

Social Media Marketing by Pharmaceutical Industry: Perception and Attitudes of Key Stakeholders

¹P Gupta*, ²A Udupa

¹ Department of Preventive and Social Medicine, Seth G. S. Medical College and KEM Hospital, Mumbai, India.

² Department of Pharmacology, B. J. Medical College and Sassoon General Hospital, Pune, India.

*Correspondence to: Pankaj Gupta, pankajgupta85@rediffmail.com

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Abstract

The purpose of the study is to assess the perception, attitudes and behavior of the key target consumer groups – doctors and patients, regarding social media marketing by pharmaceutical industry. It is a cross-sectional, questionnaire-based study done in 2 groups – 50 general practitioners and 250 patients, in Navi Mumbai (India) area, selected by random sampling. The results highlighted that the awareness and acceptance of the concept of social media marketing was high amongst both the doctors and the patients. Amongst doctors, it is positively and significantly associated with young age and having a postgraduate degree after MBBS. Amongst the patients, a high proportion take self medication based on reference to the internet, most common ailments for use of self medication being aches, respiratory illnesses and gastrointestinal illnesses. The increasing positive response of the key consumer groups, especially in the young age group, makes social media a powerful marketing tool, which can be explored by the pharmaceutical industry.

Keywords: Social media; marketing; pharmaceutical; internet.

1. Introduction

Today's patient population is completely different from those of years past. They are involved, well educated, and not afraid to question the advice of their physicians. In its 2008 report, "How America Searches: Health & Wellness", iCrossing found that 59% of patients turn to the Social Media or Web as their first source of health information. Physicians rank second at 55% and traditional media like television and print trail in the distance attracting only 20% [1].

Social media encompasses a wide range of web forums including blogs, discussion boards, video logs, video sharing sites, and virtual life websites. As per a 2009 Nielsen survey of Social Media (SM), two thirds of the world's internet population visits online communities and spends at least 10 minutes on them every day. In addition, the time spent on these websites has increased three times the rate of overall internet growth [2]. India has 52 million active internet users in 2009, with 20 million people using internet daily.

Patient-focused networks exist in a number of places: large general social networks like Facebook, Ning and MySpace; general health sites like HealthCentral, WebMD, RevolutionHealth; and specialty platforms like CureTogether, PatientsLikeMe, Inspire. As a result, patients have begun to forge relationships with one another online, discussing medications, therapies, symptoms and more [3]. One of the first firms to embrace social media was Merck, which, in 2008, set up a page on Facebook to promote its Gardasil vaccine that helps to protect human papillomavirus, which can cause cervical cancer. It was followed by GlaxoSmithKline, which chose video sharing site YouTube to launch a promotional campaign highlighting restless leg syndrome. These moves opened the floodgates for such advertising in the US and now firms such as Bayer, Novartis, Biogen and AstraZeneca all use social media to promote their products, with the Washington Post noting that a study carried out in November of last year by Manhattan Research showed that over sixty million adults in the US consume health related social media marketing [4].

The Pew Internet Project estimates that between 75% and 80% of internet users have looked online for health information. Thirty-one percent of e-patients say they or someone they know has been significantly helped by following medical advice or health information found on the internet. Newly diagnosed e-patients and those who have experienced a health crisis in the past year are also particularly tuned in: 59% say the information they found online led them to ask a doctor new questions or get a second opinion [5]. It has been shown in studies that an average person can share health information with a 50-person network within 30 days [6]. 34% of adult online users (54 million people) in the U.S. said they have connected to others or to the content others created online about health and wellness issues in the past year [7].

Social media holds a particular appeal for 18-to-34 year old health searchers, while overall, men appear more likely than women to use online social media to research health and wellness issues. Two-thirds of online adults have used general search engines (e.g. Google, Yahoo!, MSN and Ask) to find health-related information, making them the default gateway for this as well as many other topics; usage of health-specific search engines – such as Healia, Medstory, Fealth, Kosmix and Healthline – is minimal by comparison [1].

Using social media to complement traditional PR and marketing channels can enable communicators to connect with their key audiences in a manner that is more personal and informal. Internet media spending of global pharmaceutical companies had increased by 36 percent to \$137 million, in 2008, which is significantly higher than their spending on television advertisements. Social media tools ranked third (at 34 percent) among online tools to locate health information in the Seventh ePharma Consumer Survey of 2008 [3].

Two major trends are driving the product marketing in the pharmaceutical industry. First, according to IMS, in 2007 over 40% of pharmaceutical promotional spending was on consumers. This spending shift of marketing dollars is the result of increased patient accountability (financial and information-wise) in managing their healthcare. Compounding this spending shift has meant a decrease in spending by pharmaceuticals on traditional sales forces whose focus was on physician-targeted marketing [5].

Thus, to summarize, consumers, with their new-found empowerment of making their own healthcare purchase decisions, are increasingly turning online for healthcare answers. The result is more transparency, a trend that health plans and pharmaceuticals must prepare for.

The newer avenues, in terms of effective marketing, provided by the social media have a tremendous potential. However, there is a pressing need to understand and research about a few issues related to social media marketing. We need to gain a better understanding of how social media can be of benefit to the pharmaceutical industry, which is critical to ensuring we stay at the forefront in terms of digital media communication. We need to recognize the benefits and be aware of the limitations, particularly in the pharmaceutical sector, which will ensure that PR and marketing communicators maximize the opportunities provided by the web in both an ethical and mutually beneficial manner. It is incumbent upon us, as managers, to use our collective efforts to bring some regulation and standardization of procedures into the field, being guided by evidence.

Thus, this study aims to collect valuable evidence and data regarding the awareness, perception, attitudes, responses and expectations of the doctors and the patient population, which are the two key targets of a majority of pharmaceutical marketing strategies, towards this emerging and potentially resourceful strategy of social media marketing. Although there has been a lot of research in developed western countries on this topic, but data from a rapidly developing economy like India is lacking in the existing literature. This study intends to fill in this gap. A better understanding of the consumer psyche and behavior will in turn help the pharmaceutical industry to formulate an effective strategy to explore the social media for a dynamic marketing plan in the setting of a developing country like India.

2. Methods

This study was a cross sectional survey conducted in an urban area in Navi Mumbai in Thane district which is in close proximity to the metropolitan city of Mumbai in the state of Maharashtra, India. Study period was 1 month.

It was conducted in 2 separate groups - doctors and patients, residing in the study area. A list of all general practitioners in Navi Mumbai was obtained from a telephone directory. Only allopathic practitioners having a general practice were selected. Specialists and super specialist doctors were excluded. As per convenience sampling, it was decided to include 50 doctors out of the selected population. Systematic random sampling was applied to select 50 doctors from the list. An appointment was sought telephonically making sure that the appointment was during the clinic timings of the doctor. If appointment could not be secured due to any reason (e.g. refusal by the doctor, non-availability, etc), the doctor, next in the list was selected. As per convenience sampling, it was decided to interview the first 5 patients in the waiting room of the clinic of the doctor who was selected for the study. Only those patients who regularly use internet were included. Thus, the total sample size of the patient population is 250.

Two different data collection instruments, for doctors and patients, were designed based on aim and objectives of the study and after review of literature. It contained questions on – personal data, socioeconomic data; data regarding awareness of social media marketing; data regarding influence of social media marketing on the behavior and practices of the doctors and patients; and data regarding acceptance of and expectations from social media marketing. Structured interview based on data collection instrument was conducted after taking consent from the participants. Interview took around 10 minutes on an average. Data was analyzed using SPSS (version 16) software.

3. Results

3.1. Doctor's perspective

Table 1: Profile of the sampled doctors.

Age (years)	24-30	11 (22%)
	30-40	16 (32%)
	40-50	12 (24%)
	>50	11 (22%)
	Total	50 (100%)
Qualification	MBBS (only graduation)	26 (52%)
	MBBS + MD/MS (post-graduation)	24 (48%)
	Total	50 (100%)
Years of experience	<5 years	13 (26%)
	5-10 years	14 (28%)
	>10 years	23 (46%)
	Total	50 (100%)

Amongst the 50 sampled doctors, 56% were between 30 to 50 years age group, 48% had a post graduation degree and a majority (74%) had more than 5 years experience.

Table 2: Awareness and acceptance of social media marketing.

		Awareness			P value	Acceptance*			P value
		Yes	No	Total		Yes	No	Total	
Age (years)	24-30	10	1	11	<0.05**	8	3	11	<0.05**
	30-40	14	2	16		10	6	16	
	40-50	8	4	12		5	7	12	
	>50	6	5	11		4	7	11	
	Total	38 (76%)	12 (24%)	50 (100%)		27 (54%)	23 (46%)	50 (100%)	
Qualification	MBBS	17	9	26	<0.05	11	15	26	<0.05
	MBBS + MD/MS	21	3	24		16	8	24	
	Total	38 (76%)	12 (24%)	50 (100%)			27 (54%)	23 (46%)	

*Doctors who reported that they were not aware of the term "Social media marketing" were explained about the concept of SMM and then their acceptance of SMM as a valid marketing method was assessed.

** Chi values were calculated by grouping the doctors according to the age – less than 40 and more than 40, and then using two by two tables.

A majority (76%) of doctors was aware of the concept of social media marketing and 54% of them were in favour of this strategy. Both awareness and acceptance of social media marketing amongst doctors were significantly associated young age group and having a postgraduate degree.

Table 3: Reasons cited for acceptance of social media marketing.

	N=27* (out of 50)
Higher awareness amongst patients regarding health and disease.	16 (59.3%)
Better compliance of patients to medicines.	13 (48.1%)
Greater involvement of patients in promoting own health.	10 (37%)
Better understanding among the patients about the nature, prognosis and management of their current illness.	5 (18.5%)
Keeps the doctors on their toes to constantly update themselves with recent advances.	4 (14.8%)

*Percentages do not add up to 100% because it was a multiple response question.

Table 4: Reasons cited for non-acceptance of social media marketing.

	N=23* (out of 50)
Patients pressurizing doctors to prescribe certain drugs.	19 (82.6%)
Doctor shopping" : Until patient finds a doctor ready to prescribe what he wants.	14 (60.9%)
Higher chance of dissatisfied "customers" leading to a negative word-of-mouth publicity.	8 (34.8%)
Lengthens consultation time.	7 (30.4%)
Promotes irrational self-medication in form of inappropriate drug use, inappropriate doses; leading to adverse reactions.	5 (21.7%)

*Percentages do not add up to 100% because it was a multiple response question.

Table 5: Ailments according to doctors' experience for which patients refer to internet and social media.

Ailment	Frequency
Cough and URTI	25 %
Skin Diseases	13 %
Muscle and joint pain	20 %
Abdominal cramps	10 %
Fever	14 %
DM/HT	2 %
Sedatives	3 %
Motion Sickness	4 %
Vitamins and Nutraceuticals	9 %

3.2. Patient's perspective

Table 6: Profile of the sampled patients.

Age	18-25	22 (8.8%)
	25-35	27 (10.8%)
	35-50	73 (29.2%)
	50-60	68 (27.2%)
	>60	60 (24%)
Education	High School	42 (16.8%)
	College	75 (30%)
	Graduate	112 (44.8%)
	Post Graduate	21 (8.4%)
Occupation	Student	23 (9.2%)
	Salaried	80 (32%)
	Self employed	36 (14.4%)
	House-wife	71 (28.4%)
	Retired	40 (16%)

Table 7: Awareness and acceptance of social media marketing.

		Awareness			P value	Acceptance*			P value
		Yes	No	Total		Yes	No	Total	
Age	18-25	14	8	22	<0.01	13	9	22	<0.01
	25-35	15	12	27		23	4	27	
	35-50	23	50	73		39	34	73	
	50-60	14	54	68		31	37	68	
	>60	12	48	60		10	50	60	
	Total	78 (31.2%)	172 (68.8%)	250 (100%)		116 (46.4%)	134 (53.6%)	250 (100%)	
Education	High School	2	40	42	<0.01	4	38	42	<0.01
	College	23	52	75		39	36	75	
	Graduate	35	77	112		53	59	112	
	Post Graduate	18	3	21		20	1	21	
		Total	78 (31.2%)	172 (68.8%)		250 (100%)		116 (46.4%)	

*Patients who reported that they were not aware of the term "Social media marketing", were explained about the concept of SMM and then their acceptance of SMM (as a valid marketing method), was assessed.

31.2% of patients were aware about social media marketing and 46.4% accepted this strategy as beneficial.

Table 8: Information seeking behavior of the patients.

Ailment	Refer to internet for disease information	Refer to internet for drug information
Fever	18 %	13 %
Body Pain, Cramps, Spasm	11 %	16 %
Cough Sore Throat	9 %	21 %
Diarrhoea, Abdominal Pain	6 %	17 %
Chest Pain	10 %	6 %
DM/HT	15 %	5 %
Acne	20 %	13 %
Others	11 %	9 %

Table 9: Effect of SMM on the doctor–patient relationship.

Patient behaviour	Frequency
Suggest doctors to prescribe drugs which they have come to know through internet and social media	53.84%
Cross check doctor's prescription using internet and social media	34.61%
Change doctor if his prescription doesn't match the information they have got from internet and social media	25.64%

4. Discussion

The awareness about social media marketing amongst doctors and patients was 76 % and 31.2 % respectively. The acceptance of SMM amongst them was 54 % and 46.4 % respectively. Assessment of acceptance of SMM by the two groups was interpreted based on the enthusiasm, willingness to get involved and perception of usefulness of SMM. Both the parameters had a significant association with young age of patients and doctors and higher qualification in case of doctors. An adequately high level of awareness and acceptance regarding SMM, amongst the key consumer groups, despite it being a recent phenomenon and having a lot of issues regarding its legality, is noteworthy. Awareness and acceptance may be taken as proxy indicators for the possible success of this medium in the future, if it gets legal approval and is intelligently exploited. For the pharmaceutical industry which is perennially starved of novel, path breaking marketing ideas, SMM warrants attention and keen interest. Optimum utilization of SMM would entail adequate attention being given to the behavior of the patients regarding seeking of information about disease conditions and the appropriate drugs for the particular condition.

Despite the general enthusiasm about SMM, many doctors had reservations regarding this phenomenon; especially because of the change in the dynamics of the doctor–patient relationship, it has and will bring about. Patients have begun to question the decisions of the doctors, cross check their prescriptions on internet and pressurize doctors to prescribe the drugs about which they have read on the internet. Also, a matter of concern for the doctors was the authenticity of the content of social media, which may lead to improper and irrational use of self medication by the patients. This finding of our study has also been felt on the global platform which has led to the US FDA making moves (after its first attempt in 1996) to formulate a policy on the proper use and regulation of this new age media. In November 2009, the US FDA had a two-day Public Hearing on 'Promotion of FDA-Regulated Medical Products Using the Internet and Social Media Tools' [9].

The healthcare industry values regulated privacy and security, control of data, and the protection of intellectual property. With social media marketing, anyone can create an account, information is contributed by and distributed to all, and open sources are deemed most noble, following existing standards but with as few restrictions as possible [10]. Giving the legal perspective, Mr. Prerak Hora, Associate, TMT Law Practice at Nishith Desai Associates has said that, "Social network content is mainly in the form of user generated content or UGC. There is no regulation in the world which expressly deals with social networks or UGC. Hence, there is no specific mode in which once can effectively address the problem of misleading / incorrect health information on the World Wide Web. It is self-regulation that one needs to adopt when one is dealing over the social network" [3].

Indian regulators too should be thinking along the lines of the US FDA and move towards monitoring of social media sites. Ms. Gowree Gokhale, Partner & Co-Head, Pharma Practice, Nishith Desai Associates has pointed to Section 43A, Section 72, Section 72A, and Section 79 of India's Information Technology (Amendment) Act, 2008 ("ITAA") regarded as the country's cyber law which may be considered relevant in this case [3]. India has a Magic Remedies (Objectionable Advertisement) Act, 1954. It has only one relevant clause, Clause 4, on misleading advertisements which: directly or indirectly gives false impression regarding the true character of the drug; makes a false claim for the drug, or is otherwise false or misleading in any particular material [11].

The "Ethical Criteria for medicinal drug promotion" prepared by WHO in 1988 has not addressed problems related to advertising in the electronic media [11,12]. The IFPMA code of Pharmaceutical Marketing Practices (2006 revision) deals with both the electronic media and advertisements on the Internet, but is vague and has nothing to say on web pages created by drug companies [13]. Hence, it can be said that, for now, the industry is left to self-regulate, while they work towards a more systematic approach.

5. Conclusion

The increasing positive response of the key consumer groups – patients and doctors, especially in the young age group, makes social media a powerful marketing tool, which can be explored by the pharmaceutical industry. For the optimum use of this new, exciting medium, it is pertinent that the medical professionals be taken into confidence and their insecurities answered. Strict regulation of the content of such sites is mandatory to ensure maximal benefit to patients and doctors. Considering the reach of the so-called SM supermarket, one cannot ignore its potential to create awareness and influence opinions in the marketer's favor and aid brand recall, when it comes to brands that can be directly promoted to the consumer. It can also be used effectively where patient education plays an important role like health and nutrition, chronic diseases like diabetes, hypertension etc. However, one has to look into this trend a little more discerningly; weighing the consequences before taking this step.

Competing Interests

The authors declare that they have no competing interests.

Authors' Contributions

PG participated in study design, study conduct, data collection and preparation of the manuscript. AU participated in data collection, statistical analysis and editing the manuscript.

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