# **Pharmaceutical Marketing in Rural Setting**

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#### **Abstract**

Recent studies of pharmacy practice have called attention to the role played by community pharmacists and pharmacy attendants in encouraging self-medication and experimentation with medicine among the public. While research has focused on community pharmacists and pharmacy attendants as medium encouraging self-medication and medicine experimentation.

This paper highlights the context in which pharmacist and pharmacist attendants engage in "prescribing medicines" to the public in Jharkhand, India. An ethnographic description of pharmacies and pharmaceutical-related behavior in Jharkhand is provided to demonstrate how mutual relationships between pharmacy owners, medicine wholesalers, and pharmaceutical sales representatives (medical representatives) influence the actions of pharmacy staff. Attention is given on the role of the medicine marketing and distribution system in encouraging prescription practice, "counterpushing" and self-medication. In documenting the profit motives of different players located on the drug sales, it is argued that the economic benefit and the mutual relations that exist between doctors, medical representatives, medicine wholesalers and retailers, need to be more closely studied by those supporting "rational drug use".

**Keywords**: Pharmaceutical marketing, Pharmacist Behaviour, Rural Pharmaceutical sales./

### 1. Introduction

In most economically backward countries, almost any drug available whether it is life saving drug, antibiotics, drugs included in schedule H drugs, (These are drugs which cannot be purchased over the counter without the prescription of a qualified doctor)

present in the market may be purchased over-the-counter [1] [2] [3]. "Unjustified and Irrational" use of pharmaceuticals, in particular use of antibiotics, has been widely reported directing the World Health Organization to call attention about the dangers of self-medication as a cause of antibiotic resistance [4] [5]. Equal concern has also been expressed by W.H.O about the over-prescription of drugs by Physicians. The iatrogenic effects of drug combinations other than specified by W.H.O. (E.g. multiple forms of antimicrobials contained within a single medication) e.g. Ofloxacin and Ornidazole prescribed as anti diarrheal. Cefixime and Ofloxacin / Cefixime and Azithromycin are often prescribed in treatment of typhoid, and list goes on, and the availability of substandard drugs in the market adds further woes. In addition to the problem of resistant microbial strains resulting from the inappropriate use of antibiotics, drug side effects, allergic reactions and toxicity have become a cause of great concern. Various studies of pharmaceutical practice have been conducted over the last two decades by pharmacoepidemiologists, health social scientists and consumer advocates. These studies have examined the clinical rationality of prescription practices, self-medication inclusive of over-the-counter (OTC)drug use for acute and chronic illnesses, the purchase of nutritional supplements (tonics and vitamins) that have questionable therapeutic value, and the self-regulation of prescribed medicine dosage [6] [7] [8] [9] [10]. The self-medication by patients for ailments like Diarrhea, fever and many other symptoms is due to decrease intolerance for symptoms and greater familiarity with pharmacy shops and various common drugs. Health is becoming increasingly commercialized and advertised as large number of people easily "reach for the pill" at the first sign of ill health or malaise [11]. Health is being treated as a condition, which one can obtain or maintain through the use of medicines, if one has the money to spend. In India the great concern about the increasing health problem is due to the increased food adulteration and environmental pollution [13]. Attention has been called to the role played by pharmacists and pharmacy attendants in fostering self-medication and medicine experimentation among the public. Studies in several less developed countries have shown that pharmacies are not only sites where medicines are bought and sold, they are also places where information and advice on health problems and treatment is sought [14] [15] [16] [17] [18]. Some studies have found that it is routine for people to look for advice of pharmacists and pharmacy attendants for common ailments like fever, body ach, sprain and strain, minor burn and wound and diarrhea. Such consultations are not only convenient but also save time and money, they do not have to wait longer for the physician [13] [15] [19] [20] [21]. Studies have shown that patients who take medicine directly from the pharmacies are expecting quicker response to the drug just like a "magic effect" that will cure them after taking a single dose; this forces the pharmacy to recommend such drugs that provide symptomatic relief. Just like in case of diarrhea pharmacy do not recommend for the oral rehydration solution but they go for the antibiotics directly like Ofloxacin and Ornidazole which will give them faster relief but not taking full recommended course led to further problem of drug resistance and also the advice is profit motive. In urban pharmacy where numbers of customers are larger the pharmacy attendants gets lesser time to interact with patients. Hence proper advice cannot be given [22] [23] [24]. A better understanding of these factors require studies

about the pressure in which pharmacy works, as their ultimate goal is profit, how they maintain relationship with the medical representative, consumers and customer, in pharmacy business doctors are the customers of a pharmacy as a general rule patients will take medicine of brand advised to them by the doctors. Also the role of licensing authority is to be studied. In the Jharkhand state before November 2013 only four drug inspectors were working, it is very small number if compared to the number of pharmacies located in Jharkhand, hence the regular visit to pharmacies for checking the running of the pharmacy was not possible and were not done which result in not following the rules and regulation by pharmacies properly. The pharmacies in Jharkhand are located in both the rural and urban area and the number of pharmacy located in the urban area is more than the rural area. There are no drug store chains like Boots in the U.K, Walgreens in the U.S.A. or Mercury Drugs in the Philippines. In addition to pharmacies large number of grocery shop and pan-beedi shop stock OTC medicines and a limited number of scheduled prescription only drugs (Schedule H drugs). Pharmacies operate under a variety of names such as "Chemists and Druggists", "Chemist and General Store", "Medical and General Stores", or simply "Medicals". About 7000 to 20000 medicinal products are stored in the pharmacy. Beside from medicines, nutritional supplements, cosmetics, confectioneries and miscellaneous household provisions are also kept in the pharmacy. There is negligible number of "pharmacies" in Jharkhand where a qualified pharmacist dispenses" medicines in the manner found in most pharmacies in the West. Pharmacists in Jharkhand have a professional association called The Jharkhand Chemist and Druggist Association (JCDA). According to regulations of the Government of India, a license has to be procured from the Foodland Drug Administration India (FDA) to stock and sell medicines from each and every system of medicine registered with the government. A license to operate a pharmacy is granted only to a "qualified pharmacist". In addition, a pharmacy must maintain (a) a refrigerator to store perishable medicines and (b) separate cash memos for medicines classified under Schedule H, L, C and E of the Drugs and Cosmetics Act (1940) and for proprietary medicines and tonics.

## 2. Objective of the Study

In this Paper the authors have tried to study the practices of pharmacies and as of how the businesses are carried out and the various factors that effect the ethically carrying out of business with special reference to Jharkhand state of India.

## 3. Research Methodology

For the present study authors have searched pharmacy, medical, public health and social science literature. Convenience sampling method was adopted and in depth interview of 49 wholesalers and 162 retailers in the district of Bokaro, Dhanbad, Hazaribagh, Jamshedpur and Ranchi was conducted with the help of semi-structured questionnaire.

## 4. Findings and Discussion

## 4.1 Investment in pharmacy business

The investment needed to establish a pharmacy in a Jharkhand varies with the locality and size of the shop. In Jharkhand, a medium sized shop (10\*10 feet) in a low-middle income locality will require an investment of anything between Rs. 300,000 to Rs. 400,000. A full stock of medicines will require an additional investment of Rs. 200,000. Pharmaceutical wholesalers use to provide medicine stock to shops on credit for a maximum of 21 days. This practice has recently ceased because several pharmacies, which used such credit, have closed down in less than six months without completing payments to pharmaceutical stockiest. Entrepreneurs who venture into the retail medical business often procure general business loans from banks. Banks, however, do not extend special pharmacy loans and the terms and conditions of securing a loan are the same as those made for other retail businesses. Banks do, however, provide overdraft facilities to pharmacy owners against a stock guarantee. Owning a pharmacy in Jharkhand can be very lucrative. In Jharkhand, for example, the monthly net profit made by an average small shop in a low-income neighborhood is between Rs. 10,000 to Rs. 15,000, while small shops in middle-income localities generally makes between Rs. 20,000 to Rs. 30,000 net profit per month. In a highincome locality where investment in a pharmacy might range between 10 to 15 times more than that in the low or middle income localities, net profit per month is often Rs. 50,000 or above.

### 4.2 Rapid increase in number of pharmacies in Jharkhand

The number of pharmacies in Jharkhand has increased dramatically during the past decade. The marked increase in the number of pharmacies in urban Jharkhand may also be attributed to the promotional activities of pharmaceutical companies and a sudden increase in the profit margin for retailers in this business. Profit margins for Allopathic drugs are of at least 12%. Ayurvedic and other herbal products are much higher often reaching 30% to 40%, but the volume of sales of such products is significantly less compared to allopathic drug formulations. Intense competition between pharmaceutical companies has indirectly given rise to an increase in the number of wholesalers in the state, who in turn, offer attractive incentive schemes and concession packages to patron pharmacies for example a discount of up to 5% for cash payment [25].

### 4.3 Competition among pharmacies

Competition among pharmacies is keen, especially in areas where shops are clustered together for instance next to a government hospital, private multi specialty hospital. The competition between pharmacies has become so intense in cities in Jharkhand that pharmacies located near large public and private hospitals hire ``agents'' whose job it is to persuade patients to buy medicines from a particular pharmacy. These agents get a commission from the pharmacy owner for having successfully ``captured" prospective customers. Such customers are often intercepted inside hospital premises. Agents offer assistance in procuring needed drugs and a cash discount on medicines if they are purchased from a particular pharmacy. Now day's propaganda pharmaceutical

companies, companies that make an agent in state mainly wholesalers to sell their product, make pact with the doctor and doctor prescribes the medicine of that company which will be available at a particular retail shop. For this both doctor and retailer get good commission.

## 4.4 Management of routine operation of pharmacy

Most of the pharmacy is a family business or owned by the doctors or their relatives of doctors. The pharmacy located in nursing home or private hospitals are owned and maintained mostly by the nursing home and private hospital owner. If compared to the number of pharmacist registered in Jharkhand pharmacy tribunal number of pharmacy situated in the state is quite higher clearly indicating that few of the pharmacy take service of pharmacist. It is even reported that more than one pharmacy shop license is issued on the name of single pharmacist. There is no such action taken by the food and drug administration Jharkhand to check that single pharmacy license is issued to single pharmacist. In the rural area rarely a pharmacist is seen working medicines are mostly dispensed by the unqualified person who has no formal education of Pharmacy mostly person who have few years of experience in working in pharmacy are involved in the dispensing. As noted earlier, FDA regulations require pharmacies to have a "qualified pharmacist" in order to be granted a license. A qualified pharmacist is a person who has degree of either D.Pharm or B.Pharm from a recognized pharmacy college or university and is registered in pharmacy council of the state. Businessmen by pass this requirement by paying for the services of a qualified pharmacist on a part-time basis. The JCDA considers undercutting as an unfair business practice. However, it is widely practiced because no penal action is taken on a pharmacist.

### 5. Purchase Attitude of Drugs

Medicines are purchased both with and without prescription. Many of the prescription mainly in the rural setting is from local quakes who do not have degree for practicing medicine but are involved in treating patients. Prescription from spurious persons is irrational and unjustified; most of time it causes serious health problem and increased treatment cost. Customers who visit a pharmacy without a prescription generally state their requests in one of the following ways: they (a) directly mention the name(s) of the medicines they need, (b) show an old sample of the medicine (a strip or bottle), (c) present symptoms(either one's own or those of a family member) to the shop attendant and request appropriate medicines, (d)describe the shape, form and color of the medicine. The most common ways of requesting medicines without a prescription were found to vary across socio-economic groups. Customers attending shops in the low-income localities are commonly observed to request medicines by saying local pet names of the medicines. In some cases, customers specified the color, Symbols and trademarks, which appear on product packaging, are also referred to while requesting medicines. For example Neosporin ointment product was referred to as ghodachap, meaning horse brand, because of the picture of a horse (logo of Wellcome) that appears on the packaging [25]. Customers buy medicines at pharmacies both for themselves and for others.

Cost of the medicine makes influence decisions to buy partial doses of loose medicines, requests for medicine substitutes, or the postponement of treatment. These are important but neglected issues needing research. People have a conception that costlier the medicine more powerful in action that medicine is. Higher cost of the medicine leads customer disgruntled. They accuse government, doctor and pharmacy as nexus working together for profit. Due to the inability to buy all the medicines written by the physician due to cost people buy loose medicines and ask for part prescriptions. Sometimes physician do not write the entire course on the single visit for example Novamox®500 capsules comes as strip of 15 capsules but physicians write 10 capsules then the pharmacy has to give it as loose medicine another example of Eltroxin®50, 75, 100 tablets they come as bottle of 100 tablets but physician write prescription of 30 tablets which forces the pharmacy to give it as loose.

### 5.1 Maximizing profit: incentive scheme and counter pushing

Medicine wholesalers, their sales men, and medical representatives play an indirect but an important role in promoting self-medication. Complex arrangements are negotiated between all those involved in the business of buying and selling medicines, to meet a common goal that of maximizing profits. Carry and Forwarding Agents, known as" Superstockists" among medicine wholesalers, receive a 2% profit margin on the stock they procure directly from the pharmaceutical company of which they are agents. Wholesalers who deal directly with a superstockist gets an 8% profit margin on the stocks they are able to sell to retail chemist shops. On average, a wholesaler in Jharkhand may be an agent for 15 pharmaceutical companies. Pharmaceutical companies provide incentive schemes to wholesalers, who in turn pass them on to retailers to generate sales. A common scheme takes the form of direct cash discounts on bills for stock worth or exceeding a specified amount. Wholesalers typically advance their stock to retailers on a 7 to 25 day credit basis. If a retailer pays his bill in less than one week, a 0.5% to 5% discount is taken on the amount due. This discount enables shop owners to offer medicines on credit to regular customers as an incentive to remain their patrons. Another common incentive scheme offered to retailers by wholesalers involves the purchase of a given amount/volume of a specific medicine. Pharmaceutical companies also offer cash incentives directly to the retailer. The company's medical representative gives a voucher/check to the retailer for having bought/sold a specified amount of the company's products. Product bonus incentives are also popular among retailers. The form they commonly take is that for every 10 strips of X medicine purchases, one or two strips of the same medicine are given as a free bonus. During some promotional campaigns, bonuses can go up to seven strips for every 12 strips sold. Bonus schemes are attractive to chemist shop owners. OTC products may be marketed by incredibly aggressive schemes. One of the leading brands in antimalarial Emal® ampoule (alpha/beta-arteether) [28] comes with the scheme of buy 1 and get 2 ampoule as scheme. This has resulted in misuse of this antimalarial medicine which is to be specifically used in P.falciparum malarial cases but are given by quakes in general fever just for the sake of profit.

### 6. Brand substitution

Counter-pushing and substitution is especially common in pharmacies located near large hospitals. Shop attendants who engage in counter-pushing often tell a customer that company does not exists any more or those product is not manufactured by this company any more or company has changed the packing or take this medicine only company is different contents are same. However, very few customers purchase the substituted medicine. Notably, in the low-income locality, customers were observed to accept a substitute for a prescribed medicine and then verify it with the doctor.

## 7. Conclusion

Many people who have entered into the chemist business are attracted to this business only because of the high profit margins. They are not qualified even illiterate and have no idea what so ever about the medicine. The retail medicine business in Jharkhand is lucrative resulting in steady growth in the number of new pharmacies opening up over the last decade. This proliferation of pharmacies is especially evident in rural area, where setting up shops requires relatively low amounts of capital. Legal requirements are fulfilled by keeping the license of a registered pharmacist just for the purpose of displaying it in the shop. Untrained counter attendants who are familiar with medicines stocked and conditions for which they are commonly prescribed or advertised typically manage the daily activities of a pharmacy. Their knowledge is supported by discussions with medical representative and salespersons who talk to them as well as shop owners as a way of monitoring shop sales and doctors prescribing habits. Having a valid prescription is not a prerequisite for receiving scheduled drugs at pharmacies in Jharkhand and the presentation of a prescription is rarely demanded upon. People buy steroids, antibiotics, anti-tuberculosis drugs and even psychotropic medicines over-thecounter. Antibiotics are commonly purchased for self-medication and are often purchased in loose form by customers. Due to the intense competition among pharmacies, owners try and keep regular customers happy. Regular customers have access to most drugs without a prescription and are often given a 5% cash discount. Credit is usually extended to "good customers" and medicine returns are often accepted from them. Economic factors are important in self - medication, buying partial prescription. Lack of education and proper managerial skill leads to inventory problems like accumulation of dump items and expired products. There is a need of formal education and training program for the pharmacy attendants where they can gain necessary knowledge to maintain a pharmacy. There should be strict regulation for appointing a qualified pharmacist in every pharmacy.

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