

Exploring the Role of Pharmaceutical Marketing on Physician Ethical Behaviors: A Grounded Theory Study

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ABSTRACT

This paper investigates the influence of pharmaceutical marketing strategies on physicians' behaviors. It is argued that physicians are compelled into unethical behavior which is detrimental to the patients as well as the environment in general. Patients are unnecessarily exposed to high doses of antibiotics that is giving rise to globally threatening phenomenon like "superbug". Data is collected and analyzed by following grounded theory method. It is found that pharmaceutical marketing practices have led to physicians' loose adherence to ethics that exploits their materialistic approach. The pharmaceutical companies use personalized services, product incentivization and even sometimes misleading and partially proven scientific claim as marketing strategies. As a result, physicians are compelled into over prescription leading to the development of antibiotic resistance in patients. It is recommended that ethical standards should be enforced through personal, organizational and institutional wide mechanisms for both pharmaceutical companies and physicians.

INTRODUCTION

The marketing function creates, communicates, delivers and exchanges offerings that have value for customers and society (Wilkie & Moore, 2002, 2006). It is a sophisticated way of communication in organizations that ensures goodwill of the company and helps to keep and attract potential customers. Annual spending on marketing on global level is \$630 billion which is increasing with a rate of 10% per year (Statista, 2018). However, marketing is also criticized for crossing the line as it has marginalized the ethical issue that arises during the interaction between marketing and society (Tadajewski & Jones, 2014; Wilkie & Moore, 1999, 2006). For instance, it stimulates over consumption which has detrimental repercussions to consumers and society (Ariely, 2000; Czinkota & Ronkainen, 2013; Davis, 1992).

Marketing has negatively affected the ecological system through enticement of unwanted desires (Marsha, 1995). This discipline has created discontentment among end users through over promotion and unjustified incitement of products and services (van Dam & Apeldoorn, 1996). Marketing and advertisement are responsible for the promotion and pushing of calorie-dense low-nutrient foods which

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frequently lead to obesity epidemic (Chou, Rashad, & Grossman, 2008; Harris, Bargh, & Brownell, 2009). Obesity is a burgeoning cause of morbidity and mortality in developed countries and a growing contributor to global burden of disability (Carmona, 2003). Acknowledging these and other negative effects of marketing require a deeper and recognition of marketing-society interface. It is necessary to understand the marketing as embedded in society with a two-way influence which has been neglected during the mainstream historical thought (Shapiro, 2006).

Ethics and morality are the guiding principles that guide human-human and human-environment interactions and their conducts to keep harmony in societies (Carroll & Buchholtz, 2014; Niebuhr, 2013). Both disciplines hold human societies together and in a functioning mode (Singhapakdi, Kraft, Vitell, & Rallapalli, 1994). Proper compliance to ethics is essential in marketing for adequate tranquility and harmony in societies. The compliance of ethics becomes vitally important when human health issues are involved.

It has been observed that pharmaceutical marketing has a negative impact on both patients and medical profession (Landefeld & Steinman, 2009). Marketers develop programs and strategies to increase sales volumes to boost the overall profits of the organizations. While pursuing the profit maximization they often execute unethical strategies like bribing the physicians, offering abroad free trip and even sharing profits. As a result, they prescribe the drugs to patients unnecessarily because of the fulfilling commitment to the medical representatives. If the product is antibiotic, it may develop resistance in the patient and next time the same patient requires a higher/broad spectrum antibiotic. Thus, the relationship between physician and representative prioritizes profitability and not the wellbeing of patients. Pharmaceutical companies employ a variety of marketing tactics that range from legal and ethical to grey and highly unethical. However, they all focus on a single point agenda of increasing sales through higher consumption of drugs.

Apparently ethical and legal activities involve active participation in educating the medical community through regular provision of medical journals, books and latest articles. Similarly, companies providing various funds to selected physicians for carrying out critical medical research. However, these activities are aimed at influencing the prescription behavior of physicians through these activities to enhance sales. To the other end of spectrum lies notorious practices of offering gifts to physicians which is reciprocated in the form of over-prescriptions. Similarly sponsorship to a conference compels physicians to indiscriminate prescriptions (Rogers, Mansfield, Braunack-Mayer, & Jureidini, 2004). The pharmaceutical companies justify this relationship as “interaction” with the physician and claim that it is vital for understanding the therapeutic importance of new drugs and latest developments in the management of diseases (Wazana, 2000). It remains to be explored how these tactics exploit various personal and regulatory weaknesses to achieve its aims. This paper investigates the effects of various marketing practices of pharmaceutical companies on prescription behavior of physicians with regards to antibiotic drugs.

LITERATURE REVIEW

The pharmaceutical industry in the world is responsible for the development, manufacturing and promotion of medicines across the globe. According to the statistical portal 2014 total sales volume produced by the global pharmaceutical is \$1057.7 Billions in which the US pharmaceutical market is producing 44%. China, Brazil, and United States are the most growing market in the world. Merck, Johnson & Johnson, GSK, AstraZeneca, and Gilead Sciences are the five leading pharmaceutical companies of the world (Statista, 2018). These companies produced different categories of products in

which one category is antibiotics. The discovery of antibiotics has changed the world and they have revolutionized the treatment of deadly infectious diseases.

The products of Pharmaceutical industry have unprecedented importance in healthcare system because at the same time they save lives and reduce patients' miseries but harmful if misused. Due to this later characteristic pharmaceutical marketing is a highly regulated field in advanced and developing world. There are several associations and unions that are self-regulatory including WHO, IFPMA, ABPI, AMA, and EFPIA.

Pharmaceutical marketing is a strategic function for the promotion of drugs/products sales. The face-to-face promotional activities are directed towards physicians, chief pharmacists and other purchasing directors (Trusts, 2015). It is the organization of available resources to satisfy the target customer's needs and wants at a profit keeping in view the larger interest of the society (Dogramatzis, 2015; Smith, 1991). It is a process "by which market for pharmaceutical care is actualized" (Smith, 2014, p. 14). The contact between representatives of pharmaceutical companies and physicians, although critical for various essential purposes, is used to influence physicians' tendency to prescribe a certain drug. Thus, regular contacts of representatives with physicians takes the shape of offering gifts, free lunches, dinners, regular sponsorships for CME (continuing medical education) and free travel to abroad for participating in academic conferences (Dogramatzis, 2015; Rodwin, 2011) and results in improper and over dosage of antibiotics. It can be concluded that the patients suffer due to unethical conduct of pharmaceutical companies and physicians.

Pharmaceutical promotion is unique in nature because the person who is persuaded to order drugs is not the consumer (Lexchin & Kawachi, 1996). Drugs are prescribed by physicians and purchased by pharmacies while consumption takes place somewhere else in the circles of patients. So, code of conducts and guidelines compliance is the primary obligation of concerned stakeholders. Physicians are the target customers of Pharmaceutical marketing as patients use whatever they advise to them. Obviously, the focus of industry is to mold the prescribing habits of physicians in favor of their products (Fischer et al., 2009). Nevertheless, pharmaceutical drugs have proper pharmacokinetics and pharmacodynamics and its active ingredients pass through many chemical reactions within the body. Drugs having these attributes possess potential adverse effects. In a recent study, it was found that pharmaceutical marketing was aggressive, and associated with more opioid-related overdose deaths than those where payments and gifts to doctors were low (Hadland, Rivera-Aguirre, Marshall, & Cerdá, 2019). Thus, marketing entices and induces physicians to advise more active ingredients which cause multiple problems in patients. Nevertheless, some Pharmaceutical companies particularly MNCs are doing ethical practices and encourage evidence-based promotion.

Now the consequence of these inappropriate prescriptions is antibiotic resistance which is an emerging global issue and requires urgent attention from all stakeholders. So most appropriate use of antibiotic should be encouraged and erroneous prescription must be avoided. Antibiotic resistance is a global phenomenon and subsequent arousal of Superbugs even in advanced nations like America and Europe. Bacteria have developed resistance to almost all antibiotics due to its indiscriminate and inappropriate usage in hospitalized patients and outpatient in clinics and even in the food industry (Alanis, 2005). Generally, ethical behavior means bringing fairness and transparency in conducts while performing day to day activities. Healthcare profession encapsulates values and skills which the society expects from physicians. Codes of ethics or guidelines are quintessential for keeping and maintaining ethical behavior of physicians and other relevant staff (AMA, 2017). It guides doctors' relationship with patients, other

colleagues and wider society. The first notion of medical ethics can be traced back to Hypocrate (Jonsen, 2000; Miles, 2005). The umbrella term “clinical ethics” is used for practical application of principles, guidelines, and treatment protocols in treating patients either in government run hospitals or private clinics (Taylor, 2013). The very first principle of medical ethics is beneficence where it is professional obligation of doctors to increase the length of benefits primarily needed for patients (Gillon, 1994). The second principle of medical ethics is nonmaleficence where every healthcare professional is bound to avoid harm and hazards to patients. The third principle of ethics are respect for patients’ autonomy where it is the obligation of doctors to respect patients’ values and norms and avoid imposing anything which is against their norms. The fourth and last principle of medical ethic is justice where it is the primary obligation of physicians to treat and behave with patients equally, fairly and impartially. It is observed that the practice of following ethics is vastly diverse, especially, the physicians’ prescription.

Pharmaceutical products get temptation and lure in physicians’ prescriptions instead of patients’ welfare. It has been found that drug promotion may be manipulative and opaque leading to negative effect on clinical practices (DeAngelis & Fontanarosa, 2008). Thus, patients suffer because marketing and drug promotion have inundated medical profession due to lucrative attraction for industry. Another important factor which can influence the clinical practices of physicians are the peer reviewers who have financial relationship with industry and provide biased information which favors company’s products. The magnitude of this problems is not easy to assess but can be indicated by (ignoring) following of standard operating procedures (SOP).

SOPs are procedures followed in clinical practices to improve quality of patients’ care (Isaman & Thelin, 1995; Rao, Radhakrishnan, & Andrade, 2011). The way patients are handled at hospitals and private clinics, are according to guidelines and established clinical practices (Sajdak, Trembath, & Thomas, 2013). They help to bridge evidence-based medicine and clinical guidelines and local realities. Treatment guidelines are developed after thoughtful process by utilizing evidence-based medicine criteria and consist of two prominent components; summary of the evidences and comprehensive procedures for effective application of these evidences to patients’ care.

Professional autonomy, independent judgment, and strict adherence to the scientific method of treatment are ethical approaches for clinical practices (WHO, 1988). Provision of competent medical care to patients with compassion and dignity is the prime responsibility of every physician. They should continuously improve their skills, apply those skills to alleviate patients’ sufferings, and upgrade scientific knowledge for advancement of healthcare system. Physicians should participate in activities which lead to overall improvement of the community and public health. They should pave the way to patient for access to medical care (AMA, 1903, 2016; APA, 2001; Baker, 1999). But the current behaviors of physicians are contrary to it.

DRAP Codes of Conduct for Ethical Marketing

Drug regularity of Pakistan (DRAP) is responsible for overseeing the operations of pharmaceutical companies in Pakistan. The body acts as a strategic link between regulatory authorities and industry and ensures that Pharmaceutical products and services are manufactured and distributed in compliance with appropriate legislation. The code of conduct promotes ethical interaction between Pharmaceutical marketers and healthcare professionals in Pakistan. They encourage patients-centric medical decisions, increase public confidence in pharmaceutical industry, accelerate patients’ access to safe and effective treatments, and facilitate open and transparent business opportunities.

According to DRAP ethical guidelines (Atif, Ahmad, Saleem, Curley, & Qamar-uz-Zaman, 2017) the research grants should be delivered to medical professionals who have extensive research experience and relevant academic qualification. It should not be given on the basis healthcare professional’s business potential or inducement of future product patronization. Educational items such as textbooks, journals, and anatomical models are permissible but nonetheless, gifts of any kind and value is strictly

prohibited for healthcare professionals. However, on the ground situation suggests that the freebies provided to physicians as a form of industry “generosity” are ultimately borne by patients (Verma, 2004). In fact, according to strict ethical codes, physicians consider gifts as patients money which is spent without their consent (Chren, Landefeld, & Murray, 1989). The prices of gifts, samples and other promotional activities are charged from the products/services revenues.

From the above discussion it can be concluded that ethics play an instrumental role in medical profession for which various national and international regulatory bodies have formulated clear guidelines. However, there is a lack of voluntary compliance and the regulatory bodies are unable to ensure complete adherence. The interaction between pharmaceutical companies and physicians is critical to progress of medical profession and patient care. However, the abrogation of ethical boundaries results in ultimate loss of money and health to the patient and emergence of worldwide threatening phenomenon like antibiotic resistance and superbug. Among the three stakeholders, the role of physician is key to promoting right ethical conduct as they act as intermediaries between pharmaceutical companies and the patient. It is important to understand their perception regarding this issue.

Research Framework

Ethical Theories

There are multiple theories for this context like utilitarianism where actions will be more ethical and morally meticulous if they produce the greatest pleasures for the enormous number of people in society (Bentham, 1996). Deontological theory focuses on the rightness or wrongness of the actions itself not on the rightness or wrongness of the consequences (Johnson, 2008). The teleological theory focus on the end result of behavior and conducts and emphasized that behaviors of marketers and salespeople should produce an end which has the greatest positive impact on the society and all stakeholders (Ferrell, Gresham, & Fraedrich, 1989; Whetstone, 2001). While the virtue ethics stress on to produced excellent character people who do good things spontaneously and habitually (Shanahan & Hyman, 2003). But for situation like this the most appropriate theory is integrated social contract theory.

Integrated Social Contract Theory

A solid theory is needed for the effective management of business at the national and international level which has the capability to guide the corporate behaviors and provide a universal and impartial point of view (Scherer & Palazzo, 2007). The integrated social contract theory (ISCT) is considered to be the predominant theory in guiding decision making in marketing and sales (Gilbert & Behnam, 2009). The ISCT is the most sophisticated and promising theory to investigate the ethical conducts of corporations and managers (Buren, 1999; Jones, Felps, & Bigley, 2007; Sollars, 2002; Soule, 2002; van Oosterhout, Heugens, & Kaptein, 2006; Wempe, 2008a, 2008b, 2015). Due to its wide range of contracts both on macro/micro level, the theory has full potential to provide a framework for managerial and organizational level decisions making.

The goal of ISCT is to provide a theoretical framework for managers, marketers, and salespeople to make such decisions which have a positive impact on communities and society through application of ethical norms and universal moral standards (Donaldson & Dunfee, 2008; Dunfee, Smith, & Ross, 1999). It bestows an opportunity for business people to make ethical decisions in the marketplace and social context.

In the discipline of business research the ISCT is viewed as the preponderant concept due to its sophistication and promising desired results (Sollars, 2015; Soule, 2002; Wempe, 2015) The ISCT provides a well-grounded theoretical base and a solid framework which helps organizations to answer the questions of (un)ethical behaviors in a decision making context (Buller & McEvoy, 1999; Sama & Shoaf, 2005). The theory has been applied to a number of managerial topics such as marketing strategies for banking products, distribution of products and services, global citizenship and its implementation, gender discrimination and bribery (Dunfee et al., 1999; Lucas, 2004; Mccarthy & Puffer, 2008; Reisel & Sama, 2003).

METHODOLOGY

This study adopts a qualitative approach to empirically understand the influence of marketing strategies adopted by pharmaceutical companies on physician conduct with patients especially prescription of antibiotic drugs. Qualitative research design allows for a holistic investigation of this phenomenon (Patton, 2002) by giving precedence to interpretation of population. Thus, it allows for understanding the behavioral influences on physician that might come from physical, psychological and sociocultural environments (Krefting, 1991; Schmid, 1981). In other words, physicians' subjective meaning making is rendered. Subjectivity also allows for in-depth analysis of the influence of marketing tactics of pharmaceutical companies on physician behavior and provides rich insights from various dimensions. To capture the emergent phenomenon, this study employs grounded theory as a strategy of inquiry.

The basic assumption of grounded theory is that social science theory can be generated systematically in a real social setting (Glaser & Strauss, 1967). GT is one of the most successful ever developed research method in qualitative inquiry and has contributed much to social science discipline (Jo, 2009). Researchers have used in the field of marketing and macro-marketing to generate new theories and insights (Dholakia & Nason, 1984; Hunt, 1994). More specifically, grounded theory method can answer the why, what and how questions of the phenomenon under study in this research (Charmaz, 2008).

The population of this study constitutes physicians in District Peshawar. In grounded theory there is no strict sample as the criteria for sufficiency is decided by saturation of categories. Most suitable sample was selected by employing purposive sampling strategy aided with snowball sampling (Cassell & Symon, 2004). Data was collected through open ended interview for richness and depth (Corbin & Morse, 2003).

The data was transcribed through the process of naming and categorizing (Babchuk, 1997). It is a type of microanalysis of the data which analyzed data word-by-word (Moghaddam, 2006). The coding process starts with open coding followed by breaking down data into discrete dimensions and properties (Goulding, 2002; Strauss & Corbin, 1998). This provided a strategic link between collected data and the consequent emerging theory to describe these data.

Findings of the Study

While pursuing the research objectives, in-depth interviews of the targeted sample have been conducted. An appropriate analysis of these interviews resulted four themes which are physicians' poor commitment towards medical SOPs, their too much materialism, indiscriminate use of antibiotics due to personal benefits and unethical practices.

Theme.1: Physicians have loose adherence with ethics in their clinical practices

Medical profession is the backbone of society due to its relevance with ailing humanity. Adherence to ethics has multiple benefits to patients, society and the medical profession itself (AMA, 1903, 2016;

APA, 2001). Physicians must use ethical values, social norms and medical logic to select best courses of action in their clinical practices.

Resp#	Line#	13-SOPs are not followed in clinical practices of physicians
R1	19	Clinical practices are of low standard due to non-adherence with ethics
R1	63	Lacking SOPs in medical profession [R2 (153), R5 (1.32), R6 (1.27), R9 (1.75)]
R3	41	Attachment with SOPs is proportional to professional development
R7	12	Due to obsolete healthcare system international guidelines can't be followed
R11	47	Physicians are self-interested instead of patients-interested
R12	275	Implementing international guidelines in clinical practice is important

Loose adherence is taken as not following code of ethics (R1), lack or absence of SOPs (R1, R2, R3, R5, R6, R9) and blind followance of Western World's SOPs without developing our own as per requirement (R3, R7, R12).

"Currently physicians are not following any SOP in their clinical practice" (R9, line#75).
 The absence of SOPs has allowed materialistic practices resulting in low professionalism in medical profession.

This clearly shows that mostly respondents have identified the lack or irrelevance of SOPs as the primary concern. However, the DRAP has prescribed an SOP but it is not followed and implemented due to a variety of reasons. The outcome of this dilemma is that the quality of prescriptions is very low (R1) as excessive drugs are recommended or they are not to the point (R9). The absence of SOPs has allowed materialistic practices resulting in low professionalism in medical profession.

Physicians loose adherence with ethics lead to poor performance in clinical practices which is evident from their irrational prescription and fake diagnosis in patients. Following SOPs are directly related to professional development.

"...SOPs are important for professional development" (R3, Line#41).
 Western world has a great contribution in medical sciences and they have developed their own code of ethics. So, adhering to their guidelines also comes under the ambit of code of ethics but unfortunately such guidelines are rarely followed.

"...to some extent we are following Western SOPs but very rarely" (R3, Line#41).
 The importance of code of ethics in medical profession increase many folds due to human involvement. Professional grooming is possible only if physicians strongly adhere to code of ethics.

Theme.2: Physicians are too materialistic and interested only in profits not humanity

Generally materialistic approach leads to too much self-centeredness and violates the rights of fellow human beings. In medical profession materialism endangers the lives of many patients because prescribing medicines which have benefits only to physicians and what its effects on patients are very hazardous for society.

Resp#	Line#	12-Physicians are too materialistic and interested only in profits not humanity
R1	49	Physicians' materialism has resulted in unnecessary prescription [R3 (1.117)]
R4	150	Physicians are under the influence of PM [R7 (1.90), R11 (1.39), R12 (1.298)]
R6	33	Human virtues have no value in front materialism
R8	41	Commercial objectives are dominant over social ones
R9	148	Empirical prescription of antibiotic is common which is dangerous
R10	157	Physicians are bribed to prescribe medicines

Physicians' materialism is associated with no consideration for patients' health, unnecessary prescription, and lust for money, and self-centeredness (R1, R3, R4 and R7). There is a continuous competition for wealth accumulation among medical professionals (R6). These behaviors have shattered their focus from patient care to personal care (R10).

Majority of respondents have identified that physicians are money grabbers and not caring for patients. *"...physicians called money grabber it will happen, and patient will develop resistance" (R7, Line#90).*

They are overwhelmingly self-interested and lacking patients' orientation.

"...Doctors are self-interest oriented not patients oriented" (R10, Line#157).

Their prime objective is to earn as much as money. In prescribing drugs, they focus only those which have incentives for them.

"...physicians know they have gone blind because of their incentives" (R9, Line#148). Sometimes they unnecessarily prescribe different drugs particularly multivitamins and antibiotics to patients which increased their sufferings instead of reduction.

"...patients don't need a multivitamins or antibiotics and doctors are regularly prescribing" (R3, Line#117).

They behaved for their luxury life and to satisfy their acquisitiveness.

"...their luxury and greed" (R10, Line#157).

Some respondents call such behaviors illegal and equal to bribing. They ask for personal obligations from pharmaceutical companies which is narcissistic and selfish approach.

"...You will not do anything where the doctors have personal interest and gain a personal benefit" (R12, Line#298).

Incorporating ethics in their conducts will make them more fruitful for patients and society. In the medical profession indigenous guidelines will be time tested if developed and bring in to practice. Ministry of health, PM & DC and Drug Regulatory Authority of Pakistan are main statutory bodies that can brought major changes in behaviors and conducts of physicians.

Them.3: Multiple antibiotics are prescribed for a single infection

Antibiotics are a blessing for human beings and have saved many lives since its inception. However, from last few decades the drug is a panacea for all diseases and even sometimes physicians and patients themselves are using it in viral infection. In fact, the current antibiotics are losing its potency and the development of new ones is almost zero. So, need to correct the courses of action to keep this wonderful drug effective against infectious diseases.

Resp#	Line#	11-Multiple antibiotics are prescribed for a single infection
R1	40	Multiple antibiotics in one prescription
R2	41	Antibiotic patronization in non-indicated cases [R8 (1.45), R11 (1.38), R12 (1.146)]

R2	49	Bribing compel them to prescribe imprudently
R3	127	Antibiotic is considered to be panacea for all diseases
R4	70	Prescribe broad spectrum for patients' satisfaction
R5	110	Over prescription of antibiotics
R9	68	Per pack incentive increase misuse of antibiotic
R10	38	Over prescription of antibiotics

Indiscriminate use of antibiotics is referred to as advising two or three antibiotics at a time for treating an infectious disease, prescription in non-indicated cases or increases usage duration, over prescription, and the drug is considered to be panacea of all diseases which raises its misuse (R1, R2, R3, R5, R10). Rational therapy is very rare in Peshawar region because doctors are receiving per pack incentives on antibiotics which encourage its usage (R11).

It is unquestionably very clear that misuse of antibiotic is a common practice in Peshawar region where Pharmaceutical companies have incentivized their products and make them lucrative for physicians
"...drug usage increases due to physicians' personal interest in it. They are getting per pack incentive on it" (R9, Line 68).

The misuse or abuse of antibiotics is due to over promotional activities of pharmaceutical companies
"...it clearly shows that physicians are under the influence of pharmaceutical marketing tactics and activities and prescribe the extra medicines for their personal gains" (R11, Line#38).

Physicians and patients consider antibiotic a solution for all problems, but it is not
 Most of the time physicians prescribe more than one antibiotic where one is the actual treatment while the other is prescribed for personal benefits

According to some respondents, physicians deliberately prescribe broad spectrum of antibiotics for early recovery of patients otherwise the same patients may switch to another doctor which is a financial loss for them

"...doctors prescribe broad spectrum antibiotic for early recovery of the patients. If the same patient not recovers fast he/she may switch to some other doctor" (R4, Line#70).

Indiscriminate usage of antibiotics can be avoided by following proper treatment protocols and treatment guidelines for each disease. Ethical code of conducts and locally design guidelines may be more beneficial in current situations. Nevertheless, Western origin guidelines should be base for developing indigenous one.

Theme.4: Unethical practices common in medical profession

It has been observed that physicians are deeply involved in unethical practices due to their pursuit of personal agenda and interests while keeping patients' interests behind. The focus of their clinical practices should be to enhance the quality of lives of patients.

Resp#	Line#	7-Unethical practices common in medical profession
R1	63	Physicians unethical practices are ubiquitous [R3 (1.35)]
R4	25	Physician undue favor to marketers is malefic to patients
R5	177	Commercial objectives superior than social ones
R6	79	Antimicrobial resistance is developed due physician unethical practices [R7 (1.258)]

Unethical Practices in Medical Profession is refer as not following medical guidelines by physicians in their clinical practices, undue favor for pharmaceutical industry, their commercial objectives are superior than social objectives and conducts that increase the grievances of patients (R1, R4, R5, R6). Such practices increase the patients' sufferings through antibiotic abuse.

"...Off course these unethical practices increase the grievances of patients by adding antibiotic resistance" (R6, line#79).

It is obviously clear from the response of all respondents that unethical practices are pervasive and everywhere due to physician commercial behaviors

"...Unethical practices are ubiquitous because physicians are not following medical guidelines" (R1, line#63).

Physicians are under the influence of marketing and extending undue favor to companies and their products

Physicians who accept gifting and personal services from pharmaceutical companies are involved in malpractices and consequently elevate patients' sufferings

"...accepting gifts like cars etc. are unethical conducts which increase grievances of patients" (R7, line#258).

The punitive and reinforcement aspect of drug act 1976 are very weak and imperfect which lead to unethical practices

"...both penalties and reinforcement of 1976 act are weak which has led to unethical practices in the marketplace" (R8, line#33).

Medical guidelines are the golden principles for clinical practices if followed in its true spirits but unfortunately, they are pursuing their own commercial objectives and put behind social objectives

"...unethical practices are ubiquitous because physicians are not following medical guidelines" (R1, line#63).

DISCUSSION

This study investigates the influence of Pharmaceutical marketing on physicians prescribing behaviors. While pursuing the research objectives, the researcher conducted in-depth interviews of the targeted sample. An appropriate analysis of these interviews results in themes which are Pharmaceutical marketing malpractices leads to influence physicians' behaviors in the form of unethical practices, bring in them materialism, which further causes physicians' poor commitment towards medical SOPs, and their indiscriminate use of antibiotics. Eventually the repercussions are observed in the form of disturbance in ecosystem and resistance in patients against the current therapeutic antibiotics.

The undue influence of industry compels physicians to advise medicines on the basis of their personal gains and emphasized for more use. As result the sustainability of the Pharmaceutical business becomes questionable.

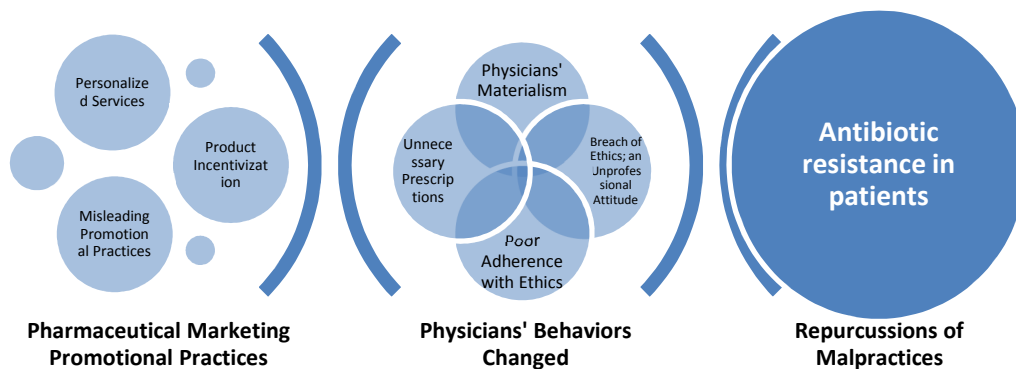


Figure:1 Relationship between Pharmaceutical Marketing and Physicians Prescription Behavior

Pharmaceutical Marketing Promotional Practices

Antibiotics are prescribed in wrong indications and with an inappropriate dosage which causes AMR (Greenhalgh, 1987). Misuse of antibiotic is due to malpractices of physicians and patients demand this drug (Palmer & Bauchner, 1997; Paluck et al., 2001). The literature is replete of studies where patients expectations to prescribe this wonderful drug to them for early recovery; bringing irrationality in prescription (Bauchner, Pelton, & Klein, 1999; Mangione-Smith, McGlynn, Elliott, Krogstad, & Brook, 1999; Schwartz, Freij, Ziai, & Sheridan, 1997). They are physician and pharmacist who both choose suitable drugs for patients, not the patients themselves.

Personalized Services

Pharmaceutical marketing attracts doctors by offering personalized services which are also called personal obligations. These activities are physicians oriented and indirectly charged from patients at the form of high prices. In the healthcare profession, when physicians gave priority to personal financial gain over patients' welfare, then a conflict of interest arises. Physicians accepting gifts and other obligations from industry eventually invoke the principles of reciprocity and thus a conflict of interest arises (Dana & Loewenstein, 2003; Katz, Caplan, & Merz, 2010). The industry is looking for gaps within the doctors' characters and focuses the loose points. For unethical tactics, they need morally corrupt individuals.

Product Incentivization

Encouraging product sales is a normal practice in marketing but when it comes to Pharmaceutical marketing it may result in undesirable consequences. Financial or any other type of incentives is a good attraction for customers and companies use it as a strategy of pushing their products or services. The industry is regularly rewarding frequent prescribers by offering a bonus on a bulk purchase or number

of prescriptions. These incentives motivate physicians to patronized products and thus increase drugs consumption which is harmful to patients' health. Malpractices in marketing are vilification for the discipline and need to be corrected so that to mitigate its impact on society. The influence of marketing should be halt so that to combat the global threats of antibiotic resistance.

Misleading Marketing Practices

Pharmaceutical marketing focuses on selective rather than critical factors of drugs. One of the objectives of Pharmaceutical marketing is to inform physicians regarding latest scientific developments in medicines and enlighten them about contemporary protocols. Unfortunately, this responsibility is neglected. Consequently, they increased the suffering of patients through indiscriminate use of antibiotics. This is being partial and bias and violates the basic principles of marketing. The industry is disease monger and widens the boundaries of treatments for their own vested interests of products sales (Moynihan, 2002). The integrity and credibility of industry are questioned when it sponsored academic activities for personal benefits.

Changing Behaviors of Physicians

The center of industry's promotional practices includes physicians because they are the ones who advise medicines to patients and set consumption patterns. The industry is fully involved in malpractices of providing cars, foreign pleasure trips, entertainments, and free meals services to prescribers. Such practices lead to improper prescriptions and misuse of drugs. In order to make the prescriptions more rational and reduce in quantity, there is an urgent need to work on two-pronged strategies; first is to halt pharmaceutical marketing and second is to properly educate and train physicians (Caamaño, Figueiras, & Gestal-Otero, 2002). Necessarily, it will reduce drugs after effects in patients and preclude antibiotic resistance.

Physicians' Materialism

Healthcare professionals are too much materialistic. Their prime objectives are wealth accumulation. The primary objectives of the healthcare system are patients' facilitation and enhancing their therapeutic outcomes, but here contradictory. They are self-centered and write a prescription based on their personal gain. In the healthcare profession, when physicians gave priority to personal financial gain over patients' welfare then a conflict of interest arises. Financial and health consequences are borne by patients due to conflict of interest created by the joint venture of pharmaceutical marketing and physicians but nonetheless, physicians also faced financial and career lose (Dana & Loewenstein, 2003). The primary interest of physicians is the health of patients and must dominate the secondary interest which is financial benefits to them. Remember that the secondary interest is not illegitimate but necessary part of professional life, but the problem is its relative weight given by the professionals.

Poor Adherence to Ethics

The study finds that physicians are not following ethical guidelines and even the code of ethics of international bodies. Healthcare profession is a scientific field, so it is very important to strictly adhere to the protocols developed in the Western world. The guidelines for clinical practices are systematically developed statements which complement physicians to make rational decisions for the best care of patients and the medical profession (Lohr & Field, 1990). Guidelines are developed after several studies on a specific issue provided the results are consistent. It has been proved that the effective execution of clinical guidelines improved patients' treatment outcomes and decrease drug-related adverse effects associated with inappropriate medicines (Audet, Greenfield, & Field, 1990; Chassin, 1990). But in our society morbidity and mortality is very high due to the misuse of medicines. The reason is that they are

very unethical in their behaviors. In the healthcare sector, physicians adherence to guidelines and SOPs is very poor (Cabana, Rand, Powe, & et al., 1999). They have much focus on the secondary need which is financial benefits while the primary objective which is patients and wellbeing is pushed behind.

Breach of Ethics; an Unprofessional Attitude

Physicians are under the influence of pharmaceutical promotional activities and write prescriptions based on personal services also called personal obligations. They serve them services from meals to foreign pleasure trips and renovation of clinics to latest model cars. In response, they asked them a fixed number of prescriptions and a specific quantity of packs to be consumed but due to variation in patients flow they go for over-consumption. In Poland, GSK is under scrutiny for allegedly paying doctors to boost prescriptions for its products. In the investigation, it was found that the regional manager and 11 doctors were connected with the allegation of corruption (Jofre, 2014).

It will be an injustice to exonerate physicians who are involved in clinical malpractices. As discussed in the aforementioned theme, they are perpetrating for the sake of financial benefits and quenched their thirst for money. The unethical behavior of physicians is manifested in patients in the form of AMR and in society an uncontrolled race for money and material things. They also keep their patients in dark because when they from them regarding drugs usage or side effects they don't brief. In the last two decades, the patient-physician relationship has drastically reshaped. The ethical way of fulfilling the economic needs of the stakeholders to maintain a decent living has altered.

Indiscriminate use of Antibiotics

Antibiotics are prescribed in wrong indications and with an inappropriate dosage which causes AMR (Greenhalgh, 1987). Misuse of antibiotic is due to malpractices of physicians and patients demand this drug (Palmer & Bauchner, 1997; Paluck et al., 2001). The literature is replete of studies where patients expectations to prescribe this wonderful drug to them for early recovery; bringing irrationality in prescription (Bauchner et al., 1999; Mangione-Smith et al., 1999; Schwartz et al., 1997). It is physician and pharmacist who both choose the best drugs for patients, not the patients themselves.

Bribing physicians are reflected in the form of irrational drugs combination in different disease management. Misuse of antibiotics is due to unnecessary prescribing habits of physicians (McCaig & Hughes, 1995; Paluck et al., 2001) and patients expectations to recover fast due to this drug (Chretien, McGarvey, & Esswein, 1975; Palmer & Bauchner, 1997). Studies have shown that patients' expectations to get antibiotics from physicians for early recovery affect their prescribing behaviors and bringing irrationality in final prescription (Bauchner et al., 1999; Mangione-Smith et al., 1999; Schwartz et al., 1997).

CONCLUSION AND MANAGERIAL IMPLICATIONS

There is proliferation of literature on the unethical behaviors of pharmaceutical marketers and healthcare system. The relationship that took place between physicians and industry has nothing to do with patients but the formers are primary beneficiaries (DeJong et al., 2016; Devitt & Hise, 2002; Sahoo, Tamhankar, Johansson, & Lundborg, 2010). Industry applies different marketing programs, strategies and tactics to established long term profitable relationships with targeted customers. According to the emic view of the researcher, the promotional strategies of Pharmaceutical companies except a few multinationals are unethical, unscrupulous and immoral. The essence of the medical profession is to provide state of the art

facilities to patients. The fundamental aim of the pharmaceutical industry is to deliver precise and accurate information regarding drugs to physicians and other relevant professionals. In this connection, there are some international bodies like WHO and IFPMA which have developed guidelines and codes of ethics for healthcare professionals. Nevertheless, industry adherence to WHO guidelines is very poor because they keep commercial objectives superior to imparting education to healthcare workers (Mali, Dudhgaonkar, & Bachewar, 2010).

The healthcare workers are supposed to deliver health facilities without any consideration of ethnicity, race, and religion. It is their fundamental obligation to dispense cost-effective services with world-class standards. It is healthcare workers responsibility to enable hospitals to become comprehensive anchors of treatment centers. Nonetheless, the contemporary workers are incompetent in skills and technique and more corrupt in character. It obviously revealed in the respondents' interviews that they are self-centered, money oriented and usually under considering patients benefits. Another important behavior of these workers is that they advise to patients irrationally. Drugs are an integral part of health delivery services but it is unformatted that irrational prescribing is a major challenge to the current system as risky and loss of scarce resources (Ofori-Asenso & Agyeman, 2016). Logical prescription, appropriate and responsible medicines dispensing, are some of the concepts need to be implemented in true spirits to enhance the best utilization of drugs to avoid hazards associated with them.

Since findings of this study some managerial implications are put forwarded. All affairs and activities of the Pharmaceutical companies should be performed to the highest standards of ethical and moral standards of marketing. They should affirm long standing commitment towards the fulfillment of laws and showing integrity in all aspects of business and avoid deception. Honesty and integrity in all its forms and types are more important today than before ever, so must be incorporated in marketers' behaviors. They should design patient-centric strategies to bring about more ethicality and social responsibility in pharmaceutical industry. They should focus on the moral and ethical side of their strategies and avoid over promotion to physicians. They should deal fairly with competitors, business partners, customers and employees.

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