

## **The Impact Of Digital Marketing On Herbal Drug Consumers A Review Study**

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Purchasing medications online has become a popular trend among patients and consumers. With the rise in demand for online prescription purchases, the number of online pharmacies has also grown. The annual Indian pharmaceutical market is valued at approximately Rs 79,000 crore, with a growth rate of around 20%. Pharmaceutical companies are highly competitive in marketing their products. The revenue generated from online sales of healthcare products in India reached INR 5,075.9 million in FY 2015, up from INR 771.0 million in FY 2012, reflecting a compound annual growth rate (CAGR) of 87.4% during the period from FY 2012 to FY 2015.

### Online Marketing and Pharmaceutical Industry

With the advent of social media before meeting a doctor, the patient researches everything about the disease its symptoms, diagnosis, possible cures etc, and has already interacted with other patients. Patients are also more and more aware of their rights and have high expectations from the physicians and the drug companies alike.

Pharmaceutical companies have shifted to online DTC advertisement of prescription drugs through interactive internet platforms like face book, twitter, google plus and linked. Social networking provides a great opportunity for the pharmaceutical industry to come near to their customer and reach out to new and broader customer base.. It can be said that social media acts as a direct, interactive and engaging medium (Bhagat and Dutta, 2012).

Myers, D. S. (2012) found that companies across product categories are working to learn the nuances of social media as it continues to grow in popularity and wide spread adoption. Pharmaceutical companies are no different, except that they must

also adapt government regulation and industry standards to the new medium, making the topic important for pharmaceutical companies, consumers, and policy makers.

The social media afford a great opportunity for the pharmaceutical industry to reach world wide audience. It allows companies to traverse boundaries. The huge growth in the social networking will be virtual in the developing countries like India after an widespread coverage in the developed markets. Social media could be a very strong and effective medium for the pharmaceutical industry for communicating their values and strategies to their customers. Chatterjee(2012).

Previous research studies report that 50 percent of online pharmacies operate without license, 33 percent do not have policies in place to protect their customers and many do not provide a contact address and phone number and hide from law enforcement (Silverman and Perlstein,2009). According to the World Health Organization (2009), medicines purchased over the internet from websites that conceal their physical address are counterfeit in more than half of the cases.

Richards (2008) in an overview found that most of the doctors think that its testing to remain educated about medicines and prescriptions. To remain educated they survey, analyze, and coordinate data from numerous sources. Most doctors say that data from pharmaceutical and biotech look into organizations is helpful to them, and they acknowledge visits from organization agents and the data and assets they give. Although most doctors welcome this data, they don't utilize it in separation" Patients who see a commercial and perceive their own side effects or hazard variables may then contact their doctor to talk about their treatment alternatives, hence sharing in their medicinal services administration (West, 2012).

Online pharmaceutical stores have limited capability to sign trust due to their incapacity to convey longevity in the marketplace. Unlike physical stores that require significant investments into property, personnel and inventory, online stores enjoy low entry cost and are relatively easy and inexpensive to maintain.(Grewal,et.al2004).The minimal expenses required for entering and exiting online marketplaces create doubts for consumers as they are uncertain if the online retailer will stay in business for a long time (Jarvenpaa,2010). The

anonymity provided to the seller by the very nature of the internet creates ambiguity and does nothing to alleviate the buyer's apprehension. The true identity of the seller can be hidden by domain names, fake addresses, and distorted information—the inability of the buyer to distinguish between true and false increases consumer uncertainty [7].

Gupta and Udupa (2011) study recommends that mindfulness and acknowledgment of the idea of web-based social networking promoting is high among both the physicians and the patients. Among physicians it is emphatically and altogether connected with youthful age and having a postgraduate degree after MBBS. Among the patients, a high extent take self-drug in light of reference to the web, most regular diseases for utilization of self-medicine being hurts, respiratory ailments and gastrointestinal ailments .

Mack (2010) said that doctors today are probably going to get medicate data from an different sources and very regularly these sources are access to by means of the Internet. Gadgets, for example, iPhone and soon iPad—will make it much more helpful for doctors and patients to get online substance.

More than seventy five percent of doctors trust that the Internet has influenced clinical to hone 'simpler', as indicated by a 2009 overview.(Parekh and Rojowsky,2009).With the expanding technological means for social occasion diagnostic information and treatment alternatives, more decisions must be considered. This can leave less time for clinical choices, which regularly should be made inside a matter of minutes.

The Online medicinal services products advertise has displayed an astounding development amid the traverse of most recent five years on the grounds of extension in item extend and also surge in online commercial centers. In accordance with the Business incomes, the normal request estimate has likewise broadly improved which has been enlisted at INR 1,762.0 amid FY'2015. Besides Direct-To Consumer Advertising (DTCA) and other traditional marketing practices, pharmaceutical companies generate revenues through different activities which are complex in nature.

With one click access to tens of thousands of online pharmacies and unlimited products to choose from, it is crucial for consumers to investigate whether the convenience outweighs the inherent risks of purchasing medicines online. However, confirming the veracity of an online pharmacy is also conflated by the use of falsified seals and fraudulent licensure information and accreditations, which may lure consumers into a false sense of security. (Liang BA Mackey, 2003) Searching for safety: addressing search engine, website, and provider accountability for illicit online drug sales

A growing number of online pharmacies have been established worldwide. The online promotion of prescription drugs directly to consumers has turned into an undeniably well known technique for tranquilize promoting in the vast majority of the developing nations. Traditionally, pharmaceutical companies' promotional efforts were directed almost exclusively to doctors and healthcare providers.. (Campbel).

Primary motivating factors that lead consumers to shop with online pharmacies include perceived lower cost (although some studies have identified higher prices from online pharmacies for certain classes of drugs and additional costs not associated with the drug's price), convenience (i.e. 24/7 website availability), greater patient autonomy and perceived privacy from shopping online (Orizio G. Merla A Schulz, PJ, et al., 2013).

The Quality of online pharmacies and websites selling prescription drugs: a systematic review complicating online health seeking and purchasing behavior are studies reporting low health literacy among potential consumers even when there are clear characteristics of patient safety risks present. (Mackey and Liang 2013)

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An observational study in Germany found that e-patients generally do not read disclaimers, disclosures or 'about us' sections on health sites (Eysenbach and Köhler, 2002).

To address the problem of online pharmacies in foreign countries, the FDA has begun to send "cyber letters" to foreign pharmacies that it suspects are selling illegal prescription drugs to Americans.<sup>47</sup> The cyber letter is only a warning letter that puts the pharmacy on notice that it may be violating U.S. laws, and that U.S. customs officers may refuse entry of packages delivered from their site into the country (Sara and Zeman, 2010).

The greater part of the pharmaceutical and healthcare companies in India - multinational and domestic - have a placeholder presence on digital platforms and are neglecting to effectively draw in with their partners, the 'India Digital Health Report 2017'

Nowadays due to increase in literacy and health consciousness of people, pharmaceutical companies feel the need to approach a large category of people to inform them about their products and to earn more profits. In the Indian population, advertisers can reach their audiences through television, radio, print media, outdoor advertising, sales promotion and the Internet (Parakh et al 2017)

As technology changes, the advertising medium is also taking new dimensions. Patients increasingly are turning to digital media to aware more about their diseases and treatments since much of the information they receive from traditional sources is "difficult to understand and interpret." (Sherrri Matis-Mitchell 2014) .

All of these pharmaceutical companies today have a face book page, twitter channel, and supported web journals. Pfizer has the most powerful web based life site, including connections to YouTube, Face book, and Twitter, and Slide Share, LinkedIn, Flickr, and blog assets (Liang and Mackey, 2016)

Three out of five e-patients in a 2006 survey revealed that health information online affects their health care decisions.(Pew Internet & American Life Project,

2006). Most important, online information can directly influence which drugs patients request from the doctors (*Cline and Haynes 2017*).

Beyond overestimating source credibility, users are vulnerable to online pharmaceutical misinformation when they are unaware of whether the source of health information is a drug company or a more neutral party (e.g. a health information website). Given the Internet's speed and ease of use, web users are also often unaware of drug misinformation because they seldom take time to verify the reliability of the sources they access (Eysenbach and Köhler 2012).

Despite the fact that web has turned into a vital medium for prescription drug advertisements it is unregulated, which could imply that the data accessible can be inconsistent if not acquired from genuine source. Another problem is the advanced gap in which accomplished and prosperous individuals from society will probably utilize the web for health reason than their less-instructed partners (Korp, 2015).

Pharmaceutical organizations utilize electronic DTCA on interactive platform (e-DTCA 2.0) to market themselves and their best offering drugs. e-DTCA 2.0 is additionally utilized by illegal online medication merchants. Controllers worldwide must consider the present e-DTCA 2.0 nearness when endeavoring to achieve arrangement and security objectives. People view on an average 30 hours every year (Liang and Mackey, 2011).

Online pharmaceutical marketing and drug consumption:

online retailing is the quickest developing appropriation channel for OTC customer health products around the world. Buyers are progressively pushing toward the utilization of advanced stages for comfort and speed in conveyance, which fit costumers busy lives. online media has revolutionized the sale of medicines so that consumers can self-select and buy medicines, often delivered across national and state boundaries, without face-to-face interaction (Bessel et al., 2003). Many certified e-drug stores are at present accessible on the Internet yet a vital number of illicit medication dealers are additionally working on the web. E-drug stores look engaging purchasers since they spare treks to specialists, never have long holds up in line and frequently offer diminished costs.



Moreover, some offer private e-mail additionally to discuss medications with a druggist, tools for checking interactions with other drugs, e-mail refill reminders and tools for tracking and viewing past orders. Some sites such as Drugstore.com (D-Store, 2005) are associated with a pharmacy chain (Rite Aid (RAC, 2005) in this case for giving customers the option of having the prescription filled at the local pharmacy where they can pick it up faster and safer.

Some medication companies are likewise creating developing health management tools for versatile applications, which are accessible in online markets, for example, the Apple iTunes Store and the Android Market. Although numerous early advanced cell applications concentrated essentially on diabetes administration devices, there has presently been fast venture into other sickness classifications (Pharmaceutical Industry Rapidly Expanding Partnerships with New Entrants in Health Care Space( Ernst and Young 2011).

There are some potential benefits of online DTCA. Communication of patient safety risks and public health information, coordination with existing regulatory tools such as FDA risk evaluation and mitigation strategies and Med Watch, and integration of reliable information into online searches can benefit patients (Kuehn BM). FDA weighs limits for online ads.(JAMA,2010).

Although people can get information directly from pharmaceutical companies' sites, they can also search for information about particular drugs within popular social media sites. In particular, Face book, Twitter, and YouTube are 3 of the most common social media platforms (Duggan,2014).

Though internet has become an important medium for prescription drug advertisement, it is unregulated, which could mean that the information available can be unreliable if not obtained from authentic source. Another concern is the digital divide in which well-educated and affluent members of society are more likely to use the internet for health purpose than their less-educated counterparts (Korp, 2005).

Many successful social media campaigns were found to be in the area of pregnancy, childcare, oncology and geriatrics (Supriti Agrawal & Navjot Kaur, 2015). Internet sites claiming to sell authentic Viagra, shipped counterfeit medication 77% of the time; counterfeits usually came from non-U.S. addresses and had 30%-50% of the labeled API (active pharmaceutical ingredients) claim. Caution is warranted, when purchasing Viagra via the Internet (Campbell, N, 2012). The online health information & DTC Campaigns, greatly influenced the health discourse of the consumers.

Buying from a website that is not a registered pharmacy offers no opportunity for a healthcare professional to assess whether the medicine is safe and appropriate for the individual concerned, or to advise on how the medication should be taken. The information about medicines available on some websites can be incomplete, even where it might be factually accurate (Clauson, Polen, et al., 2008).

The internet additionally encourages access to anti-bionics without a prescription. It is realized that self solution utilizing anti-antibiotics happens in all nations, however as of now there is restricted confirmation with regards to the degree that antibiotics are really obtained over the web, without prescription, for this purpose (261).

Another study by Huh and colleagues on the trust of on-line advertisements on prescription drugs found that majority of respondents do not trust the information provided on-line on prescription drugs (Huh et al., 2005).

In developed countries, online pharmacies supply so-called 'lifestyle drugs', such as for weight loss, hair loss or erectile dysfunction. There is likely to be less demand for therapeutic medication in countries with "high social security coverage" (such as France) given that the price of the relevant pharmaceutical may actually be higher than in domestic pharmacies (Mahé, Saiag, Aegerter and Beauchet (2009). Electronic health (e-health) empowers patients, fosters clinician patient relationships and promotes evidence based medicine (Liang and Mackey, 2011).



Weckmann (2012) conducted a content analysis of websites for antidepressants. They found that most websites were easily accessible through search engines and contained information useful to educating consumers about medical symptoms. They also reported few comparisons between drug efficacy and adverse effects, however, making it difficult for consumers to make rational choices about drug selection. It is worth not to ignore the confusing effect of some e-DTCA, a study conducted by Hyla et al. to measure the impact of e-DTCA on patients' behaviors found that more than one quarter of their respondents were confused from the advertisements. In addition many of them stopped taking their medications due to considerable side effects mentioned in the advertisement (Hyla et al., 2009).

Moore and Newton (1998) argued that the Web has features of both print and broadcast media and its interactivity makes it very different from any other media. Unlike other traditional media, website visitors are not passively “exposed” to content because, on the web, information is not “pushed” but “pulled” by viewers. Where information is located and how it is displayed as well as how viewers browse the website, therefore, can be more important than the information itself. Graber and Macias and Lewis (2003) analyzed the content of DTC prescription drug websites and found that most provided consumers with rich information and great educational value. From the results, the authors inferred that, in general, pharmaceutical companies were conforming to FDA requirements.

Thus, the role of an individual prescription drug website has increased in importance. More than 25 million consumers have visited a pharmaceutical product website in the past 12 months). If a website does not provide consumers with balanced information on benefits and risks, consumers may be misled(Manhattan Research, 2014).

The developments in the pharmaceutical segment offer new ways for individuals to online purchases of health products and medicines. This industry market estimates to be generating 3,000-4,000 orders on a daily basis (Supriti,2015). Though online medicines look like a promising trend today the business is challenged by regulatory issues. There are no dedicated online pharmacy laws in India as on date.

Traditionally, pharmaceutical companies controlled all the information regarding their products and they would also control release of this information. But Modern pharmaceutical industry goes beyond the traditional business of marketing and selling of medicines. The Direct-to-Consumer Advertising (e-DTCA) of pharmaceutical firms has been characterized as an endeavor of pharmaceutical organizations to publicize or promote data in regards to a physician recommended medicate specifically to patients. The DTCA can be performed through different channels including, television broadcast, billboards, websites and consumer magazines (Abel et al., 2006). Most of the pharmaceutical companies are very aggressive in marketing and sales of their products. They meet their targets by different other activities along with the Direct-To Consumer Advertising (DTCA) in the market. Besides traditional marketing practices, pharmaceutical companies generate revenues through different other activities, which are complex in nature.

The advent of digital technology has changed the way the information is accessed, processed and used and health information is not an exceptional. The medical community and public started using heavily the Internet for health information. Modern pharmaceutical industry goes beyond the traditional business of marketing and selling of medicines.

The last few decades have seen a dramatic transformation of the consumer's role in health care. Physicians' authority over the prescribing of drugs has been directly challenged by DTC advertising campaigns urging consumers both to self-diagnose and to demand specific medications from their provider (Donohue,2006). Today, consumers especially youth are informed and aware of the medicines being promoted through different sources including internet and social media and are able to take their own health care decisions. They are determent, aware and well informed that they know longer are scared to question the suggestions of the doctors Gupta and Udupa, 2011).

Pharmaceutical companies have shifted to interactive online platforms like Facebook, Twitter, Google plus, company websites etc. Social networking provides a great opportunity for the pharmaceutical industry to reach out to new and broader customer base. The online provides an unique experience to

consumers as it is direct, interactive and engaging medium (Bhagat and Dutta, 2012).

Online pharmacies can be advantageous to customers (eg, convenience, security, free access to data, correlation shopping, and so on) yet can likewise convey with them various inconveniences (eg, absence of significant interaction with doctor and drug specialists, misdiagnosis, wrong utilization of medications, individual information assurance, and so on (*Orizio and Merla 2011*))

In most of the cases consumers don't know that products offered by online pharmacy might not have a similar quality that a retail drug store may offer [Online drug stores: security and administrative considerations. Montoya ID, Jano E Int J Health Serv. 2007; 37(2):279-89.] and regularly it is hard to decide if a site is authentic or not [Assessing the problem of counterfeit medications in the United Kingdom. Jackson G, Patel S, Khan S Int J Clin Pract. 2012 Mar; 66(3):241-50). additionally making buyer separation between a unique medication and a fake form a troublesome.

In July 2015, the health ministry of India ordered the constitution of a subcommittee to investigate the issue of online pharmacies. The Committee has been constituted under the headship of the Food and Drug Administration (FDA) Commissioner of Maharashtra, Harshadeep Kamble. The issue before the subcommittee was the examination of the online deal rehearses did by created nations and how they have affected the public health in these nations and whether their execution is conceivable in India. The board has welcomed remarks and contributions from different partners, for example, stakeholders such as public companies, trade bodies amongst others The sub-committee has not submitted its report yet. (Anubhav Pandey 2017). Legality of Online pharmacy in India, Ipleaders,

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Why Social Media has revolutionized the Marketing Practices The philosophical and technological foundations of web 2.0, allow the creation and exchange of user-generated content, where a group of internet based applications structure on”, is considered to be Social media (Kaplan & Haenlein, 2010). It has many advantages that help to develop and foster the connection between the businesses to consumer and strengthen the relationships in timely and at low cost manner (Kaplan & Haenlein, 2010). This social media has an uniqueness and its immense popularity revolutionize marketing practices especially in advertising and promotional activities (Hanna, Rohm, & Crittenden, 2011) and patterns of Internet usage (Mangold & Faulds, 2009).

Consumer Behavior is also influenced by social media, by acquiring information from the post purchase behaviour of consumers, such as dissatisfaction statements or behaviors (Ross et al., 2009 and Laroche et al., 2012). To gain an increased sense of intimacy with the customers, companies use social media websites as an opportunity to engage and interact with them, which especially creates consumer loyalty (Mersey, Malthouse, & Calder 2010).

Most prompted industry leader’s state that, the higher level of efficiency of social media, in comparison with other traditional communication channels, should participate in Facebook, Twitter, MySpace, and others, in order to succeed in

online environments. Thus, more industries including health industry also try to benefit from social media, as they can be used to develop strategy, accept their roles in managing others' strategy or follow others' directions (Williams & Williams, 2008).

A very few pharmaceutical social networking websites, permit consumers to not only exchange information about products or services, but also connect in co-creating value, in online experiences with offline outcomes, with both existing and potential consumers. Williams & Williams, 2008).

Besides, social media is extensively used to provide information, about dietary supplements and pharmaceuticals. With the introduction of devices, such as smart phones, coupled with government and private sector initiatives, the Internet is reaching almost every nook and corners of the country. Technology can help in meeting the healthcare objective of India (Market Research Report, 2013). In the present scenario, 120 million of populations are the active internet users and 900 plus millions are mobile phone users in India (Dinesh Chindarkar, 2015).

Though, online medicines look like a promising trend today, the business is challenged by regulatory issues. The developments in the pharmaceutical segment offer new ways, for individuals to online purchases of health products and medicines. Almost, 31 start-ups related to online pharmacies were launched in 2014, with the major chunk of investment, announced by pharmaceutical companies like Netmeds (\$60 million), followed by 1MG (\$6 million) and Zigy (\$3.2 million). This industry market, estimates to be generating 3,000-4,000 orders on a daily basis (Supriti, 2015). It is expected that, the online pharmacy model could account for 5-15%, of the total pharma sales in India, largely by enhancing adherence and access to the medicines, for a lot of the under-served population.

There is a continuous argument on the impacts of pharmaceutical marketing on health services conveyance. In a research study Civaner (2012) analyze the kinds of offers procedures utilized by pharmaceutical companies in the purchasers advertise and to pick up knowledge into the methods for staying away from the negative impacts of these methodologies recognize different deals techniques, both

legitimate and unlawful, are all around connected. These techniques target prescribers, patients, drug specialists, and society in general.

The most recent couple of decades have seen a dramatic change of the customer's part in health care services. The present time of buyer inclusion in health services harkens back to the medication market in the mid twentieth century when self-treatment was very esteemed and most medication promoting was pointed specifically at purchasers. Doctors' power over the recommending of medications has been straight forwardly tested by e-DTC promoting efforts asking buyers both to self-analyze and to request particular drugs from their supplier (Donohue, J. 2006).

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 (Gupta and Udupa, 2011). Internet serves as a useful informational tool for consumers (Deshpande, Menon and Perri, 2004). Consumers are informed and aware of the medicines being promoted through different sources including internet and social media and are interested in their own health care decisions.

According to a research of UK 'medicinal services experts are progressively finding that they have more data accessible than they can deal with trust in their bustling time plans.( Roy A, Kostkova P, Catchpole M, Carson .E 2006).

Patients should seek the physician's opinion on the relevance and accuracy of information in DTCA. This would both strengthen the doctor patient relationship and avoid clinically inappropriate interventions (Murray, et al., 2003). If doctors believe that patients want and expect a drug then doctors will prescribe them even when it is not indicated. Some patients ask and doctors begin to believe that many patients will be dissatisfied without the advertised drug. Frequent misleading claims could reduce the credibility of true claims or cause consumers to exaggerate the safety or appropriateness of drug therapy (Hoffman and Wilkes 1999).

According to Myers (2011) physicians feel that that e- DTCA encourages consumers to seek medications that they do not need; it does not provide balanced information on costs, adverse events and alternative treatment options.



Landsman and Venkataraman (2013) found that patients increasingly request their physicians to prescribe specific brands of pharmaceutical drugs. Requests are triggered by direct-to-consumer advertising (e-DTCA) in different channels like print, radio, television or internet. It was found that although the effect of requests on prescriptions is significantly positive, the mean effect of DTCA on patient requests is negative. It was found that specialists receive more requests than primary care physicians but translate them less into prescriptions

According to Donohue (2006) Technological change has spurred an increase in health information seeking and self-treatment. Consumers use internet to collect information about their health and discuss with their doctors. Consumers accept that it makes them feel empowered to talk to their doctors. Because of the unique history of prescription drugs and physician's important role as intermediaries between drug manufacturers and patients for more than a half century, e- DTCA represents a challenge to physicians' roles as agents for their patients.

Majority of the physicians agreed that the info pharmaceutical companies provide on third-party websites for healthcare professionals "are always ads" for their products, and only few doctors trust the information pharma provide on these websites. Physicians want more from pharma on these websites. It also revealed that some of the Physicians Believe Pharma Websites are not credible sources of information (Manhattan,2017).

Pharmaceutical advertisements harm the doctor-patient relationship in many aspects. Pharmaceutical advertisements do not always inform patients about the possible risks of the advertised products equally as they inform about their benefits (Cox and Cox, 2010).Patients may be purchasing drugs without professional oversight; some drugs may be unapproved or have safety concerns. Some online pharmacies have been found to sell counterfeit drugs resulting in patient death and injury( Liang , Mackey, 2009).

Seniors' request for a prescription as a result of drug promotions may complicate the relationship between the doctors and their patients. Moreover, majority of the respondents mentioned that they would consult another doctor or even change the

doctor is conditional with his/her refusal to prescribe online promoted drug (Grenard et al. (2011).

Additionally a study that examined the impact of TV and internet advertisement of medication for seasonal allergy of asthma found that majority of respondents have seen the advertisement and most of them interacted with their doctors asking them about the advertised medicine (Khanfar et al. 2008). on the contrary to that another study revealed that digital promotion had a positive and long-range impact on the number of visits to doctors (Liu and Gupta, 2011). Wilkes et al., (2000) study indicated that patients who asked for particular medication brands were just low in rate.

Online marketing and herbal products purchasing :

Herbal products are defined as “herbal preparations produced by subjecting herbal materials to extraction, fractionation, purification concentration, or other physical or biological processes. They may be produced for immediate consumption or as the basis for herbal products. Herbal products may contain excipients or inert ingredients, in addition to the active ingredients they are generally produced in larger quantities for the purpose of retail sales” (Thomas Nicholl and Coleman 2011)

The use of herbal medicinal products and supplements has increased tremendously over the past three decades with not less than 80% of people worldwide relying on them for some part of primary healthcare(Martins and Ekor, 2013).

Progressively more, alternative therapies such as herbal products are being used in the United States. Approximately 25 percent of Americans who consult their physician about a serious health problem are employing unconventional therapy, but only 70 percent of these patients inform their physician of such use( Eisenberg ,Kessler 2013)

India has known to be a center of Herbal brands also since the herbal products are profoundly connected with the spirituality sentiments of the people. A WHO (World Health Organization) contemplate estimates that around 80 percent of total populace relies upon common items for their health rather than modern drugs

principally due to side effects and highly expensive . (Sharma and Shankeet.al, 2018).

Herbal products are commonly marketed on the internet which was used by approximately 140 million individuals in the United States in 2001(Marcus.2002).

Unlike conventional drugs, herbal products are not regulated for purity and potency. Thus, some of the adverse effects and drug interactions reported for herbal products could be caused by impurities (e.g., allergens, pollen and spores) or batch-to-batch variability. In addition, the potency of an herbal product may increase the possibility of adverse effects.( Dietary Supplement Health and Education Act of 1994.) The worldwide herbal market products are around \$6.2 billion and estimated to reach \$5 trillion by the year 2050 (WHO & Kotler ,2008). Drugs could be miscellaneously classified-Orphan drugs, Ethical drugs, Generic drugs, Lifestyle drugs, Diagnostics, Nutraceuticals, Personal Care Products, etc. India has a very long, safe and constant tradition of many herbal drugs in the authoritatively standard alternative systems of health *viz.* Ayurveda, Yoga, Unani, Siddha, Homeopathy and Naturopathy. These systems have fairly existed next to Allopathy and are not in ‘the domain of obscurity’, as stated by Venkat Subramanian (2011).

Many Ayurvedic companies in India produce pharmaceutical products, nutraceuticals products and also FMCG like soaps, shampoos, toothpaste, toothpowder using traditional herbal ingredients and promote these products in various channels like magazines, Radio, Television and Digital media (Vaijyanthi et al., 2012).

In purchasing herbal products online, the consumers need to have previous product knowledge with the herb that is being sold online and some knowledge on how to use computers and the internet. Previous and after experience in purchase are noteworthy predictor to trust for e-Commerce (Chow. and Angie. 2006).

In a survey of 20 Indian drug makers that the Indian Pharmaceutical Industry is sweeping across Rs.1036 billion market shares and is entering into the digital waves of promotions. The study also indicated that, mobile apps and social media

are playing a wider role in this industries' growth. Companies are very well emphasizing, on monitoring the discussions going online, about the products. (Prabha Raghavan ,2016)

Prior experience are consists previous usage of online herbal products, herb purchase and internet usage. Previous product experience is a noteworthy sign of behavior on internet shopping (Klein 2008).

Ayurveda meaning, "the knowledge for long life" is a traditional system of indigenous medicine in India ,and is viewed as an alternative medicine. It is a function of modern and traditional knowledge systems. India's Ayurvedic medicine is losing market and needs new marketing strategy. It is losing its global market to China and has registered a fall in the export of ayurvedic medicines (Valiathan, 2006).

In India, the traditional herbal medicines, such as Ayurveda, Siddha, and Unani (ASU), are considered safe because of their long history of use. As such, no safety and efficacy studies are required for marketing approval, as per the Drugs and Cosmetics Act of 1940 (DCA).

Online marketing and herbal dietary supplementary and nutrients consumption

Dietary supplements and herbal remedies are popular complementary or alternative products for people. These are the supplements that are intended to supplement the diet and contain one or more dietary ingredients (including vitamins, minerals, herbs or other botanicals, amino acids, and other substances) or their constituents. These are intended to be taken by mouth as a pill, capsule, tablet, or liquid and are labeled on the front panel as being a dietary supplement. Such products may range from isolated nutrients, dietary supplements and diets to genetically engineered "designer" foods, herbal products and processed foods such as cereals, soups, and beverages.(Schroder, 2015).

These botanicals are sold in many forms as fresh or dried products, liquid or solid extracts, tablets, capsules, powders, tea bags, and so forth. For example, fresh ginger root is often used in various food stores; dried ginger root is sold packaged

in tea bags, capsules, or tablets, and liquid preparations made from ginger root are also sold in the market. A particular group of chemicals or a single chemical may be isolated from a botanical and sold as a dietary supplement, usually in tablet or capsule form. An example is phytoestrogens from soy products ([36].

Nutritional supplements are usually offered in an untypical form of food, including tablets, capsules, powders, or pills. Although many individuals use supplements, those engaged in sport and physical activities were found to represent an important portion of people purchasing supplements (Maughan,2011)

Media, including books, magazines, television, and internet, was also perceived as a powerful influence on a person's decision to use nutritional supplements .Media, including internet, media, magazines, and books, influenced the decision making of 60.8% of participants in the current study. Magazines, newspapers, and internet were also the major sources of information about supplements(Conner,2013).

The Internet is a tool perfectly suited to the marketing of herbal dietary supplements. There are a great many websites that sell supplements and they send out millions of spam e-mails (Norman 2013).

The marketing strategies and efforts by various manufacturers of herbal medicines and their sales representatives have seriously projected these products into greater limelight. Various advertisements in the mass media including television and radio programmes and digital media have significantly increased consumers' awareness and given the herbal products undue respectability and credibility (Brevort, Parle and Bansal, 2006).

Internet marketing and sales are in part responsible for the growth and development of the natural dietary supplement industry over the past decade. National survey data collected from 2003 to 2006 indicate that 53% of US adults report dietary supplement use .Consumers can easily find information about dietary supplement over the Internet and on social networking sites such as Twitter and Facebook (Bailey RL, Dodd ,2010)

supplement users in several surveys reported that books, magazines, Internet, health food stores and even fitness and/or nutrition classes were more useful sources of nutrition information than were physicians or dietitians/nutritionists (Barr Levy and Schutz et al.2008). Moreover, Levy and Schucker (2008) reported that individuals who consumed more than two supplements daily were less likely to rely on physicians than were individuals who consumed less than two supplements daily.

Children are encouraged to use herbs for their nutritional values to facilitate normal or healthy growth and development; young persons for their euphoric effects, supply essential ingredients to help them cope with daily stress and to prevent or slow the onset of aging; older persons for their anti-aging or rejuvenating effects and women for slimming and beauty enhancing effects (Parle and Bansal, 2006).

Even though the fact that herbal drug use is common amongst patients and they can adversely interact with drugs, various studies have found low patient disclosure rate of herbal usage to the doctors. This may be because of lack of communication between patients and doctors or because of patient's unawareness about their potential toxicities and possible drug interactions.(Saw and , Bahari etc al ,2006)

Herbal drugs for COVID-19 and consumers:

While the number of Covid-19 cases increases in India, people are more and more turning to ayurvedic drugs and products in the expects of boosting their immunity. (Anjali Venugopalan,2020). This is most manifest in China and India, health officials in China are recommending traditional herbal remedies for COVID-19, but many experts warn that we don't have enough data on COVID-19 to understand how different herbs may affect people's health.

Though herbal drugs may no side effects, if misused, they could increase a person's risk for COVID-19. Some researchers may find that certain herbs are effective in preventing and treating COVID-19 in some people, but there currently no enough data regarding the use of herbal remedies for the covid-19.(22) .But in major medical journals published reports that large numbers of patients treated in



China make not mention about alternative drugs. But ,they revealed that treatment revolves around popular treatments such as respiratory support, drugs to help prevent other infections such as bacterial pneumonia and other widely accepted therapies.(15). Promoting treatments with alternative drugs without an adequate scientific basis is worrying some of these preparations can be toxic, harm the liver or interfere with other drugs and you need to do the hard work to prove them safe (Dr. Daniel Kuritzkes, 2020).

Pharmaceutical companies like Himalaya, e-marketplaces such as Grofers and Milkbasket, as well as new age ayurvedic health brands like Auric announced that they were witnessing a surge in sales that could be attributed to the corona virus concerns.

Milkbasket said online sales of products like honey, chyawanprash and herbal teas which are touted to improve immunity had increased 17-18% month on-month. January and February are usually the months with the best sales of these products, as most of North India

Auric, a brand of new-age ayurvedic health drinks, said apart from the regular expansion in sales, an additional 30-35% increase was there which he attributed to the corona virus scare. The company's immunity drink, 'Body defence', is now pushing up the sales in online rather than the drinks that aimed at skin rejuvenation and boosting hair which used to sell more earlier. "Earlier, people want to look good and then feel good," but now it is reverse.(Deepak Agarwal,2020).

While sales of Himalaya's hand sanitisers and hand wash have gone up ten times in the last few weeks, sales of the company's immunity tablet, 'Guduchi', has gone up three times as well. Delhi, Madhya Pradesh, Punjab, Haryana, Uttar Pradesh and Gujarat are driving the demand, said Himalaya Drug Company CEO Philippe Haydon.

The public can easily purchase herbal drugs without a doctor's prescription in stores and online also . Most of the people rushed for the herbal drugs with flu symptoms who fear quarantine measures are likely to self-medicate with herbal drugs and avoid going to hospital, thus delaying the proper diagnosis and treatment

of the disease, and hampering the government's testing, tracing, and quarantining efforts.

At the end of January, 2020, rumours circulating on social media suggested that a patent herbal drug called Shuanghuanglian, which contains honeysuckle and forsythia and is used routinely in traditional medicine to treat influenza and the common cold, helps ward off or even cure COVID-19. Millions of people nationwide crowded into drug stores to buy the herbal drug as a just-in-case remedy. Yichang Yang,2020)

The Ministry of AYUSH released an advisory in January about the ayurvedic, homeopathic and unani ways of managing the outbreak. While it also included WHO guidelines like handwashing and using masks, it listed out a number of herbs and other formula that could be adopted by people.

Against this background though a lot of research has been carried out in different countries on online pharmacy marketing and their impact, data on herbal and supplementary pharmaceutical marketing strategies like India is still lacking. There is a need for more and more research on awareness levels, perceptions, attitudes, responses and consumption of the patient population and doctors which are the key targets of a majority of pharmaceutical marketing strategies.

Not only allopathic pharmaceutical drugs have been a major online product but also herbal and supplementary medicines are being sold at an equal rate. But then there has been no such research on the marketing of herbal and supplementary medicines as there is on the allopathic.

A strong evaluation and awareness that is created towards the perception, attitudes and behavior of the key target consumer groups regarding digital media marketing by pharmaceutical industry may help to fill the gap and revolutionize the contemporary pattern of using on the web for purchase of herbal and supplementary products.

So, there is a need for more critical research in this area to understand the online media marketing of herbal and supplementary pharmaceutical industry and its impact on drug consuming behavior of the public.

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