

# Coverage of Science news in English and Urdu Dailies Published from Hyderabad

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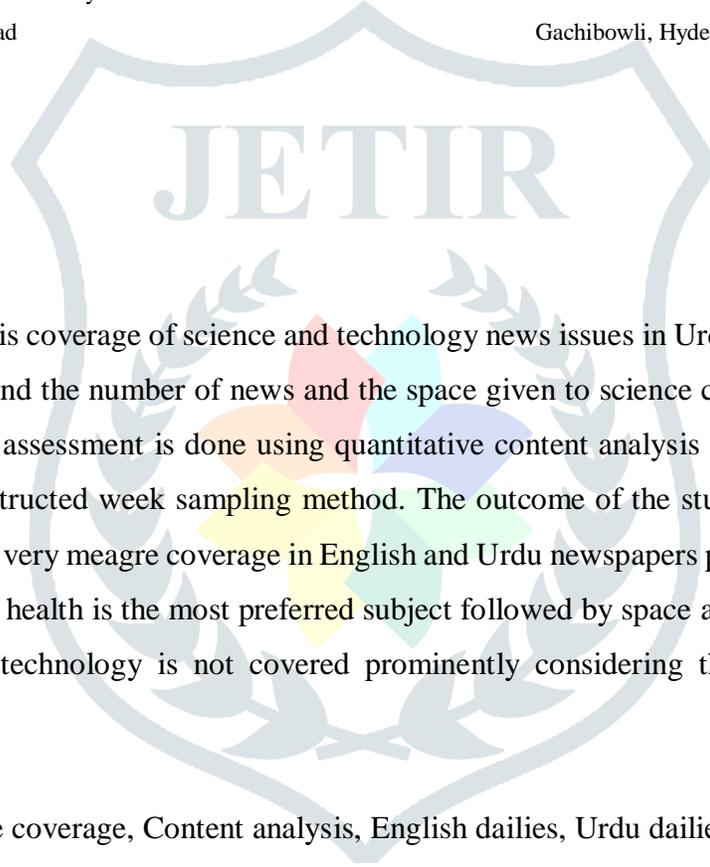
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## Abstract:

The focus of present study is coverage of science and technology news issues in Urdu and English dailies. With an intent to find the number of news and the space given to science coverage in the selected news dailies. The assessment is done using quantitative content analysis for a period of one month, employing constructed week sampling method. The outcome of the study shows that science and technology get very meagre coverage in English and Urdu newspapers published from Hyderabad. It is found that health is the most preferred subject followed by space and astronomy. Whereas the information technology is not covered prominently considering the location of newspapers.

*Key Words:* Science coverage, Content analysis, English dailies, Urdu dailies

## Introduction

Science has been an integral part of life and the recent widespread changes has brought a phenomenal shift in the socio-economic status of people in India. According to Merriam Webster, Science is the state of knowing or knowledge as distinguished from ignorance or misunderstanding. Collins dictionary defines it as "the study of the nature and behavior of natural things and the knowledge that we obtain about them. So, science is a systematic way of

acquiring knowledge about a particular thing or field, through a coordinated efforts and experiments. While technology is the product of science to solve a problem to ease human lives. The overwhelm impact of science and technology has transformed the whole society, its cultural values and the way people communicate.

During the freedom struggle, British ruled India had witnessed great strides made by Indian scientist. After independence in 1947, the Government of India formulated different policies to set up modern science and technology infrastructure to bring the country on par with other developed and advanced nations of the world.

According to Scientific Policy Resolution (1958) “The dominating feature of the contemporary world is the intense cultivation of science on a large scale, and its application to meet a country's requirements. It is this, which, for the first time in man's history, has given to the common man in countries advanced in science, a standard of living and social and cultural amenities, which were once confined to a very small, privileged minority of the population”. Similarly, the Science and Technology Policy (2003) emphasized on spreading of scientific and technological information to all the citizens, with an aim to create a scientific temper.

Science in today's context is not just related to pure science like Physical and Biological sciences, but it has diversified into different specialized sector like Information technology, Biotechnology, Genomics etc. especially after globalization in early 1990s in India. Though the scientific and technological innovation have profound infiltration in present day life in the country, the informed and elite section of society taking most of the advantages while illiterate and untaught lot is still uninformed about the advancement.

According to India Science report (2005), television is a major source of information in the country with 57% and is about five times as popular as newspapers. Nearly three-fourths of urban population depend on TV for information while nearly two-thirds of the populace get science news from the TV while under 8% get information from newspapers.

With rise of different technological advancement science communication is very important as modern lifestyle is intricately related with gifts of science (Baruah, 2019). The role of media is very important in informing the public about early-stage science policy (Bubela, *et al.*, 2009).

Science journalism as a professional sub-field of journalism is only a century old, but the use of mass media to distribute science dates back to the beginning of newspapers printing in the late 18th century (Gregory & Miller, 1998; Nelkin, 1995). Spread of scientific information can be made through education in a regular school setting or (re)education with the help of mass media (The Royal Society, 1985; Ziman, 1991).

Nelkin (2001) states media as agents between science and the public, framing the social reality for their readers and determining the public perception about science-related issues. For a common reader to understand technological jargon, science communication should provide information with an explanatory bent of mind in clear and eye catching manner (Dutta & Ray, 2011).

During this highly competitive environment, dissemination and diffusion of information is the key to make the underprivileged more aware of the significant advancement and its impact and uses in their daily lives. For dissemination of information combined with entertainment media has a pivotal role to play. Most of the study on science communication suggests that mass media in general and newspapers in particular are not giving adequate space to science issues compare to other genres like politics sports and entertainment.

Hyderabad has a rich history of Urdu journalism right from the mid-19<sup>th</sup> century. This is evident from the fact that the first magazine in Urdu was published in 1857 which was on science and medicine. The title of the magazine was ‘Risala-e-Tababat’, edited by John Smith. Now it is interesting to know how and what way Urdu dailies are covering science and technology issues in 21<sup>st</sup> century compare to other languages especially English language newspapers.

In an effort to assess this, an attempt has been made to know how English and Urdu newspapers being published from Hyderabad gives coverage to science and technology issues. Two leading newspapers namely Deccan Chronicle (English) and Siasat daily (Urdu) being published from Hyderabad is selected for the study.

### **Literature Review:**

Shivajyoti Das Baruah (2019) analyzed how science items are given prominence in newspapers published from Nagaland. The Hindu and Times of India and Nagaland Post, Eastern Mirror and The Morung Express from Nagaland was selected for the content analysis for three months period. It was revealed that national newspapers have printed more science news with images than local newspapers. The Morung Express has devoted 731.80 sq.cm space to science items which is higher than The Hindu and Times of India. While in number of news items on science The Hindu tops with 183 items followed by, Times of India with 178.

Meenu Kumar (2013) in her study compared science and technology coverage in popular Hindi and English newspapers of India. Two English newspapers namely The Times of India and The Hindu and two Hindi dailies: The Dainik Bhaskar and Patrika were selected for one-year period from June 2011 to June 2012. The content analysis of 144 editions revealed that science coverage gets a meagre space of only 1.74 percent in Hindi newspapers and English newspapers covered 2.34 percent of the total news hole.

A comparative study by Sneha Verghese (2016) analysed two leading newspapers- Times of India and Deccan Chronicle being published from Hyderabad for a period of three months from January 1- March 31, 2014. The finding shows that the two news dailies allotted 9.57 % of their collective news hole to Science news. Content analysis shows that 10.09 % of the science news was published in the Times of India while 9.05% was covered in Deccan Chronicle.

Pramila Majumdar and B C Saikia (2010) in a case study tried to find out the science coverage in English and Hindi newspaper published from Assam. The Assam Tribune in English and Dainik Purbodoy in Hindi were selected for the study carried for the month of May 2009. Findings

revealed that Dainik Purbodoy focused mainly on health (79%) while health content in Assam tribune was 39%, while science occupied very little space in both the newspapers.

Bharvi Dutta and K C Garg (2012) in their study of 37 English newspapers published from various parts of India observed that Science and Technology is not the priority of these newspapers. Quantification of data for six months from April 1, 2008 to September 30, 2008 revealed that only small portion gets front page positioning. Only 2.4% of the total number of items on the first page and occupied about 4% of the total Science and technology coverage throughout all the newspapers.

In a study conducted by Afrina Rizvi (2007) revealed that The Times London presented science news in a very enthusiastic way and employed 198 special correspondents for the coverage. Whereas the Times of India presented the science news as any form of news without making it appealing to the Indian readers. The study was done for a period of twelve years from 1987 to 1998, a total of 168 issues were analysed using stratified sampling method.

According to India science report (2005), just 12% of the Indians refer to newspapers as their primary source of information when compared to 29% in US. Nearly, 65% of science news in India is obtained from TV as compared to 7% in America.

### **Objectives of the study**

The study has been conducted with the following objectives:

1. To analyse the overall coverage of science issues in English and Urdu dailies.
2. To compare the number of science issues covered in English and Urdu dailies.
3. To compare the space given to science coverage in English and Urdu press.

**Methodology:**

The study is done to with an aim find out the space given to science issues in English and Urdu dailies. Content analysis method is based on quantitative assessments of the data. Berelson (1952) defines content analysis as “a research technique for the objective, systematic, and quantitative description of the manifest content of communication.” According to Chawla and Sodhi (2016), Content analysis technique includes studying a earlier recorded or reported communications and systematically and objectively breaking it up onto more manageable units that are related to the topic under study. All the information pertaining to science and technology appeared across Deccan Chronicle (English) and Siasat daily (Urdu) were considered as a unit of analysis. Further the content was sub categorized into different fields such as health, technology, information technology, space and astronomy, innovations etc. and space was measured in square centimeters.

**Selection criteria and Sampling technique:** Two leading newspaper of Hyderabad namely Deccan Chronicle (English) and Siasat daily (Urdu) were selected for the study from January 1, 2018 to January 31, 2018.

Data was drawn from every 4<sup>th</sup> day issue deploying constructed week sampling method starting from January 1<sup>st</sup> to 5<sup>th</sup>, 9<sup>th</sup>, 11<sup>th</sup>, 15<sup>th</sup>...and so on to ensure representation of all the days of week in cyclic variation. A total of 256 pages from 16 issues were analysed from the sample population of 62.

**Profile of the News dailies:**

News dailies selected for the study are the most popular and oldest in the respective languages being published from Hyderabad, capital city of south Indian state Telangana.

Deccan Chronicle is one of the popular South Indian English language daily published in Hyderabad owned by Deccan Chronicle Holdings Limited (DCHL). Founded by Rajagopal Mudaliar in 1938, the daily is also published from Andhra Pradesh, Tamil Nadu, Karnataka, and

Kerala. According to Indian Readership Survey (IRS)2017, Deccan Chronicle has a readership of 13,89,000 from all its editions.

The Siasat daily is a largest selling Urdu language newspaper published from the south Indian city of Hyderabad, Telangana. It started publishing in 1949 and is one of the first Urdu daily to launch its online edition in India in 1998. The daily also publish its online editions in English, and Hindi languages. According to Audit Bureau of Circulation (ABC) report 2017, the circulation of the Siasat daily is 44,793

**Tools for data collection:** A code sheet was prepared to collect primary data for all the categories from newspapers through content analysis by the single coder.

#### **Data Collection and analysis:**

The data drawn from the two dailies were analysed using simple percentage and presented in the tabulated form.

**Table No 1: Coverage of Science issues in English and Urdu dailies**

S. No	Newspapers	Total space for News (sq.cm)	Total Science coverage (sq.cm)	% of Science coverage
1	Deccan Chronicle	87907	2966	3.37
2	Siasat daily	90070	1661.5	1.84
3	Total (sq.cm)	177977	4627.5	2.60 (Avg)

Table No.1 shows the overall coverage of news hole which includes opinion piece content in English and Urdu newspaper. The total space given to news items is 177977 sq.cm, while only 4627.5 sq.cm was allotted to science and technology which makes up to 2.60% of the total news hole. Science and technology issues in English newspaper covered 2966 sq.cm (3.37%) of space and in Urdu newspaper it has occupied only 1661.5 sq.cm (1.84%) space.

**Table No.2: Comparison of number and percentage of science news in English and Urdu newspapers**

No	Categories	Deccan Chronicle		Siasat	
		No. of News	percentage	No. of News	percentage
1	Health	7	29.17	12	66.67
2	Technology	4	16.67	1	5.56
3	Info. Technology	3	12.50	3	16.67
4	Space & Astronomy	5	20.83	1	5.56
5	Innovations	2	8.33	0	0.00
6	Discoveries	1	4.17	0	0.00
7	Bio Tech	1	4.17	0	0.00
8	Agro. Tech	0	0.00	0	0.00
9	Others	1	4.17	1	5.56
Total		24	100.00	18	100.00

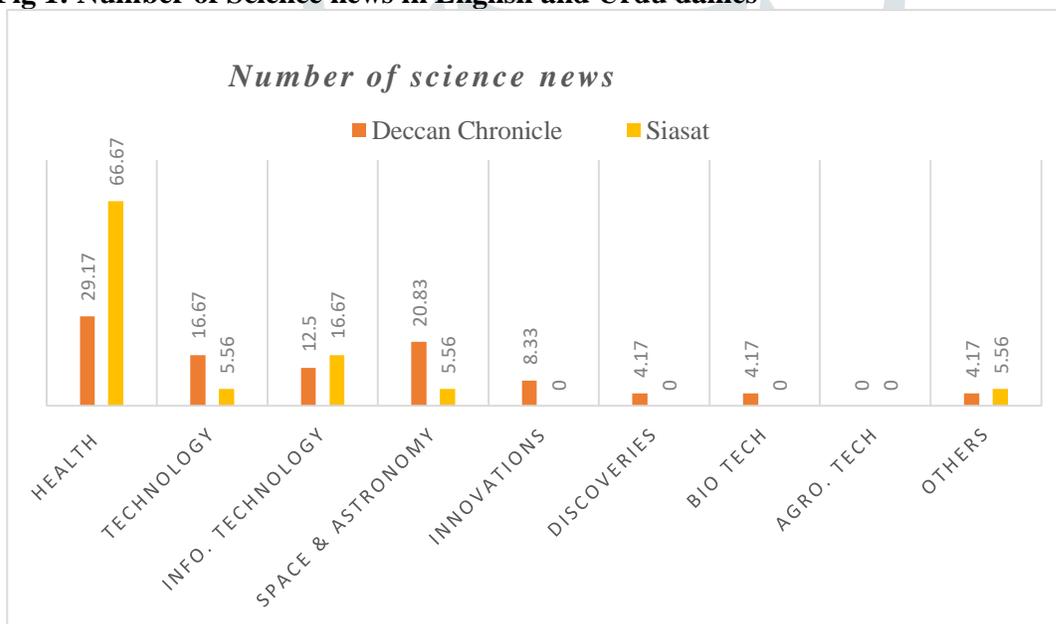
**Fig 1: Number of Science news in English and Urdu dailies**

Table No.2 and Figure 1 reveal the total number of news items related to science items published in English and Urdu dailies. It is clear from the table that Deccan Chronicle has published 24 news items and Siasat daily published 18 items related to science. The highest number of news was published in the category of health 7 (29.17%), space & astronomy 5 (20.83%) and technology 4 (16.67%) followed by Information technology 3(12.50%), innovations 2 (8.33%), discoveries 1

(4.17%) and biotechnology 1 (4.17%) in Deccan Chronicle. No news item appeared in agro-tech category in Deccan Chronicle.

Siasat daily has published 18 items of science and technology where 12 (66.67%) news items were published under health category followed by information technology 3 (16.67%), and one each in technology, space & astronomy, and others category. No news was published related to innovations, discoveries, bio tech and Agro-tech categories.

**Table No 3: Space given to Science issues in English and Urdu newspapers**

S. No	Categories	Deccan Chronicle		Siasat	
		Space (sq.cm)	% of sharing space	Space (sq.cm)	% of sharing space
1	Health	956	32.23	710	42.73
2	Technology	500	16.86	198	11.92
3	Info. Technology	296	9.98	312	18.78
4	Space & Astronomy	681	22.96	256	15.41
5	Innovations	119	4.01	0	0.00
6	Discoveries	96	3.24	0	0.00
7	Bio Tech	248	8.36	0	0.00
8	Agro. Tech	0	0.00	0	0.00
9	Others	70	2.36	185.5	11.16
<b>Total</b>		2966	100.00	1661.5	100.00

Fig 2: Space allotted to Science news in English and Urdu dailies

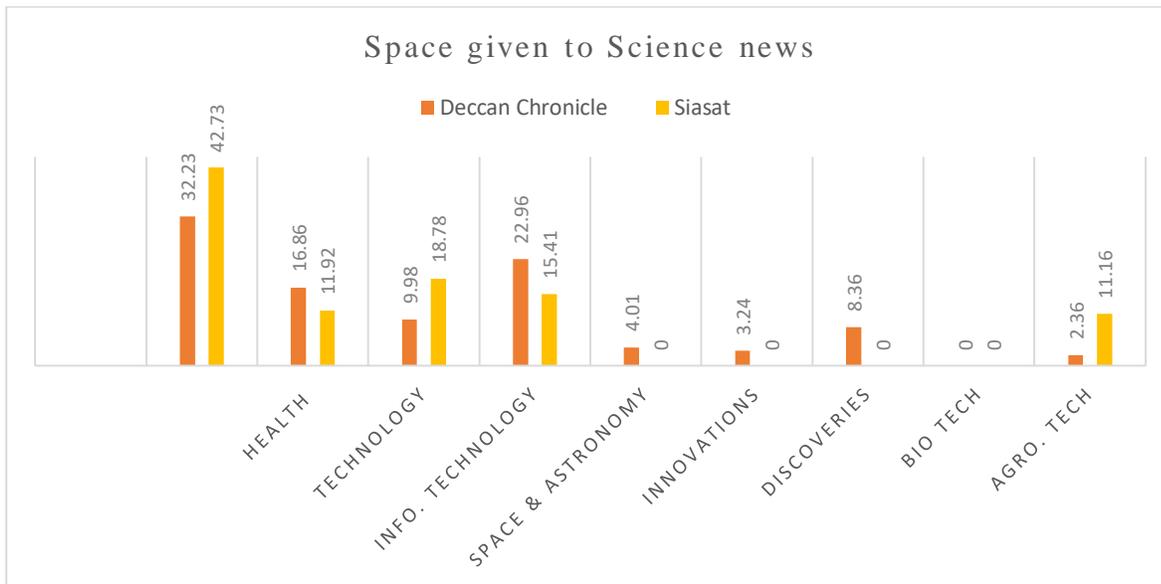


Table 3 and figure 2 indicate the space and the percentage allotted to science issues in the English and Urdu dailies. It shows that English newspapers *Deccan Chronicle* allocates 2966 sq.cm space to science issues out of 87907 sq.cm total printable area. Health items measure up to 956 (32.23%) sq.cm, technology 500 (16.86%) space & astronomy 681 (22.96%) and information technology 296 (9.96%) sq.cmsq.cm in *Deccan Chronicle*. The newspaper gives a very negligible coverage to other science categories like innovations, discoveries, bio tech with zero coverage for Agrotech.

Urdu newspaper *Siasat daily* has given 1661.5 sq.cm of space out of total 90070 sq.cm area. Health issues covered 710 making it to the 42.73% of the total science coverage in Urdu newspaper followed by information technology 312 (18.78%) sq.cm, space & astronomy 256 (15.41%), technology 198 (11.92%) and others 185.50 (11.16%) sq.cm of area. No space was given to news items like innovations, discoveries, biotech, and agro-tech in Urdu newspaper.

**Results and Discussion:**

- The first objective of the study was to measure the proportion of science coverage in two newspapers and the study uncovers that in January 2018, coverage of science issues in both English and Urdu dailies, is exceptionally pitiful which is on average only 2.60 % and cumulatively is just 5.21%. Urdu newspaper has devoted just 1.84% of the total area to the science coverage while English newspaper also gives only 3.37 %. In a developing country like India, science news should get more coverage in newspapers that too in a consistent way to keep their readers more inclined towards scientific information and progressive thinking.
- With the second objective of the study to compare number of scientific news, the result denotes that English newspaper has published 24 news items and Urdu has published 18 news on the topic. Highest number of health news cumulatively published in both the newspapers is 19 which makes up to about 48% of the overall science coverage whereas it is nearly 15% in information technology. English newspaper published 5 items for information technology while Urdu published one item. Other news items like innovations, discoveries, biotech and Agrotech got no coverage in Urdu newspaper while coverage of these issues is also very insignificant in English newspaper. News issues related to Agriculture technology or Agrotech, which has a great importance in agrarian society like ours to get more yield in agriculture, horticulture and aquaculture got no coverage at all in both newspapers.
- The study reveals that both the newspapers dedicated a significant space to health followed by space & astronomy. Deccan Chronicle allocates 32.23% of science coverage to health issues while Siasat daily gives about 43 % of total science coverage to health. A major portion of health news in Urdu newspaper was in the form article and feature while English newspaper published both as news and articles, most of them attributed to news agencies.

**Limitations of the study:**

The study was completed with certain limitations such as:

- The study was done using quantitative analysis method only.
- This study is limited to only two dailies, each from English and Urdu languages
- The study does not consider the advertisements for analyzing data.
- No supplements and pull-outs and magazines were considered for the study.

**Recommendations:**

- It is suggested that for the future research to be done for a longer period of time with a larger sample.
- Qualitative analysis can be conducted to measure the science coverage in news dailies.
- Comparative study can be done for other language newspaper like Telugu and Hindi

**Conclusion:**

The study highlighted that the selected newspapers covered less that is on average 2.60 percent to science to the total printed area. In these categories also health and space & astronomy gets more coverage in both English and Urdu newspapers compare to other genres. Hyderabad being one of the hubs of information technology in the country, the abysmal attention to information technology news in both the newspapers is worrisome. Another startling observation was made from the results that Urdu newspaper do not focus on other various aspects of science like innovation, discoveries, biotech and Agrotech. Past studies revealed that Urdu readers are poor, and a very significant proportion are from madrasa (religious school) background, who can hardly read English newspapers. Allocation of more space to scientific issues in Urdu newspapers ought to be enhanced to make readers rational towards scientific concepts and create awareness. This can help bigger populace of the Urdu readers mindful about science and innovation.

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