

Promotion of Indian Drugs in Media



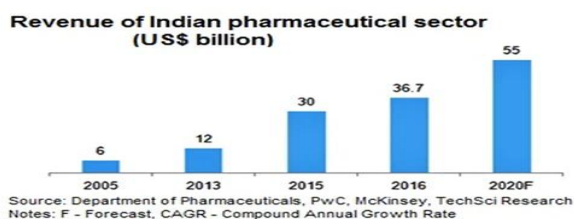
Munish Kumar Tiwari, Anshu Goel, Jaspreet Kaur, Amit Manglik

Abstract: The Indian pharmaceutical industry is very wide and in volume it has been ranked 3rd in the world. It is contributing to 10% of the total pharmaceutical production. In terms of value the pharmaceutical industry is 14th largest in the world. As far as market is concerned it is 1.5% of the total pharmaceutical market. India is a good source of good quality and cheap medicines with strong retail base. It is also a hub for clinical trials, biotechnology, contract research, and clinical data management services. There has been tremendous competition among all pharmaceutical companies. In this competitive situation, media has emerged as a strong tool to promote pharmaceutical drug to end customers. This research paper contributes to the different aspects of pharmaceutical drug promotion in media in India.

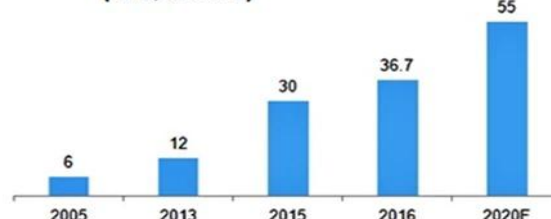
Keywords: Pharmaceutical Industry, NDDR, Biotechnology, Contract Research, DPCO.

I. INTRODUCTION:

The Indian Pharma Industry has reached to 810bn with domestic and export sales. The Pharma Industry is 14th largest in the whole world in values it is 1.5% of the world pharma market. In global market it has a lower share due to the fact that Indian medicines are 5-50% cheaper than in the developed country. The pharmaceutical sector employs about 3,40,000 persons, around 4,00,000 doctors and 3,00,000 chemists are there who are making 1 bn plus market. India is a good source of high quality and cheap medicines with strong retail base. It is not only the global pharmaceutical manufacturing industry but also the biggest hub for biotechnology, clinical trials, clinical data management, clinical data management services, and contract research.

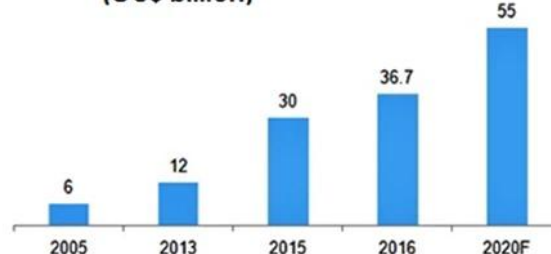


Revenue of Indian pharmaceutical sector (US\$ billion)



Source: Department of Pharmaceuticals, PwC, McKinsey, TechSci Research
Notes: F - Forecast, CAGR - Compound Annual Growth Rate

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New Drug Discovery Research (NDDR):

Due to the emergence of prevalent and new disease which has become resistant to exist, the New Drug Discovery Research (NDDR) has started. Pharma companies need to do big capital expenditure for NDDR. There are around 10 pharma companies in India in the areas of cardiovascular disease, inflammation, metabolic disorders like diabetes and infections. Indian Pharma companies generates up to 25% of all the new drug applications all over the world.

Contract Research and Clinical Trials:

The Indian Pharma Industry has become the hub for the clinical trials, Bio-technology, clinical data management, and contract research. Clinical trials constitute almost 70% cost factor of the total R&D. The Indian pharma market provides a good environment for the clinical trials at a very low cost scientific human resource and the R&D cost.

The Indian pharma Industry as compared to western countries provides very high cost advantage which is up to 50% for clinical trials. Many western countries have shifted their production base for pharmaceutical to India. As per Central Drug Standard Control Organization (CDSCO), the total numbers of clinical trials have grown from 170 trials in 2006 to 350 in 2008. Many small pharma companies have increased their R&D expenditure and increased their operations all together.

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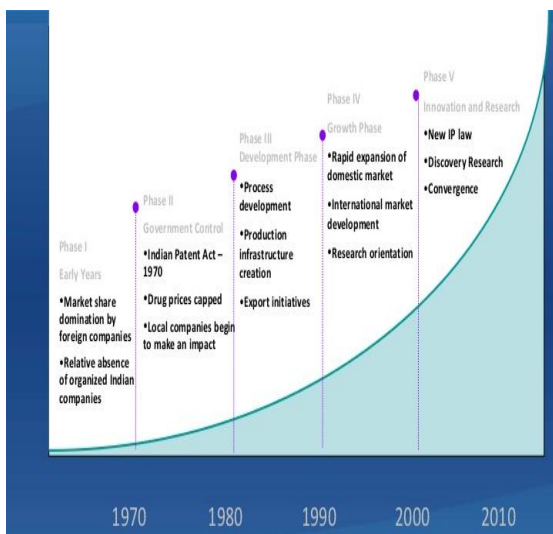
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Pharmaceutical Industry Performance:

The Indian Pharma Industry market is very much fragmented with 24,000 organizations with 330 companies in the organized sector. The top 10 Pharma companies are making up more than one third share of the market. The generic branded market is constituted to around 70% to 80% of the total share. For the year ending March 2014, the Indian Pharmaceutical market was valued at Rs 750 bn. The growth of this sector was 6% as against of 12% in 2013. The growth in the Pharma Industry happened due to the notice issued by Drug Price Control Order (DPCO) so as to bring 348 drugs under the price control. In terms of volume Indian Pharma Market is 3rd largest and in terms of value it is 13th. Indian Pharma companies are getting large revenue from exports, apart from getting from domestic market. By 2020 Indian Pharmaceutical Companies will focus on the generic market in the semi regulated market, USA. It is expected to grow by \$85 bn

Indian Pharmaceutical Evolution:

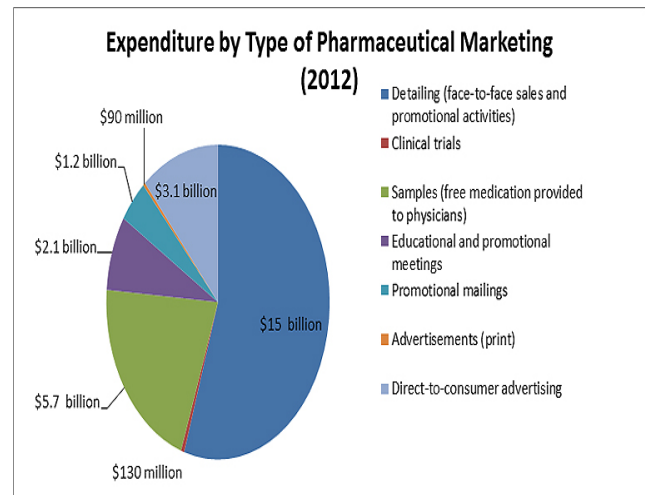


Source:

Slideshare.net

Drug Promotion:

70,000 brands of drug formulations of Indian Pharma companies are produced as against of WHO's 250 essential drugs. Chemists and stockists are selling many drugs and make margin on the sale. Doctors are very influential prescriber of medicines because the health expenditure of private sector is 80%. Unregistered medical practitioners are playing important role by playing fraud. In this condition, Pharma drug promotion can influence drug use and also plays an important role in medicines use for our benefits. In India the OTC i.e. promotional information of medicines prescribed and sold without prescription, is regulated through national legislation. The drug advertisement's ethical code is a proper rule to improvise the prescribed drug promotion and the OTC marketing in India.



Source: <http://qjcourseworkzdhh.speedfoiler.com/drug-promotion-media-nudutewat3473.html>

Code of Conduct restrictions:

1. Medicines which are prescribed i.e. "Schedule H-Drugs" cannot be promoted to general people, it should only be prescribed.
2. The traders and manufacturers are not allowed to promote their medicines which are not in the list of recognized product information.
3. Unless and until the promotional material is important, the Medical Representatives are not allowed to promote these medicines over telephone.
4. Unwanted reprints of journals should be uniform with all the product information and the word 'Safe' cannot be used unless it is really required.

II. OBJECTIVE OF THE RESEARCH:

1. To find out the current status of Pharma companies drug promotion in the Media.
2. To determine the effectiveness of advertisement of Pharma companies drug promotion in the Media.
3. To identify reasons behind the changes in growth of those Pharma companies drug promotion who are advertising in the Media.
4. To predict the changes that might happen in advertising of Pharma companies drug promotion in the Media.
5. To study the ethical issues related to Pharma companies drug promotion in the Media.

III. RESEARCH DESIGN:

Descriptive research design is used. 200 sample collection from consumer of Mathura region only through simple random sampling method. Primary data collection is done through questionnaire. The data collection will be done from consumers only and not dealers. Those pharmaceutical companies will be considered for research who is actively giving advertisements on media. Total respondents covered are 200 out of that 189 data is collected. Other respondents did not respond. All Age groups were covered for research. Male, female, educated, uneducated and people of different classes are covered. Analysis of data is primarily done through SPSS software and windows Excel.

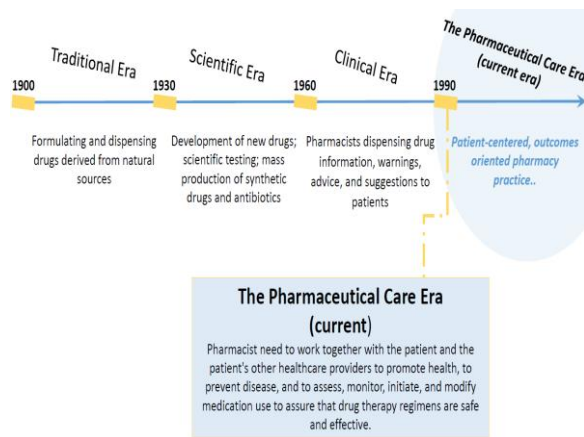
IV. Literature Review:

About Pharma companies’ promotion of drugs to all the consumers, many problems have been raised in the past. The direct to Consumer Advertising (DTCA) form is very interactive and it provides pharma drugs benefits which can be overstated as compared to the risks involved in it. Consumers who are non expert, shares their drug information on the social media and other illegal online pharmacies for marketing of their medicines on the social media websites. So, people can be exposed to deceptive information about the pharmaceutical drugs on social media (Jennifer Tyranski, David C DeAndrea, 2015).

The consumers and the doctors are required to be educated on the promotional methods and ill-treatments done by pharma sector companies and other different methods to handle funded drug information services and also health campaign. There is requirement to check the availability, clarity, range, quality of independent information & accurate information regarding prescription of drugs on internet (Pratibha Khosla & Akash Khosla, 2011).

FDA has not issued any guidelines for the social media usage for drug promotion. Pharma companies should find it out this technological area. Social media will stay for a long duration and the pharma companies cannot stay without it (Kassity Liu, 2015). By using the human generated methods to find out how informal social media forums adjust public opinion on prescription drug use. The findings was valuable to pharmaceutical company stakeholders interested in improving their patient-consumer understanding in the four areas of personal profiling, risk communication, sentiment analysis, and education (Katherine Relle, 2012). Pharmaceutical companies which are using social media for their promotion and marketing gets more sales value than those companies which are not using social media for pharma marketing and promotion.

With the social media awareness for pharma promotion and marketing, it can become important method to increase the market share and business also (Nabeel Akhtar, Muhammad Adnan Kanpurwala, Rabia Arshad, and Tariq Sharafatullah, 2015). Pharma companies are getting fast that consumers can be engaged with the help of unbranded message on the social media clubbed with linked cause than a particular pharma product. The social media effectiveness depends upon disease, brand goals, product situation, and the regulatory environment. There are different trends which states that online advertising is better than the other marketing methods. So in a changing phase of social media, pharma companies can be more creative if they were to stay pertinent, particularly as more and more competitors enters the social media arena (Shannon Gibson, 2014).



Source: <https://ivanacirkovic.com/en/marketing-en/modern-marketing-approach-in-pharmacies-from-both-sides-of-the-counter/>

V. Data Analysis and Interpretation:

Table No 5.1 Chi-Square Test of Advertisement of Drug in Media is to Overcome Competition

	Advertisement of Drug in Media is to Overcome Competition
Chi-Square	79.968 ^b
Df	4
Asymptotic Significance	.000

Source: Field Survey

The calculated Chi-Square value is 79.968 with Df 4 and significance level 5%. The Chi-square table value is 9.488 with Df 4. The calculated Chi-Square value is greater than Table No Chi-Square value. So, the variable (Advertisement of Drug in Media is to Overcome Competition) is significant.

Table No 5.2 Chi-Square Test of Advertisement of Drugs Shown To Increase Sales

	Advertisement of Drugs Shown To Increase Sales
Chi-Square	84.995 ^b
Df	4
Asymptotic Significance	.000

Source: Field Survey

The calculated Chi-Square value is 84.995 with Df 4 and significance level 5%. The Chi-square table value is 9.488 with Df 4. The calculated Chi-Square value is greater than Table No Chi-Square value. So, the variable (Advertisement of Drugs Shown to Increase Sales) is significant.

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Table No 5.3 Chi-Square Test of Indian Govt Should Ban Advertisement of Drugs

	Indian Govt Should Ban Advertisement of Drugs
Chi-Square	93.302 ^b
Df	4
Asymptotic Significance	.000

Source: Field Survey

The calculated Chi-Square value is 93.302 with Df 4 and significance level 5%. The Chi-square table value is 9.488 with Df 4. The calculated Chi-Square value is greater than Table No Chi-Square value. So, the variable (Indian Govt should Ban Advertisement of Drugs) is significant.

Table No 5.4 Chi-Square Test of Advertisement of Drug in Media is Unethical

	Advertisement of Drug in Media is Unethical
Chi-Square	101.767 ^b
Df	4
Asymptotic Significance	.000

Source: Field Survey

The calculated Chi-Square value is 101.767 with Df 4 and significance level 5%. The Chi-square table value is 9.488 with Df 4. The calculated Chi-Square value is greater than Table No Chi-Square value. So, the variable (Advertisement of Drug in Media is Unethical) is significant.

Table No 5.5 Chi-Square Test of Decision about Drug Selection by Doctor

	Decision about Drug Selection by Doctor
Chi-Square	104.413 ^b
Df	4
Asymptotic Significance	.000

Source: Field Survey

The calculated Chi-Square value is 104.413 with Df 4 and significance level 5%. The Chi-square table value is 9.488 with Df 4. The calculated Chi-Square value is greater than Table No Chi-Square value. So, the variable (Decision about Drug Selection by Doctor) is significant.

Table No 5.6 Chi-Square Test of Advertisement of Drug in Media is Misused by Customer

	Advertisement of Drug in Media is Misused by Customer
Chi-Square	83.143 ^b
Df	4
Asymptotic Significance	.000

Source: Field Survey

The calculated Chi-Square value is 83.143 with Df 4 and significance level 5%. The Chi-square table value is 9.488 with Df 4. The calculated Chi-Square value is greater than

Table No Chi-Square value. So, the variable (Advertisement of Drug in Media is misused by Customer) is significant.

Table No 5.7 Chi-Square Test of Media Should play Vital Role for Health Awareness

	Media Should play Vital Role for Health Awareness
Chi-Square	125.683 ^b
Df	4
Asymptotic Significance	.000

Source: Field Survey

The calculated Chi-Square value is 125.683 with Df 4 and significance level 5%. The Chi-square table value is 9.488 with Df 4. The calculated Chi-Square value is greater than Table No Chi-Square value. So, the variable (Media should play Vital Role for Health Awareness) is significant.

Table No 5.8 Chi-Square Test of Customer Should Become Responsible About Drug Use

	Customer Should Become Responsible About Drug Use
Chi-Square	168.857 ^b
Df	4
Asymptotic Significance	.000

Source: Field Survey

The calculated Chi-Square value is 168.857 with Df 4 and significance level 5%. The Chi-square table value is 9.488 with Df 4. The calculated Chi-Square value is greater than Table No Chi-Square value. So, the variable (Customer should Become Responsible about Drug Use) is significant.

Table No 5.9 Chi-Square Test of Indian Govt Should Have Strict Norms for Drug Promotion

	Indian Govt Should Have Strict Norms for Drug Promotion
Chi-Square	114.148 ^b
Df	4
Asymptotic Significance	.000

Source: Field Survey

The calculated Chi-Square value is 114.148 with Df 4 and significance level 5%. The Chi-square table value is 9.488 with Df 4. The calculated Chi-Square value is greater than Table No Chi-Square value. So, the variable (Indian Government should Have Strict Norms for Drug Promotion) is significant.

Table No 5.10 Chi-Square Test of Code of Conduct for Media Should Be Reviewed

	Code of Conduct for Media Should Be Reviewed
Chi-Square	150.021 ^b
Df	4
Asymptotic Significance	.000

Source: Field Survey

The calculated Chi-Square value is 150.021 with Df 4 and significance level 5%. The Chi-square table value is 9.488 with Df 4. The calculated Chi-Square value is greater than Table No Chi-Square value. So, the variable (Code of Conduct for Media Should Be Reviewed) is significant.

Table No 5.11 Chi-Square Test of Pharma Companies Gets Extra Profit through Promotion

	Pharma Companies Gets Extra Profit through Promotion
Chi-Square	125.471 ^b
Df	4
Asymptotic Significance	.000

Source: Field Survey

The calculated Chi-Square value is 125.471 with Df 4 and significance level 5%. The Chi-square table value is 9.488 with Df 4. The calculated Chi-Square value is greater than Table No Chi-Square value. So, the variable (Pharma Companies Gets Extra Profit through Promotion) is significant.

Table No 5.12 Chi-Square Test of Pharma Companies Promoting Drug through OTC

	Pharma Companies Promoting Drug through OTC
Chi-Square	207.905 ^b
Df	4
Asymptotic Significance	.000

Source: Field Survey

The calculated Chi-Square value is 207.905 with Df 4 and significance level 5%. The Chi-square table value is 9.488 with Df 4. The calculated Chi-Square value is greater than Table No Chi-Square value. So, the variable (Pharma Companies Promoting Drug through OTC) is significant.

One Way ANOVA:

Table No 5.13: Advertisement of drugs in media is shown for awareness like other products and Advertisement of drugs in media is shown to overcome cut throat competition in market.

	SS	df	MS	F	Sig.
BG	4.982	4	1.246	1.229	.300

WG	186.425	184	1.013		
Total	191.407	188			

Source: Field Survey

$F_{cal}(4, \infty) = 1.229$ and $F_{crit}(4, \infty) = 5.63$

Since F_{cal} less than F_{crit} , It is concluded that there is no Significant Difference between the variables.

Table No 5.14: Advertisement of drugs in media is shown for awareness like other products and Advertisement of drugs in media is shown to increase its sales only

	SS	df	MS	F	Sig.
BG	13.846	4	3.462	3.587	.008
WG	177.561	184	.965		
Total	191.407	188			

Source: Field Survey

$F_{cal}(4, \infty) = 3.587$ and $F_{crit}(4, \infty) = 5.63$

Since F_{cal} less than F_{crit} , It is concluded that there is no Significant Difference between the variables.

Table No 6.15: Advertisement of drugs in media is shown for awareness like other products and Indian government should ban advertisement of drugs in media

	SS	df	MS	F	Sig.
BG	14.709	4	3.677	3.829	.005
WG	176.698	184	.960		
Total	191.407	188			

Source: Field Survey

$F_{cal}(4, \infty) = 3.829$ and $F_{crit}(4, \infty) = 5.63$

Since F_{cal} less than F_{crit} , It is concluded that there is no Significant Difference between the variables.

Table No 5.16: Advertisement of drugs in media is shown for awareness like other products and Advertisement of drugs in media is unethical

	SS	df	MS	F	Sig.
BG	10.270	4	2.568	2.608	.037
WG	181.137	184	.984		
Total	191.407	188			

Source: Field Survey

$F_{cal}(4, \infty) = 2.608$ and $F_{crit}(4, \infty) = 5.63$

Since F_{cal} less than F_{crit} , It is concluded that there is no Significant Difference between the variables.

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Table No 5.17: Advertisement of drugs in media is shown to increase its sales only and Decision to select a particular drug by patient should be decided by Medical Practitioner and not by media

	SS	df	MS	F	Sig.
BG	8.586	4	2.146	1.585	.180
WG	249.224	184	1.354		
Total	257.810	188			

Source: Field Survey

$$F_{cal}(4, \infty) = 1.585 \text{ and } F_{crit}(4, \infty) = 5.63$$

Since F_{cal} less than F_{crit} , It is concluded that there is no Significant Difference between the variables.

Table No 5.18: Advertisement of drugs in media is shown to increase its sales only and Advertisement of drugs in media makes customer to misuse it

	SS	df	MS	F	Sig.
BG	10.377	4	2.594	2.637	.036
WG	181.031	184	.984		
Total	191.407	188			

Source: Field Survey

$$F_{cal}(4, \infty) = 2.637 \text{ and } F_{crit}(4, \infty) = 5.63$$

Since F_{cal} less than F_{crit} , It is concluded that there is no Significant Difference between the variables.

Table No 5.19: Indian government should ban advertisement of drugs in media and Advertisement of drugs in media makes customer to misuse it

	SS	df	MS	F	Sig.
BG	13.619	4	3.405	2.879	.024
WG	217.566	184	1.182		
Total	231.185	188			

Source: Field Survey

$$F_{cal}(4, \infty) = 2.879 \text{ and } F_{crit}(4, \infty) = 5.63$$

Since F_{cal} less than F_{crit} , It is concluded that there is no Significant Difference between the variables.

Table No 5.20: Advertisement of drugs in media is shown for awareness like other products and Media should play vital role in awareness about health of human being rather than promotion of drugs

	SS	df	MS	F	Sig.
BG	5.083	4	1.271	1.255	.289
WG	186.325	184	1.013		
Total	191.407	188			

Source: Field Survey

$$F_{cal}(4, \infty) = 1.255 \text{ and } F_{crit}(4, \infty) = 5.63$$

Since F_{cal} less than F_{crit} , It is concluded that there is no Significant Difference between the variables.

Table No 5.21: Advertisement of drugs in media is shown for awareness like other products and Customer should also become responsible about using or not using drugs after watching advertisement in media

	SS	df	MS	F	Sig.
BG	9.425	4	2.356	2.382	.053
WG	181.983	184	.989		
Total	191.407	188			

Source: Field Survey

$$F_{cal}(4, \infty) = 2.382 \text{ and } F_{crit}(4, \infty) = 5.63$$

Since F_{cal} less than F_{crit} , It is concluded that there is no Significant Difference between the variables.

Table No 5.22: Customer should also become responsible about using or not using drugs after watching advertisement in media and Pharmaceutical drug companies should also become responsible promotion of its drugs in media

	SS	df	MS	F	Sig.
BG	31.376	4	7.844	11.984	.000
WG	120.434	184	.655		
Total	151.810	188			

Source: Field Survey

$$F_{cal}(4, \infty) = 11.984 \text{ and } F_{crit}(4, \infty) = 5.63$$

Since F_{cal} greater than F_{crit} , It is concluded that there is Significant Difference between the variables.

Table No 5.23: Advertisement of drugs in media makes customer to misuse it and Indian government should have strict norms related to drug advertisement in media

	SS	df	MS	F	Sig.
BG	5.650	4	1.412	1.386	.240
WG	187.440	184	1.019		
Total	193.090	188			

Source: Field Survey

$$F_{cal}(4, \infty) = 1.386 \text{ and } F_{crit}(4, \infty) = 5.63$$

Since F_{cal} less than F_{crit} , It is concluded that there is no Significant Difference between the variables.

Table No 5.24: Indian Government should have strict norms related to drug advertisement in media and Code of conduct for media should be reviewed and the benefits of customers should be taken care of regarding pharmaceutical drug promotion in media

	SS	Df	MS	F	Sig.
BG	39.164	4	9.791	15.199	.000
WG	118.530	184	.644		
Total	157.693	188			

Source: Field Survey

$F_{cal}(4, \infty) = 15.199$ and $F_{crit}(4, \infty) = 5.63$

Since F_{cal} is greater than F_{crit} , It is concluded that there is Significant Difference between the variables.

Table No 5.25: Advertisement of drugs in media is shown to increase its sales only and Pharmaceutical companies try to gain extra profit through drug promotion in media

	SS	df	MS	F	Sig.
BG	17.446	4	4.361	3.339	.011
WG	240.364	184	1.306		
Total	257.810	188			

Source: Field Survey

$F_{cal}(4, \infty) = 3.339$ and $F_{crit}(4, \infty) = 5.63$

Since F_{cal} less than F_{crit} , It is concluded that there is no Significant Difference between the variables.

Table No 5.26: Pharmaceutical companies have become less responsible due to drug promotion in media and Pharmaceutical companies are promoting OTC Activity (over the counter) for their drug through promotion in media

	SS	df	MS	F	Sig.
BG	.796	4	.199	.250	.910
WG	146.612	184	.797		
Total	147.407	188			

Source: Field Survey
 $F_{cal}(4, \infty) = 0.25$ and $F_{crit}(4, \infty) = 5.63$

Since F_{cal} less than F_{crit} , It is concluded that there is no Significant Difference between the variables.

Table No 5.27: Code of conduct for media should be reviewed and the benefits of customers should be taken care of regarding pharmaceutical drug promotion in media and Pharmaceutical companies are promoting OTC Activity (over the counter) for their drug through promotion in media

	SS	Df	MS	F	Sig.
BG	15.576	4	3.894	5.732	.000
WG	124.996	184	.679		
Total	140.571	188			

Source: Field Survey

$F_{cal}(4, \infty) = 5.732$ and $F_{crit}(4, \infty) = 5.63$

Since F_{cal} is greater than F_{crit} , It is concluded that there is Significant Difference between the variables.

VI. CONCLUSION

Patients feel that there is a need of drug promotion on media. They feel that drug promotion on media is carried out only for promotion. Some feels that promotion of drugs carried out in media only to handle competition. Some also feels that promotion is carried out for increase in sales. Some respondents have opinion that the government should ban drug promotion on media as it is ethical. Some agrees that decision to select a particular drug by patient should be decided by Medical Practitioner and not by media. It is misused by customers. There is a need for customers to become responsible about using drugs after seeing drug promotion. Drug companies should also become responsible for promotion of its drugs in media. Indian government should have strict norms related to drug advertisement in media.

VII. LIMITATIONS OF THE STUDY

1. Due to less time, less numbers of respondents were covered.
2. Due to less time, the selection of universe is limited to only Mathura.
3. Literature review is limited and could be wider.

VIII. SCOPE FOR FURTHER RESEARCH

There is lot of scope for further research. Research can be carried out at national level by considering all the cities and the number of respondents can be increased. Only OTC drugs are covered in this research. More drug can be included which are promoted on media. Selection of media is mainly considered as TV. There are other media's that can be included and further research can be carried out.

IX. POLICY IMPLICATIONS

The manner in which drug promotion has increased in the media, it has resulted into lot of drugs purchased as OTC from medical stores without Physician's prescription. Now promotion of drugs will be reduced on media. It may be limited to promotion of some common drugs which doesn't have severe consequences. Promotion of drugs may be stopped in the media in near future. These things can happen only when government make a regulation related to drug promotion.

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Dr. Munish Kumar Tiwari (MBA, PhD), Working as an Associate Professor, School of Management Studies, Mangalmai Institute of Management & Technology, Greater Noida, India. He has twenty two years of experience, Out of which ten years of experience in Corporate Sector and twelve years in Academics. He has worked as Regional Sales Manager with Indoco Remedies Ltd and Divisional Sales Manager with Serum Institute of India Ltd. He has worked with

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