



Framing Intellectual Property Rights in the Indian Print Media

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To implement the "National IP Policy 2016", Indian Government launched an awareness campaign and initiated the process to introduce the IPR Policy Model for educational institutions at the pan-India level in 2019. In contexts of this, the study analyses the IPR news framing in selected national and vernacular newspapers during the "National IPR Policy 2016" making process and implementation of the policy. Not much scholarly attention has been devoted to the studies of media coverage of IPRs in Indian contexts. The study is based on the content analysis of the selected national and vernacular newspapers and discusses the media coverage frames with National IPR Policy 2016 objectives. The study finds that the regulatory frame is the most dominant frame in media coverage of IPR issues. However, media coverage does not look consistent with the National IPR Policy 2016 framework that focuses much on awareness and economic development. The primary application of this study is to assist policy makers, industries, and other stakeholders in understanding how their information on IPR could be presented to the public.

Keywords: IPR Communication, Framing, Awareness, Newspapers, National IPR Policy 2016

Indian Government introduced the National Intellectual Property Rights (IPR) Policy in May 2016 highlighted public awareness about the economic, social and cultural benefits of IPRs among all sections of society.¹ The policy's prime objective was to address the low level of IPR awareness, especially in rural and remote areas. In the implementation of IPR Policy 2016, Government announced various programmes for awareness in educational institutions.² The announcement of the IPR Policy-making process and implementation of the policy attracted media attention. In contexts of this, it would be significant to analyse the media coverage of IPR during the policy formation process and implementation of the policy.

CIPAM (Cell for IPR Promotion and Management), in its "scheme of IPR awareness", identifies the problem as "Inadequate knowledge about the rights of individuals to protect their ideas and low awareness about the procedures involved in obtaining an IPR has hindered India's growth in Intellectual Property."³ However, India is home to 1.39 billion people and accounts for 18 per cent of the global population.⁴ The population can be seen as the driver of a nation's intellectual property, but India ranks 48th in the global innovation index.⁵ Patent filling in India is also less than in other major developing nations.⁶ Government-sponsored educational institutions get most of the

patents, and individual-level participation is significantly less.

The study on "Intellectual Property: Rights, Need & Awareness" finds that students, scholars, teachers and managers, from 203 educational institutions in Karnataka, Tamil Nadu, Kerala and Telangana were not fully aware of the benefits of IP.⁷ Lack of awareness may contribute to the infringement problem because people would not allegedly acknowledge others creation.⁸ The infringement is a more significant threat to global industries because of the pirated and counterfeited goods, which account for 3.3 per cent of the total global trade.⁹

It can be assumed that when the public has a high level of awareness, they will respect others' creations. In addition to this view, the mass media can play an essential role in IPR awareness in society at all levels. One effective way for media to shape public opinion is to frame the news in a specific manner intended to impact readers.¹⁰ The media frame can explain what information people are getting from an essential communication medium. The study of IPR coverage would be significant in this context because the new IPR policy's objective has a greater emphasis on awareness, innovation and economic development.

Media Coverage of IPR News

Some IPRs, especially patents, are discussed under the science communication purview.¹¹ However,

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some IPR issues get more coverage in the media, such as biotechnology, patent, gene patenting, genetically modified crops and ethics in patenting biotechnology.¹² Conflict of interest also gets more media coverage, like the first animal clone, ‘Dolly’, got attention globally and framed as a scientific breakthrough than general cloning issues.¹³ Similarly, in the case of the genetically engineered crops debate in Canada, nearly every media organisation covered this issue with priority because it became a conflict of interest.

Sometimes, media coverage differs from the public, government, and expert opinions on science and technology issues. Li Du,¹⁴ in his study, explains the case of patenting of the human gene as a long-debated issue in the public domain, and the general sentiment is to understand the negative aspects of this issue. Although, government-sponsored studies on human gene patenting always favour and highlights the positive aspects of this issue. Therefore, media’s biased behaviour towards government support for gene patenting is evident. In contrast, Caulfield *et al.*,¹⁵ noted that often media cover issues as a social dilemma to attract the policymakers’ attention to drive the policy agenda. A. Petersen,¹⁵ investigates the framing of genetics in print media and concludes that journalists frame the news as *the “unlocking of nature’s secret”* in a sensational way and picture scientists as a hero.

K. C. Smith *et al.*,¹⁶ found that the tobacco advocacy group was successful in its mission to influence newspapers’ coverage, which in turn had an impact on policy progression. Media coverage also differs due to proximity and geography as in Samsung–Apple patent disputes. The South Korean newspapers showed a more assertive nationalism favouring Samsung, whereas the U. S. newspapers portrayed the business conflict in the market logic.¹⁷ L. C. Esmail *et al.*,¹⁸ in their study, found that the most frequently mentioned themes in newspapers were drug affordability, intellectual property, trade agreements and obligations, and development. L. Dolak and B. Bettinger,¹⁹ find that the U.S. media negatively covered the patent system which differs in the editorial and news sections. They further argue that print media coverage shaped public understanding and perhaps influenced policy-making. J. Liu and Z. Yao,²⁰ studied the media frame, party affiliation and location of newspapers. They concluded that the national press and party-affiliated

press frequently use the national interests frame; however, the local press and independent professional press use the economic and legal frame in IPRs coverage.

Media Framing of News

Media popularise knowledge through the process of framing that makes intended impacts on the audiences. Framing is also a tool for journalists to present complex information more straightforwardly to readers’ natural understanding. The news construction and production is a subjective process, involving a variety of internal and external actors, such as the informants, news agencies and other sources, reporters, journalists and editors.²¹ Influential political and other actors too lobby for coverage of their views and positions.²⁶ The government also influence news production by providing selected information to the media.²² Looking at IPR from the framing perspective will elaborate the message media want to convey to readers. B. Van Gorp,²³ describes framing as a systematic way of inferring frames from media texts. Journalists narrate events in a storyline by applying a specific frame that makes sense to audiences. R. M. Entman,²⁴ describes framing as selecting some aspects of perceived reality and making them more salient to promote a particular problem definition, causal interpretation, moral evaluation, and treatment recommendation. For W. A. Gamson and A. Modigliani,²⁵ a frame is a “central organising idea” for making sense of events. M. C. Nisbet & B. V. Lewenstein,²⁶ describes that framing depends on actors’ interaction in the media texts.

Overview of IPR policy and acts find that it primarily focuses on various economic and social issues. However, international and domestic laws on IP shaped the future of the socioeconomic, legal and regulatory framework in India. In these contexts, academic literature talks about the economic, legal, regulatory, national, and R&D frame in studies of science and IPR. J. Liu and Z. Yao,²⁰ find the economic, legal, and national interest frames prevalent in the national and local press in China. The legal frame emphasises the legal dimension of IPR issues, laws, and court cases. The national interest frame refers to the national perspective that considers IPRs in international competition, concerning the political, economic, awareness, and cultural interests of a nation. The economic frame highlights the

financial costs or benefits.²⁷ The regulatory frame emphasises the adjudication of competing interests by government regulators.²⁹ The R&D frame focuses widely on the market, government, and organisation regarding regulation and the R&D process.²⁸

Methodology

Analysis of Intellectual property rights coverage in media is based on the frame analysis of news published in vernacular and national newspapers. The framing of the news follows the content analysis method. This study focuses on systematic analysis of the contents of national and vernacular newspapers published in India. This study's chosen time frame is two different years; the first phase (pre-policy) is from "September 2014 to August 2015", and the second phase (post-policy) is from "April 2016 to March 2017." The study's time frame starts from September 2014 because, in October 2014, the government initiated India's National Intellectual Property Rights policy. When the final policy was announced in May 2016, this study focuses on the one-year coverage from April 2016 onwards to March 2017. This study wanted to focus on two significant events, the announcement of the IPR policy-making process and the implementation of the policy. In respect of these two significant events, the study focussed on starting the study period from the prior one month to one year from the significant events.

This study focuses on newspapers from two languages, Hindi and English, published in various places in India. Four newspapers are selected for the study: two national-level newspapers from the English languages, The Times of India (Delhi Edition) and The Hindu (Chennai Edition), and two Vernacular Hindi newspapers Amar Ujala (Lucknow Edition) and Rajasthan Patrika (Jaipur Edition). National and vernacular newspapers categorisation is historical in India, where English newspapers are considered national and languages newspapers in vernacular categories. The newspapers' selection was also contingent on the access provided by media organisations for their archival data on their websites since the study solely uses archival data from internet sources only, such as e-papers. The newspapers were accessed in the form of a digital copy available on the websites of the newspapers. This study ignored some of the largest circulated daily like Dainik Jagran, Dainik Bhaskar, Hindustan, and Hindustan Times because some do not give easy access to their archival

data on their websites, or there is no policy about access to this.

Access of Contents and Coding

Selection of news is based on the entire news report. These reports are selected if their headlines, subhead, box item of the news or leading paragraph mentions IPRs or gives a sense of IPR-related news. This study then tried to find out the "central idea" of the story. The unit of analysis is the whole news story, and the focus is on issues discussed in the news article. Selected news items have been coded and analysed based on their characteristics. Variables are selected from both the literature on IPR and the news reports. Different variables such as 'Pages' (*Local, National, International, Business, Editorial, Opinion*), and 'Reporting Sources' (*Staff Reporter, Staff Editor, Columnist, Agency*) are coded. Further, the 'Theme of the news', and 'Frame of the news' were extracted after reading the text carefully. Using qualitative content analysis techniques we first extracted "themes" and main 'keywords' of the news item. Then the frames based on the keywords extracted from the news and the central idea of the story were identified. These keywords led to the final frames that are identified based on existing literature. In this process, only one dominant frame is selected per story. The final frames are the legal frame, economic frame, R&D frame, national frame and regulatory frame (Table 1).

Before proceeding with the analysis, however, a few caveats are in order. The observation of news writing in newspapers shows that sometimes the word patent, copyright or trademark used in the news are not related to IPR. The newspapers use these words with 'loose' meanings. For example, "MS Dhoni's *trademark* helicopter shots", "Ramos *trademark* bullet header", "SRK's *trademark* dance style" or "Sushant Singh Rajput's glossy, shiny *patent* leather sneaker". These uses describe the journalists' writing styles, which perhaps also show that these words are able to catch peoples' imagination, which, in turn, might reflect a decent level of awareness and acceptance of these terms among the people. Such uses of the words justify our methodology of screening the data based not only on keywords but a full reading of the news items.

Analysis

This study analyses the data collected over time to examine IPR news framing in Vernacular and national

Table 1 — Different keywords and frames studied

Keywords descriptions	Frames
Fair use, piracy, copyright infringement, plagiarism, trademark violation, counterfeiting, court issues, judgments, protection, infringement, monopoly, regulation, licensing, piracy, legal scrutiny, rights, उल्लंघन, धोखाधड़ी, पायरेसी, ट्रेडमार्क उल्लंघन, साहित्य चोरी, नकली	Legal frame
Liberalisation, development, commercialisation, progress, market, launching drug, price control, equitable access, access to medicine, generic medicine, सस्ती दवाएं, उदारीकरण	Economic frame
Technology, creativity, new medicine, research, innovation, invention, GM crop, नवोन्मेष, नया आविष्कार	R&D frame
IPR awareness, education, knowledge, less filling of the patent, IPR education, copyright, rights, morality, lobbying, conflict, strategy, conflict of interest, political movement, national interest, sovereignty, political economy, autonomy, बौद्धिक संपदा पढ़ाई	National frame
Misappropriation of traditional knowledge, compulsory licensing, copyright protection, ownership, royalty, anti-competition, approval, ever-greening, revocation of the patent, protection, regulation, access to medicine, policy, transparency, fair regulation, Acts, IPR policy, patent regime, anti-competition, review of India's IPR, stronger IPR, open access, rights, संरक्षण, पारंपरिक ज्ञान, बौद्धिक संपदा अधिकार नीति	Regulatory frame

Table 2 — Newspaper coverage of IPR news

Newspapers	Number of news	Per cent (%)
The Times of India	118	39.6
The Hindu	117	39.3
Rajasthan Patrika	23	7.7
Amar Ujala	40	13.4

newspapers. The primary concern of the study is to analyse the framing of IPR news in Indian newspapers during pre-policy and post-policy coverage. The chosen study period is the National IPR Policy 2016 formation process and when the policy was implemented.

Press Attention to IPR News

To understand the nature of media attention given to IPR issues in selected newspapers, an attempt is made to map out the average frequency of news. Analysis of the frequency of media attention given to IPR issues (Table 2, Fig. 1) reveals that the Indian regional media paid average attention to IPR-related issues compared to the national media. The press attention to IPR issues was almost equal regarding numbers in The Times of India (39.6%) and The Hindu (39.3%), but Amar Ujala (13.4%) and Rajasthan Patrika (7.7%) provided less attention to the IPR news. In the relative amount of coverage, the IPR-related articles appeared in these four media on the average of every third day as a whole. The newspaper's specific attention to IPR issues can be numbered as in Table 2.

The Times of India and The Hindu published one story out of every six daily editions. However, Amar Ujala published one news in every 18 daily editions. Rajasthan Patrika published one story out of every 31 daily editions.

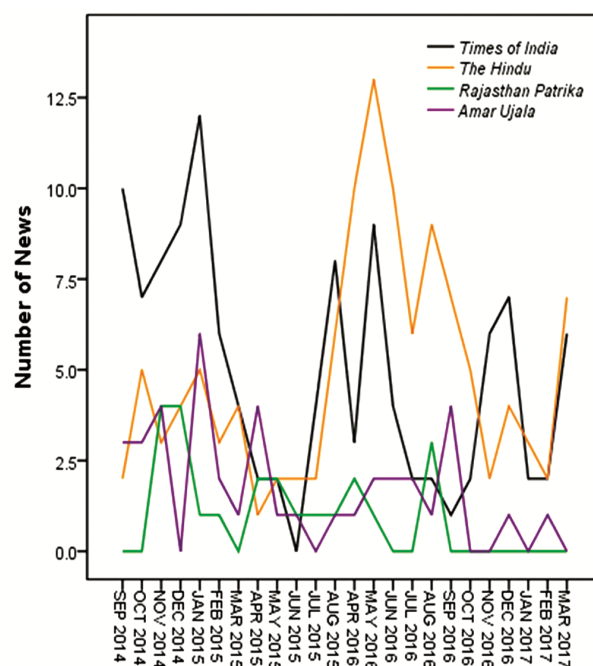


Fig. 1 — Newspapers show the differentiation in IPR news coverage in two years (Sep 2014 -Aug 2015 & April 2016 - March 2017)

In the pre-policy study, when the Indian government announced the IPR policy formation process in September 2014, the media attention was high. The newspaper focussed mainly on U. S. pharmaceuticals negotiation and the US-India patent debate. In October 2014, a similar trend of media attention was reported, and it highlighted the issues of the setup of the IPR think tank and other political activities such as a review of the Indian patent regime by the US. The IPR issues were raised significantly till February 2015 and newspapers attention was average during these months. Newspapers' attention

saw a fall from March 2015 to July 2015. The trend observed low media attention with the negative coverage of issues that emerged in these months, such as criticism of India's IPR policy-making process and unfavourable judgments by the courts on MNCs. Media attention was on the rise owing to the tussle regarding the GI status of *Rasgulla* between the Indian states of West Bengal and Orissa in August 2015.

In the post-policy study, selected newspapers shifted their focus from criticism of IPR to positive stories favouring the Indian government's stand on the IPR policy. The second phase of the study was dealing with the period from April 2016 to March 2017. When the Indian government announced IPR policy implementation in May 2016, the media coverage was again high. In the subsequent month's post-IPR policy announcement, the media attention declined gradually. August 2016 witnessed a surge in media coverage because of the disputes over Basmati rice G. I. status among multiple stakeholders, i.e. it was a contested issue between India and Pakistan and within the Indian states of Madhya Pradesh, Punjab, Haryana, and Himachal Pradesh.

The two separate months were the highest in the coverage of IPR issues in the whole study, one was in the pre-policy study (January 2015), and another was in the post-policy study (May 2016). In both months, two different newspapers were at a peak. In January 2015, The Times of India coverage was the highest, and in May 2016, The Hindu covered more news on IPR. The political and policy activities might explain the reason behind the highest coverage in these two newspapers. In January 2015, US President, Barak Obama visited India as a Chief Guest on Republic Day. Both countries negotiated the IPR policy issues in the mean times, and political and lobbying activities were at their peak. During the month, the newspapers published news related to drug pricing, and IPR issues affecting bilateral relations, and the focus was more on the politics of IPR. In May 2016,

when the final National IPR Policy 2016 was announced, The Hindu's coverage was the highest. This might explain that The Times of India focused more on the political aspects of IPR coverage, and The Hindu was more focused on disseminating the new IPR policy information.

The news attention to page-specific coverage in the newspapers indicates that local and national pages cover more news on IPR (Table 3). The trend shows that the 'national pages' of the newspapers cover most of the IPR policy news. The coverage on the opinion and editorial pages was less as compared to the other pages. Newspapers' attention was high on the event-based coverage. The widespread media attention to IPR issues shows that in the first phase (pre-policy coverage), the United States' intervention in the Indian IPR policy process makes the media agenda in policy and pharmaceutical-related debates. However, in the post-policy study, several news sources (the US, government, and pharmaceutical industry) prominent in the pre-policy coverage disappeared, which led to the decline in the IPR news.

Themes of IPR News Coverage

Table 4 shows the themes of IPR coverage and their frequencies. This study coded IPR as a separate theme for that news which uses only the word 'Intellectual Property Rights' without naming any types of IPR. In both phases of the study, 'IPR' and 'patent' emerged as dominant themes in newspaper coverage. More than 29% of news focussed on the IPR; however, the IPR policy debate was around

Table 3 — Page-specific trend showing the distribution of news

Pages	Number of news	Per cent (%)
Local	41	13.8
National	122	40.9
International	18	6
Business	77	25.8
Editorial	22	7.4
Opinion	18	6

Table 4 — Themes covered in the select newspapers and their frequency (%)

Themes	The Times of India	The Hindu	Rajasthan Patrika	Amar Ujala
IPR	33	42	3.4	21.6
Patent	47.5	33.8	7.5	11.2
Copyright	45.3	28.3	13.2	13.2
Geographical indication	25	54.2	12.5	8.3
Trademark	57.1	38.1	4.8	0
Innovation	16.7	83.3	0	0
Compulsory licensing	50	33.3	0	16.7

Table 5 — Newspapers and the frames of coverage

Newspapers	Economic frame	National frame	Legal frame	Regulatory frame	R&D frame
The Times of India, N = 118	5.9	17.8	39.8	33.1	3.4
The Hindu, N = 117	17.1	11.1	20.5	35.9	15.4
Rajasthan Patrika, N = 23	17.4	8.7	34.8	30.4	8.7
Amar Ujala, N = 40	17.5	12.5	22.5	30	17.5

patent issues. The US-based pharmaceutical companies have shown interest in the IPR policy formation process and focussed more on the patenting issues, which led to the patent as a dominant theme in the newspaper coverage. The patent theme focussed mainly on drug patents and generic medicine-related issues.

However, the national media focused more on the national and international issues influencing IPR policy, but the regional media discussed copyright issues more. Probably the “Delhi University Copyright Case” in which leading international publishers challenged the photocopy of their publications, focussed by the regional media. However, both national and regional media equally covered the copyright issues related to national, and international celebrities. When pop singer Iggy Azalea sues her ex-boyfriend for infringing on her copyright, both the national and regional newspapers covered this news. In other news, copyright cases for the selfie of the monkey, Stephen Hawking’s name trademark issue or singer and film composer Ilaiyaraaja sending a legal notice to musician S.P. Bala Subramanyam, are covered in newspapers extensively.

Policy theme was more covered in The Hindu, and patent focussed in Times of India. In regional newspapers, Rajasthan Patrika has given more space to geographical indication. In the post-policy coverage, policy and patent themes were still dominating the news. In issue-based coverage, the media’s focus was ‘protection’; however, after implementing the IPR policy, newspapers changed their focus and covered infringement issues more. The infringement news mostly covered the case of technology infringement in which Apple and Samsung’s issues were mentioned. The media attention to the pharmaceuticals sector was high in both phases of the study. The pharmaceutical news coverage appeared in connection to the judicial disputes involving Roche-Cipla, Novartis, Gilead, Natco-Tava, and Glenmark. In pharmaceutical news, government-affiliated sources are mentioned frequently.

Framing of IPR News in Media

Table 5 analyses the frames in IPR news coverage in various media. The framing analysis of the IPR news explains that the regulatory frame was covered by the national and regional media more in pre and post-policy coverage. The only different trend was reported in May 2015 and August 2016, when the economic frame dominated the newspaper’s coverage. In August 2015, the national frame dominated, while in January 2017, the R&D frame topped the media coverage. When the IPR policy formation process was announced, it made the media agenda for the coverage. In their initial coverage, newspapers' focus was the US pressure, India and the United States IP Working Group, IP think-tank announcement, meeting with US-India trade forum, and US president’s India visit. The dominant frame across the study was regulatory, with less media attention to the R&D frame.

Regulatory Frame

In the regulatory frame, newspapers focussed on policy issues such as whether the IPR 2016 was TRIPS compliant, and the issues around managing the international pressure. News items here sought to offer justifications for protecting the said policy. The issues are discussed primarily in the context of pharmaceutical and other small sectors. The national and vernacular newspapers discussed patent and GI protection. Various acts, the Patents Act 1970, the Patents Amendment Act, 2005 and Section 3(d), were the focus of reference while covering news in this frame. The other issues discussed are the bio-piracy and the US pressure on India. In this frame, newspapers also focussed on the start-up news that would benefit the IPR policy. Newspapers also showed some concern while boosting the IPR issues such as, “*Interestingly, more than two-thirds of the pharmaceutical patents awarded by India in the last three years were granted to foreign drug makers such as Pfizer Inc., Novartis AG and F Hoffmann La Roche Ltd, which have been critical of India’s intellectual property rights (IPR) regime*”.²⁹ Staff reporters write news items mostly in ‘regulatory frame’. However,

when page-specific frames are analysed, we find that the majority of news under the regulatory frame appear on Business and National pages of the newspapers.

Legal Frame

In this frame, the newspapers focused on court cases and legal aspects of the Indian IPR debate on law enforcement, infringement, piracy and counterfeiting, fair use, copyright infringement, and trademark violation. Pharmaceutical and IT sector news were the primary focus in this frame. In the pharmaceutical sector, infringement issues were raised extensively in the case of the Glivec patent issue, Novartis case, Nexavar, Gilead's case, and Cipla and Roche dispute. In the IT sector, newspapers paid attention to tech giants Apple, Samsung, and Sony Ericson. In the Delhi University copyright case, newspapers discussed 'Section 52 of Copyright Act' and explained it "*falling within not constitute infringement*".³⁰ While the other side of this news focussed on Sections 63, 63-A, and 65-A, and explained as "*Copyright is not a divine right: Delhi HC*".³¹ It appears they framed this issue in a conflicting way. Legal framing focussed on the Indian patent law with the global standard, protection of generic pharma industry, or India needs less rhetoric and more reforms in IPR and US Watch List issues that are affecting the affordable drug business. News agencies cover most of the news related to IPRs in the legal frame and such types of news find a place more on local and national pages of the newspapers.

Economic Frame

News on economic development, generic medicine, affordability, access to medicine and economic progress is discussed in the economic frame. The Hindu and Amar Ujala focussed on the affordability and protection issues regarding pharmaceutical patents and drug costs. The focus of The Times of India was affordability and protection of traditional knowledge. The newspapers raised the high price of drugs, business activities, and monetisation of IP knowledge, piracy, fake brand, and cheap drugs, pushing IPR as marketable financial assets and promoting innovation. In this frame, newspapers criticised some Indian government's steps in the policy-making process. Such as, "*India's first IPR policy trots out the worn western fairy tale that more IP means innovation, and encourages the pointless*

privatisation of indigenous knowledge."³² However, some newspapers supported the IPR policy that it will promote innovation and ensure cheap drugs. In this frame, newspapers discussed the issues of uncertainty in business and the regulatory environment. They focussed on the economic aspects of policy, piracy, the unaffordability of drugs, and medicine patents. News in economic frame finds a place more frequently on editorial pages and the individual columns of independent columnists.

National Frame

In this frame, newspapers highlighted the national interests or the ones that affect the national or international image of the nation, such as awareness efforts, lobbying activities, Politics, bilateral dialogues, IP education, less filling of the patents (at the national level), strategy, and the conflict of interests. Newspapers discussed the patent owner's issues, preventing the theft of IPR, the challenge of IPR protection, drug pricing dilemma, treatment unaffordability, global competition, and the Traditional knowledge digital library issues. The protection and IPR policy issues most discussed in this frame focus on patent protection, geographical indication protection, and trade protection issues in mostly pharmaceutical sectors. The national frame used by The Times of India was higher than other newspapers. The regional and national newspapers highlighted the news in the national and international framework and constructed an IPR narrative, and journalists frequently raised the issues related to the domestic companies, or 'Make in India' issues. The newspapers dramatise the news using the phrases such as, "Rasgulla war", "patent war", "patent battle", "Titanic battle of the patent", "big-ticket patent infringement suit", and "patent fight" in the national frame. Staff editorialists focus on the national frame more than other frames while writing the editorial.

R&D Frame

Newspapers covered the news related to the need for R&D, Technology, Creativity, new medicine, research, innovation, and invention in this frame. However, the focus of newspapers on innovation was less. In the national media, The Hindu and regional media Amar Ujala framed the R&D frame more frequently. The Hindu focussed on the R&D frame, innovation debate, affordability, traditional knowledge, and patent activities. However, Amar

Ujala focuses on awareness and patenting activities concerning R&D. While framing news in this frame, the media focuses on the need for patenting research activities, especially agricultural research. R&D frame stories are based on the pharmaceutical, IT and other small sectors. News on the R&D frame does not gain any significant prominence on any page including the pages curated by the editorial staffs.

Conclusion

The paper analyses the coverage of IPR-related news during, and immediately after, the implementation of the National IPR Policy 2016. Our findings are significant at three levels. First, we find that the 'regulatory frame' dominates the type of news items covered in both national and vernacular media. Second, interestingly, innovation as a theme is almost completely absent in the regional media covered for this study. Finally, before the making of the policy protection related news dominated the discourse, while it quickly changed to infringement-related news, after the policy is implemented.

Even though the regulatory frame dominated both national and vernacular media, the nature of news differs in the pre-policy and post-policy periods. In the pre-policy period, the key focus items were negotiations, pressure, IPR regime review, price, and enforcement. In the post-policy period, the key focus items changed to affordability, start-ups, cheap drugs, and IPR safeguards. In pre-policy, news tones were mostly negative, but they gradually become positive in post-policy coverage. The extensive focus on the regulatory frame in pre-policy and post-policy coverage implies how the regional and national media centres serve the industry and political interests. The preference for using the regulation frame shows that Indian media tend to set agendas aligned with official voices and endorsement of policy issues and might serve the industries' interests. Staff reporters cover most of the news related to IPR, and they seem to be highly inclined towards writing news in the regulatory frame. This tendency shows that journalists may be either biased or are instructed to put stories in a few specific frames during the IPR policy-making process. The over-dependence of a certain kinds of frames perhaps demonstrates that the IPR reporting in the country lack the balance needed to create a comprehensive awareness among the masses for a complex and nuanced topic such as the IPR.

Before the policy is implemented, the protection issue was leading in media coverage, primarily favouring the interest of the domestic pharmaceutical industries, and their focus was protection. They raised issues of patent protection, drug price, fair regulation, legal mechanism, and commercial interests. However, after implementing the policy, the infringement issue gradually became more dominant in media coverage. Infringement issues were primarily raised in the IT sector's contexts, especially patent, copyright and trademark infringement.

The difference in coverage of IPR news is visible within national and vernacular media. Within the national media, The Times of India focuses less on the R&D frame (3.4%) and economic frame (5.9%), whereas The Hindu's coverage is comparatively more on this frame (R&D 15.4%, Economic frame 17.1%). It seems, The Times of India, headquartered in India's political capital, New Delhi, has a greater focus on the political aspects of the IPR and R&D, and economic issues are not much important to them. However, The Hindu, published in Chennai, is distant from the political centre, and these issues matter to their readers. Generally, the TOI has been in favour of neo-liberal economic policies, of which IPR is a major pillar. It is possible that by not discussing the R&D consequences of IPR, which remains negligible, the paper might have tried not to emphasize the limitations of this major policy pillar of the neo-liberal policy architecture. The Hindu, on the other hand, has an explicit tilt towards the 'left of the centre' policy ideologies, which might explain the preference for those items, which exposes the limitation of the IPR policy in the Indian context.

The second issue that concerns vernacular media is innovation coverage. The analysis finds that the vernacular press does not cover innovation issues at all (Amar Ujala=0% and Rajasthan Patrika=0%). We might argue that in rural or small cities, readers do not care for innovation much. The national IPR policy was promoting patents and innovation in the growth and development of the knowledge economy. In this context, the national IPR policy's objective might be hard to achieve in rural and remote areas. Overall, the vernacular media located in regional centres focus less on the IPR news. Vernacular media's frequency of IPR news coverage (Rajasthan Patrika=23 and Amar Ujala=40) is significantly less than national media (Times of India=118, The Hindu=117). The large gap in news frequency shows that regional

media does not give much importance to IPR issues. It also shows that the enthusiasm and awareness of IPR among the readers of India's tier 2 and tier 3 cities remain less than those in tier 1 cities. In other words, English newspapers are read by the middle or upper-middle class, and they generally live in cities. They influence the thinking of the ruling elite and the prime moulders of policies. However, a newspaper published in regional centres deals with different situations and readers' priorities. News selection and presentation influences readers' opinion. The regional population focuses more on employment, social and economic development, and their interest in the issues that focus on economic development and employment. In these contexts, innovation and R&D, or the IPR, do not find much resonance with these groups, leading to their low coverage in the vernacular media.

Future studies can focus on the more extended period, including more diversified newspapers that will give a diverse understanding of the coverage of IPR. Including various news media such as digital and electronic would give the IPR information dissemination function in the differences across the media platform. This study's primary application would be to assist policymakers, industry, and other stakeholders in understanding how their information on IPR could be presented to the public. This study would also address the political actors in which framing their information is presented into the media by journalists and how they could deal with more specific and inclined levels of information to reach their target public through the media. Newspaper reporters could also benefit from this study to know how they present the IPR information to their readers.

This study focused on the newspapers published in India's diverse regions, but it did not analyse the relation between geographical characteristics and IPR issues' coverage in those newspapers. The study was not focusing on the effect of regional biases on the coverage of IPR issues.

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