



## STUDY ON DIGITAL PRESENCE OF PHARMACEUTICAL COMPANIES ON SOCIAL MEDIA

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### ABSTRACT

**Background:** The patients now are more educated and are curious about their health and diseases. Before going to a doctor for advice, people turn to social media for health-related answers. This makes the presence of pharmaceutical companies on social media important. **Objective:** Comparative study was performed on the presence and activeness of Indian & Multinational pharmaceutical companies on social media. **Methodology:** The social media platforms included in the study are: Facebook™, LinkedIn™, Twitter™, Instagram™, and YouTube™. The study is performed by collecting the data manually from the social media page of the various companies. The data collected is for a year from 1/12/2017 to 31/12/2018. **Result:** The results show that in comparison to MNCs, Indian pharma companies are present in less number on social media and lags in activity on various social media platforms included for the study. **Conclusion:** The study concluded that the presence on Indian pharmaceutical companies is very low compared to MNCs.

### INTRODUCTION

The world is changing every day and so the patient's population which unlike to those past years that too not only in terms of numbers but also in behavior. The patients now are more educated and are curious about their health and diseases. Before going to a doctor for advice, people turn to the internet and only with few clicks they have tons of information and with changing time technologies are evolving and without the use of the keyboard, you can interact to your smartphones voice active digital assistant and mention your symptoms. For example, 'Hey, google' on google, 'Hey, Alexa' on

Amazon and 'Hey, Siri' on iPhones. But what is the guarantee that all those information's present is reliable? The answer to this question is social media. As per the reports of Nielsen Survey of Social Media 2016, there are 177 million US users who are engaged on social media through there smartphones [1]. But what is social media? Social media means socializing or being social over a means of mass communication, or a form of media [2]. It covers a wide range of web pages that includes blogs, discussion area, videos sharing pages & more. Social media plays a vital role in this as it helps numerous

people to find out what information can be trusted. With so much transformation, people are shifting to different social media platforms such as Facebook™, LinkedIn™, YouTube™, Twitter™, Quora™, Pinterest™ and Instagram™ & many more to find out the answers. This information can be wrong but easily trusted: a relative who had the same symptoms or had a bad experience with certain medicines, or a friend in the medical field. As per a survey conducted by PWC in the USA on “Percentage of consumers viewing health information through social media” there were 42% people viewing health-related consumer reviews on social media and 32% viewed friends & family post regarding health-related reviews [3]. The information given won't be efficient, and here the role of healthcare organizations (doctors, hospitals, pharmaceutical companies) becomes important. Pharmaceutical companies are restricted to advertise their product and have followed certain rules & regulations as per the country government. The interaction with the patient is only possible through patient leaflets (information regarding medicine intake) which is present along with the medicine and through health care awareness campaigns. But now patients are also educated, and they know the importance of interaction which is not enough through PI's & campaigns, they want more information regarding the disease, research going on, clinical trial information & adverse effects. As per, Accenture reports there are 76% of the patients who believe that pharmaceutical companies have the responsibility to provide information that could help them to manage their health. [4] The pharmaceutical companies should cease their traditional approach towards patients and should initiate the new method to build trust & relationship with the patients. As per, ‘2011 Patient View’ survey, Novartis had the best corporate reputation and has a patient-oriented strategy to provide quality information &

to also have good safety records. The patient interaction of Novartis has wide coverage in terms of various diseases: Alzheimer's, breast cancer, diabetes. [5] Merck was the first pharmaceutical company to welcome itself on Facebook in 2008, followed by GlaxoSmithKline on YouTube and later on encouraging other multinational pharmaceutical companies such as AstraZeneca, Bayer, Pfizer & Novartis on social media to not only promote their products & services but also to educate about patient health care management. Pharmaceutical companies use social media to reach & to build a strong relationship with the patients. The major key is to keep a constant conversation with all the patients they interacted with and to understand their perception regarding the problems they have & what they need. Engaging more with patients would help the pharmaceutical companies in building relation, and benefiting both in terms of what they both want. Social media is a valuable part of communication, establishing a reputation and providing knowledge and it is just not for patients but also for those who use it for research purpose. 41% of the patients are using social media to be sure about their healthcare decisions [6], and this makes it important for the physicians & the pharmaceutical companies to show their presence on social media. Which in turn may help the patients who had faced the difficulties previously. As per IMS Health Social Media Engagement Index, three factors explain the current use of social media within pharmaceutical companies that are: ‘reach, relevance, and relationship.’ [7] As patients are increasingly getting more curious & wants more information and complementary services besides medicine, this is the chance for the pharmaceutical companies to grab the opportunity and to get engaged with the patients on social media. **Objective:** The study objective was to determine the presence of Indian based &

Multinational based pharmaceutical companies on different social media platforms, to study how active these pharmaceutical companies are on social media and to conduct a comparative study between the Indian based and Multinational based pharma companies on different social media.

**METHODOLOGY:** The study involves data collection on the different social media platforms through manual method meaning no use of the software. The study selected five social media platforms to perform the mentioned objective: Facebook, Twitter, YouTube, LinkedIn, and Instagram. Data was collected for the Indian Pharmaceutical & Multinational Pharmaceutical companies, and then the data was compared to reach to a conclusion. On social media, there can be many pages/profile of a single company and here to differentiate which is the official page becomes difficult. So, to identify the official page, every company's official website was opened, and the link for the different social media profile was searched, and from there it was redirected to the official page/profile. The data included in the study is from the date 1/12/2017 to 1/12/2018, and the data collection was done in January 2019. Data category involved for the different social media platforms were:

- 1) In Facebook, data involved were: Followers, Posts, Likes and Comments.
- 2) In Twitter, data involved were Followers, Tweets and Likes.
- 3) In LinkedIn, data involved were: Followers, Posts, and Likes.
- 4) In YouTube, data involved were: Subscribers, Video Posts and Likes.
- 5) In Instagram, data involved were: Followers, Followings, and Posts.

While collecting data, the method used would be different due to the different categories involved in the various social

media platforms. It was very clear that only the presence had to observe and the method for all the social media platforms remained the same. To check the presence of the companies on the various social media platforms, they were searched on the internet explorer. Example: Open internet explorer and browse the Eli Lilly & Company (company name). After getting the browsed result, click to open the company website and search for their profile links on the various social media platforms. The social media links are generally mentioned under the title 'Follow us on.' Evaluation of activity for the various social media platforms, the method adopted was to: Locate company website on the internet explorer, the link for the various social media page is searched, and from there by clicking on the link, the page is redirected to the company profile on the various social media page. After locating company profile on the social media, the page is scrolled down to the date (01/12/2017) from which data has to be collected and was entered to the excel data sheet created for the data entry till the date required (31/12/2018).

**Example for Facebook:** Search 'Pfizer' on the search bar of the internet explorer page which gives the result for the company website 'www.pfizer.com.' Search for the Facebook link which is generally present at the end of the Pfizer website. Click on the link which redirects to the 'http://m.facebook.com/Pfizer.' Descriptive statistics was used for comparative evaluation and data presentation.

**RESULTS:** The MNCs and the Indian Pharmaceutical companies involved in the study are given in Table no. 1. After conducting the study and gathering all the data required for all the objectives, the study found that almost every multinational pharmaceutical companies included in the study are present on the various social media platforms which are phenomenal with the rise in social media.

But the presence of Indian pharmaceutical companies is very low compared to MNCs. Where MNCs are present on every social media platforms with good numbers, the Indian companies are limited to few social media platforms that too with a low number. Figure no 1 explains the presence as well as a comparison of MNCs & Indian pharmaceutical companies on social media. The study included 20 Indian & 20 Multinational pharmaceutical companies for which the presence was determined. The Figure no1 depicts that the Multinational companies are present on every social media and majority is present on LinkedIn with 20 companies, followed by Twitter with 19 companies, Facebook with 16 companies, YouTube with 15 companies and Instagram with 12 companies. Whereas in comparison with MNCs the Indian companies lag in numbers, the majority is present on LinkedIn with 12 companies, followed by Facebook with eight companies, Twitter with seven companies, YouTube with four companies and Instagram with one company. The presence of both MNCs & Indian companies is more on LinkedIn and least is on Instagram compared to other platforms. The result analyzed for the activity of companies on social media can be explained by the following graphs (2, 3, 4, 5 & 6) prepared for the different social media platforms for both MNCs & Indian companies: When the data collected from Facebook for the different companies and the total was calculated for the Indian & Multinational Companies, the study found that there were only 8 Indian companies & 16 MNCs out of 20 companies on Facebook. In terms of posts, there were above 3 thousand posts by the MNCs whereas it was around 1300 posts by the Indian companies, there is a difference of thousands post between them. When comparing likes & comments on the posts, there were more than 2 million likes & almost 30 thousand comments on the MNCs posts whereas around 0.4 million likes & 6 thousand comments on Indian

post as seen in Figure no. 2. Pfizer had posted more than six hundred posts within a year which is highest compared to other MNCs & Indian companies, but Boehringer Ingelheim had more than one million likes and around five thousand comments on its only 270 posts within a year. When looking on Indian companies, Biocon had more than five hundred posts & two thousand comments within a year which is highest compared to other Indian companies post, but also, Piramal Enterprise had highest likes that are more than 0.2 million likes with only hundred posts. With the huge difference between the presence, posts, likes, and comments, it can be easily understood that the activity of Indian pharma companies is very low compared to MNCs as shown in Figure no 2. When the data for Twitter was analyzed, it was found that there were 19 MNCs and only 7 Indian companies on Twitter and when the total activity of all MNCs and Indian company was compared it was found that: there were 20 million followers of MNCs whereas only 30 thousand followers of Indian companies. In terms of the number of tweets & likes, MNCs had a total of ten thousand tweets & 0.2 million likes whereas Indian companies had total thousand tweets & 16 thousand likes. In MNCs, Novartis with the highest number of followers that is more than 2 million, Gilead Sciences with highest tweets that is 769, and Merck with the highest number of likes on the tweets that is 45 thousand. In Indian companies, Dr. Reddy's Lab with the highest number of followers that is more than 7 thousand, Lupin with the highest number of tweets that is 258, and Cipla with the highest number of likes on tweets that is 6012. When comparing both data, the MNCs follows above ten thousand digits whereas Indian companies are in the thousands of digits. The presence and activeness of Indian companies are very less on Twitter compared to MNCs, Figure no 3. LinkedIn is a social networking site which is business &

employment oriented. It helps to build a professional relationship & trusts. It is mainly used for professional networking (employer posting jobs & job seekers applying for the same after going through the posts). When there is social media that is professionally dealing with the business community, the presence of the companies becomes necessary. But, here also the Indian companies are lagging in their presence & activity when compared to MNCs. There were only 12 Indian companies whereas 20 MNCs present out of 20 companies on LinkedIn. When comparing the followers, posts, likes & comments MNCs had 17 million followers, >4 thousand posts, >1 million likes & > 25 thousand comments whereas Indian companies had 1 million followers, thousand posts, 0.2 million likes & 7 thousand comments as seen in Figure no 4. In MNCs, Johnson & Johnson had the highest number of followers that is more than 2 million, Merck with the highest number of posts & comments that is 440 & 2 thousand and Novartis with the highest number of likes on the post that is 0.1 million. In Indian companies, Sun Pharma had the highest number of followers that is 0.2 million and Biocon with the highest number of posts that is 331, likes that is >69 thousand & comments that are 2188. YouTube is a social media site where one can share videos when the data analyzed, and it was found that the Indian companies were behind MNCs here as well. There were only 4 Indian companies & 15 MNCs out of 20 on YouTube. In total MNCs had a higher number of subscribers, video shared, views & likes on the video compared to Indian companies as shown in Figure no 5. Johnson & Johnson had the highest number of subscribers, views & likes that is >50 thousand, >4 million, & 14 thousand and Roche had the highest number of videos posted that is 160. In Indian companies, Cipla had the highest number of subscribers, videos posted, likes & views on them that is > thousand

subscribers, 74 videos, 479 likes, and >13 thousand views. On YouTube also the presence & activeness of Indian companies is less compared to MNCs as seen in Figure no 5. Instagram is the most trending social media platform nowadays, but here also only 1 Indian company is present that is Torrent Pharma that too with 0 posts & 2202 followers & 0 followings. There 12 out of 20 MNCs companies present on Instagram as shown in Figure no 6. Novartis had the highest number of posts that is 577, Bayer with the highest number of followers that is 45200 and Johnson & Johnson with the highest numbers of following that is 334. The presence and activeness of Indian companies on Instagram are almost negligible compared to MNCs.

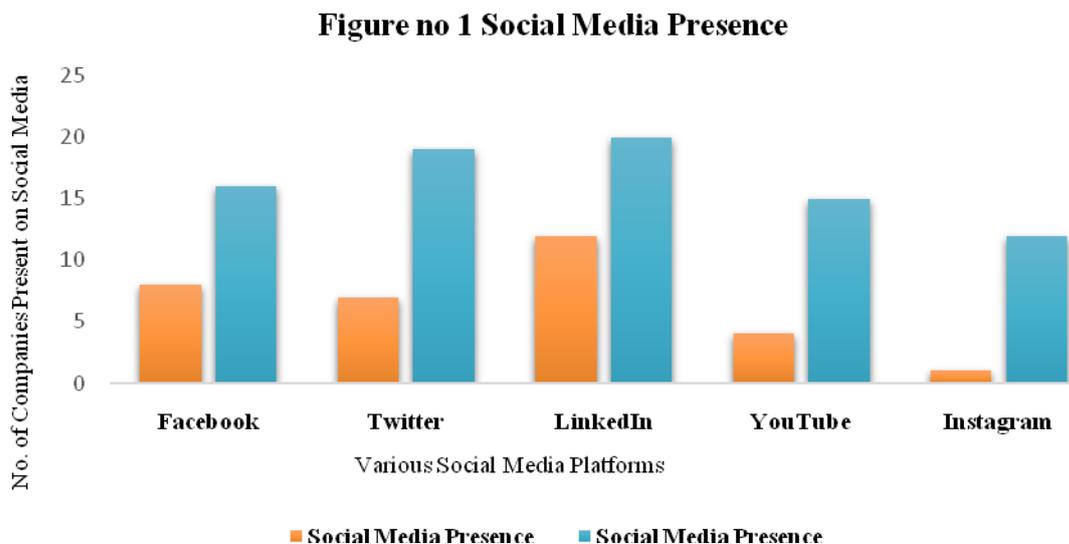
## **DISCUSSION**

Indian pharmaceutical companies are not present on social media as multinational pharmaceutical companies; It is recommended to make sure the top level management is aware of the importance of social media in this daily changing world. The companies should know the importance of various social media platforms and should use it wisely. The presence is not only what matters but how active these companies are the sites that also is important. The key factors that affect social media reach, relevance & relationship. The reach is possible through presence, relevance is possible through how active the companies are & what information they are sharing, and finally, the relationship can be maintained through constant interaction with the end users & understanding their needs & wants. Understanding various social media platforms will help the pharmaceutical companies to not only share information but also in interacting with the patients as it's a two-way communication platform.

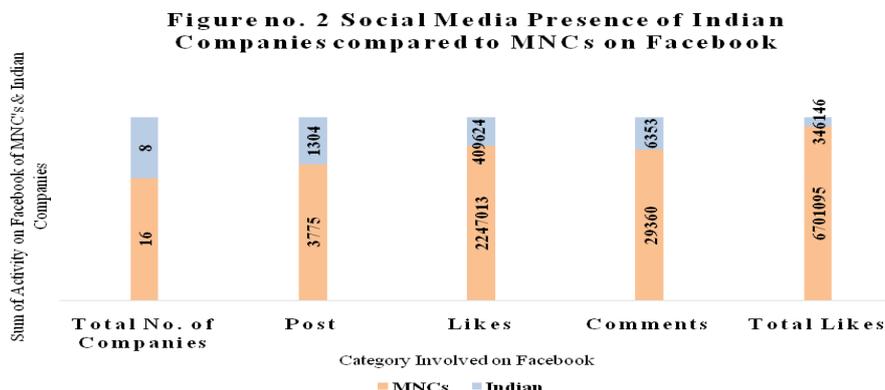
**Table no. 1** -List of companies included in the study:

Table No. 1: Top Pharma Companies		
Sr. No.	MNCs	Indian Pharma Companies
1	Pfizer	Cipla
2	Novartis	Lupin
3	Roche	Dr. Reddy's Lab
4	Merck	Aurobindo Pharm
5	Sanofi	Sun Pharma
6	Johnson & Johnson	Cadila Health
7	Gilead Sciences	Glenmark
8	GSK	Torrent Pharma
9	AbbVie	Alkem Lab
10	Amgen	Divis Labs
11	AstraZeneca	Piramal Enter
12	Allergan	Alembic Pharma
13	Teva Pharmaceutical Industries	Ipca
14	Bristol- Myers Squibb	Jubilant Life
15	Eli Lily	Biocon
16	Bayer	Wockhardt
17	Novo Nordisk	Strides Shasun
18	BoehringerIngelheim	Ajanta Pharma
19	Takeda	Laurus Labs
20	Celgene	Nectar Life

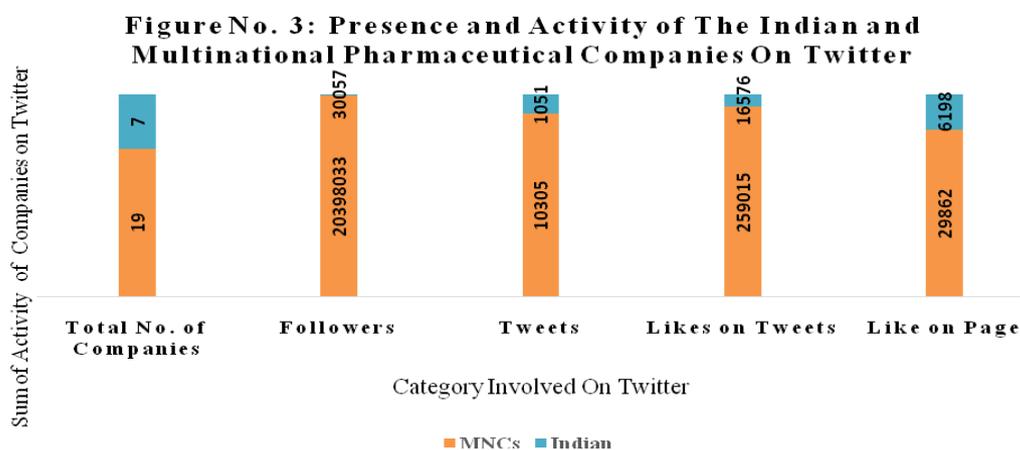
**Figure no. 1:** Presence of Indian and Multinational pharmaceutical companies on the different social media platforms



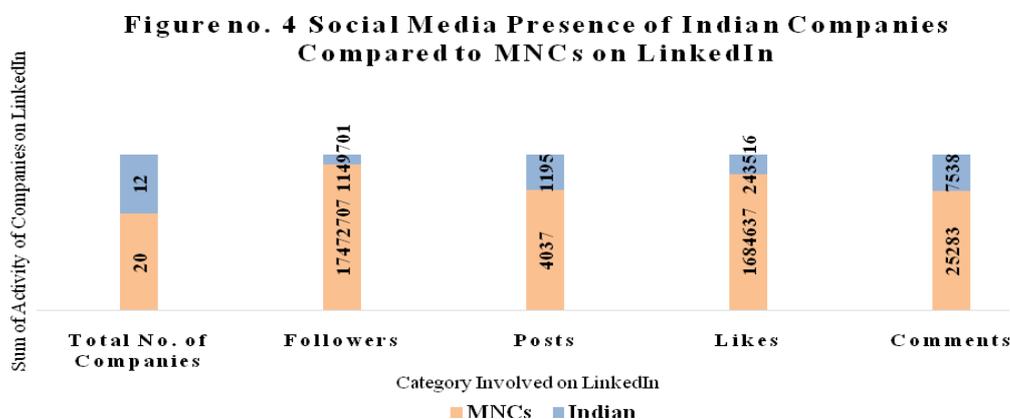
**Figure no.2:** Presence and activity of Indian and Multinational pharmaceutical companies on Facebook



**Figure no. 3:** Presence and activity of the Indian and Multinational pharmaceutical companies on Twitter.

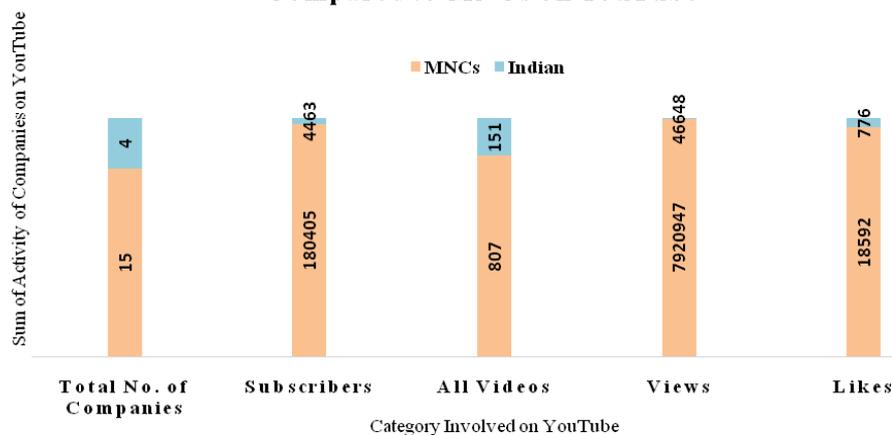


**Figure no 4:** Presence and activity of Indian and Multinational pharmaceutical companies on LinkedIn



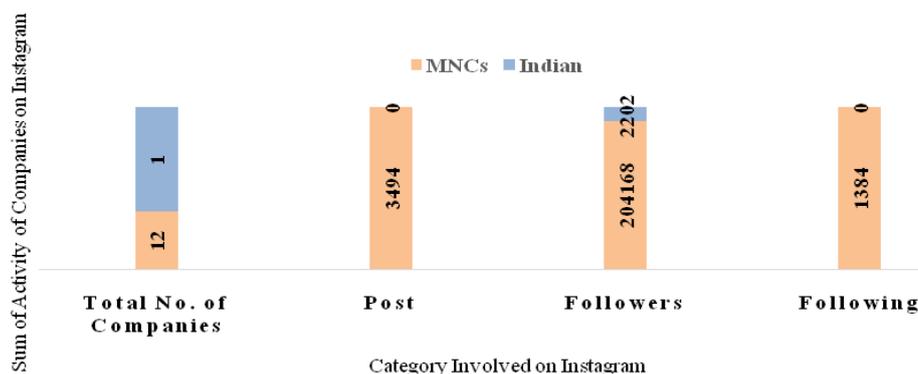
**Figure no 5:** Presence and activity of Indian and Multinational pharmaceutical companies on YouTube.

**Figure no 5 Social Media Presence of Indian Companies Compared to MNCs on YouTube**



**Figure no 6: Presence and activity of Indian and Multinational pharmaceutical companies on Instagram**

**Figure no 6: Social Media Presence of Indian Companies Compared to MNCs on Instagram**



The suggestion is not only to show their presence but also to be active on social media. Share information and interact with the patient, understand their problems and try to help them. Through social media, it is easy for pharmaceutical companies to ask the question to the patients and can get their answers from them that would help them to improve more & more. Social media presence and activeness would not only increase their company brand but also can be used as a tool for reporting adverse events of the medication observed. Social media platform can help in the pharmacovigilance studies as well, as the patients can report there complain the on the posts related to it. The companies can use social media to create awareness

regarding various diseases and health campaigns that may help various individuals. These initiatives would help to change the ‘money-making’ perception of patients about pharmaceutical companies. The pharmaceutical companies are recommended to build a strategy for their social media that would help them to keep a constant interaction with the healthcare professionals & the patients. Social media can be one of the opportunities to help patients by providing social support & information. The presence on social media would also help them to build long term relationship with the patient.

**CONCLUSION:** The study indicated that the presence & activity of Indian pharmaceutical companies on the various

social media platform is very low compared to the Multinational companies. Since people are more turning towards social media for the health-related information and health-related decisions, it is the responsibility of the pharmaceutical companies to be present on social media to provide the needful & reliable information. The pharmaceutical companies can build a long term relationship with the patients through their social media presence, activeness & constant interaction.

**Limitation:** The data for the few MNCs on some social media platforms like Twitter, Facebook and LinkedIn were not available for the whole year, due to their large number of posts.

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