useful’ followed by 35.6% respondents opined ‘very useful’, 5.4% said ‘not useful’ and 1.6% opined ‘not at all useful’ with test statistics of Chi-Square 1.680E2 at and P-value of 0.001.

IMPACT OF HELINET SOURCES

Downloading of publications in HELINET consortium

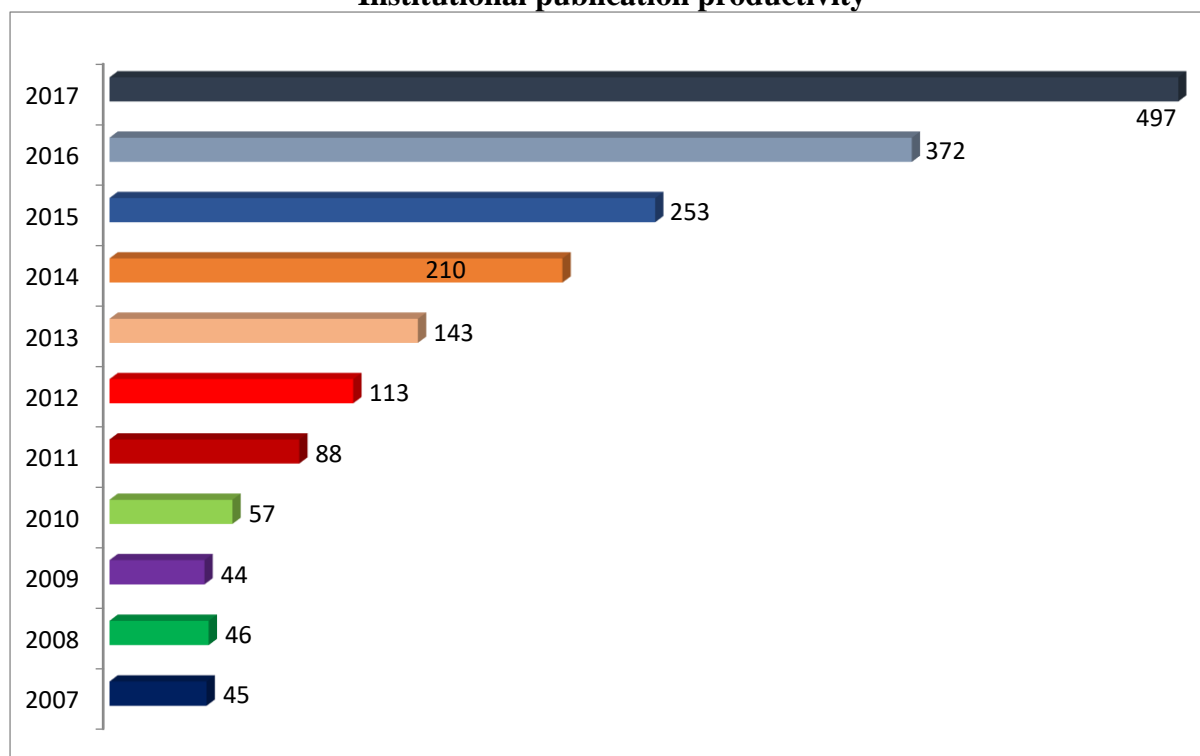


The above graph shows the usage data (viewing full-text as well as downloading full-text articles) of 10 years using the resources provided under HELINET consortium. The increased trend started to form in the year 2009. The year 2012 witnessed 685680 downloads with a year-on-year (YoY) growth rate of 1131.07% in comparison with 2011 data. This

increase may be correlated with productivity in the next figure. The usage shot up in 2017, hence the research output productivity in terms of publications from the sources of international repute. This shows the researchers have used the downloaded data in 2006, 2007 and 2008 to conduct their research and publish their output in terms of research papers in reputed international journals.

The data also shows an increase in the YoY download rate to 51.39% from 2003 to 2004. The similar increased percentage has been observed till 2007 before the recession hit. The years 2008 and 2009 have witnessed a downward trend, as this can be attributed to the global recession, shrunken library budgets, reduced e-resources access, and reduced usage. The year 2010 has witnessed negative growth for the first time in HELINET history due to the deepened recession and its aftermath effects on scientific productivity. But, the negative effect has affected the usage but not the productivity (please refer to the next graph). The year 2012 and 2013 shows consistency in terms of usage (i.e. view/ download) with a ~6% difference. This trend may be attributed to the recovering global economy and also a stagnant Indian economy.

Institutional publication productivity



The above graph shows that the institutions subscribing to HELINET resources from the beginning. The publication data shows, top 10 institutions above 100 publications cumulative have started to show the increasing trend in terms of research output such as research articles in reputed journals of international scope. The above data has been gathered from the journals that have been part of reputed databases such as PubMed, Scopus, Embase, and Web of science to name few.

The above graph has provided all the 39 institutions under the study showcases the total productivity in international journals of repute. This study has not taken into consideration of national and intl. conferences, national and international journals and other sources which are not been indexed in Scopus, PubMed, Web of Science, Embase, and so on. The forward trend of increasing publications from 2008 can be attributed as follows;

1. Access to more number of databases, journals, eBooks, and so on
2. Increased thrust from stakeholders, govt. management of the institutions, affiliating bodies, HELINET themselves asking more and better participation by promoting the use of the available HELINET resources to be used more

3. The pressure to publish to be afloat in the competitive health services industry can be correlated to the scholarly communication trend called “Publish or perish”
4. Increased thrust on RoI (Returns on Investment)
5. Researchers and authors increased tech-savvy nature to access and use e-information rather than print information as compared to the pre-internet era.
6. Modern-day medical libraries adopting the policy of “save the time of the reader”, “anywhere, anytime access to information”. This trend gives rise to a new slogan “Libraries: A Place to Space” also contributing to this trend.

Discussion

Among the broad category subjects, respondents from Super Specialty subjects were not more than 43.5 per cent who used the library for updating knowledge the highest other than any purpose with a Chi. Square of 132.90 and significance is .000.

The year 2012 witnessed 685680 downloads with a year-on-year growth rate of 1131.07% in comparison with 2011 data. This increase may be correlated with productivity in the next figure. The usage shot up in 2017, hence the research output productivity in terms of publications from the sources of international repute. This shows the researchers have used the downloaded data in 2006, 2007 and 2008 to conduct their research and publish their output in terms of research papers in reputed international journals.

The data an increase in the YoY download rate to 51.39% from 2003 to 2004. The similar increased percentage has been observed till 2007 before the recession hit. The years 2008 and 2009 have witnessed a downward trend, as this can be attributed to the global recession, shrunken library budgets, reduced e-resources access, and reduced usage. The year 2010 has witnessed negative growth for the first time in HELINET history due to the deepened recession and its aftermath effects on scientific productivity. But, the negative effect has affected the usage but not the productivity (please refer to the next graph). The year 2012 and 2013 shows consistency in terms of usage (i.e. view/ download) with a ~6% difference. This trend may be attributed to the recovering global economy and also a stagnant Indian economy.

The above graph shows that the institutions subscribing to HELINET resources from the beginning. The publication data shows, top 10 institutions above 100 publications cumulative have started to show the increasing trend in terms of research output such as research articles in reputed journals of international scope.

The above graph shows that the institutions subscribing to HELINET resources from the beginning. The publication data shows, top 10 institutions above 100 publications cumulative have started to show the increasing trend in terms of research output such as research articles in reputed journals of international scope. The above data has been gathered from the journals that have been part of reputed databases such as PubMed, Scopus, Embase, and Web of science to name few.

It was found that MS Ramaiah Medical College has produced the highest number of research articles in international journals of repute with 417 at the average rate of 32.08 articles per year. The higher trend can be attributed to that the College that is one of the oldest and established specialised research systems in place. This is followed by JSSMC with 285 articles at an average of 21.92 articles per year.

CONCLUSION

It is revealed from the study that a significant number of the respondents are aware of HELINET consortium and its resources. Among the various subjects, almost 50 per cent of the respondents were aware of access to HELINET. The usage of the resources has gone up considerably in recent years in the areas of e-resources, audio-visual materials and so on. In the forthcoming years, it will become even more imperative for e-resources. HELINET consortium has come a long way since 2003 and the consortium has gained momentum both

in terms collection and increasing the user base. Thus, there is increased usage of content (in terms of total view/downloads) and associated productivity in terms of research output (publications in international journals of repute). The data shown in the publication productivity graph is not comprehensive, as medical researchers would have published their research output in many Indian journals/ conference proceedings of Indian origin are highly unlikely to be featured or indexed by Scopus, PubMed, Web of Science, Embase, and so on. This can be a hindrance in terms of publication productivity as part of institutions/ researchers. However, one has to understand it as a limitation. Overall the HELINET has created a thumping impact on users, colleges and RGUHS as a whole.

References

- Ahire, M. S. B. (2018). *Tilak Maharashtra Vidyapeeth, Pune For The Degree Of Doctor Of Philosophy*. 318.
- Anderson, E., Maher, S., & Maltarich, B. (2016). Evaluating the Consortia Purchase: Journal Usage in a Multi-Institution Setting. *Collaborative Librarianship*, 8(3). <https://digitalcommons.du.edu/collaborativelibrarianship/vol8/iss3/6>
- Arora, J., N V, S., & S, K. (2004). *Library Consortia and Resource Sharing Initiatives in India: A white paper*. Rajiv Gandhi University of Health Sciences, Bangalore.
- Babarinde, B. A., & Onifade, F. (2019). *Problems and prospects of consortium building in academic libraries in Nigeria*. 1(1), 10.
- Li, S., Jiao, F., Zhang, Y., & Xu, X. (2019). Problems and Changes in Digital Libraries in the Age of Big Data From the Perspective of User Services. *The Journal of Academic Librarianship*, 45(1), 22–30. <https://doi.org/10.1016/j.acalib.2018.11.012>
- Minde, I., & Monson, J. (2019). Challenges of creating alliances across borders: Midterm reflections from the Alliance for African partnership. *Journal of Global Ethics*, 15(2), 155–167. <https://doi.org/10.1080/17449626.2019.1641543>
- Pal, J. K. (2016). Organizing models of library consortia: Forming sustainable participation among potential partners in India. *ALIS Vol.63(3) [September 2016]*. <http://nopr.niscair.res.in/handle/123456789/35699>
- Ramesha, J., Dhanamjaya, M., & Talawar, V. G. (2020). Usage of HELINET-Consortium by Faculty Members and PG Students of Pharmacy Institutions in Karnataka: A Study. *Library of Progress-Library Science, Information Technology & Computer*, 40(1). <https://web.b.ebscohost.com/>
- Rey-Garcia, M., Mato-Santiso, V., & Felgueiras, A. (2020). Transitioning Collaborative Cross-Sector Business Models for Sustainability Innovation: Multilevel Tension Management as a Dynamic Capability. *Business & Society*, 0007650320949822. <https://doi.org/10.1177/0007650320949822>
- RGUHS. (2020). *RGUHS University Library*. HELINET Consortium. <https://www.rguhs.ac.in/digitallibrary/Helinet%20about%20us.html>
- Shukla, A. (2018). *New Dimensions in the Management of Information Systems: A Festschrift Volume in honor of I R Kumar* (pp. 163–171).
- The Royal Society (2014). 350 years of publishing at the Royal Society (1665 – 2015). The Philosophical Transactions. November. *Journal of Educational Research & Medical Teaching*, 1(2), 58-61.
- Urs, R. R. (2014). Significance of RGUHS Digital Library & HELINET Consortium in the Growth of Medical Knowledge, Literature and Access. *Journal of Educational Research & Medical Teacher*, 2(1), 58-61.
- Verma, D., & Bhandari, D. P. (2020). *Health Science Information System in India: A Librarians Perspective*. 04(03), 4.