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Pharmacist as Doctor's Assistant – Prescription Less Drug Dispensation in A Rural Setting

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Abstract

Community chemists and pharmacy staff have been singled out in recent research as a key influence on patients' decisions to self-medicate and try new medications. Studies have pointed to community chemists and other pharmacy staff as conduits for promoting self-medication and facilitating medicine experimentation. In this work, we examine the setting in which chemists and pharmacy assistants in Jharkhand, India, "prescribe drugs" to the general people.

To illustrate the reciprocal nature of the interactions between drugstore owners, medicines distributors, and pharmaceutical sales agents (medical representatives), an ethnographic account of pharmacies & pharmaceutical-related behaviour in Jharkhand is offered. The influence of the pharmaceutical industry's marketing, distribution, and sales infrastructure on patient adherence to prescribed treatment, "counterpushing," and self-medication is discussed. It is argued that advocates of "rational drug use" would benefit from a more thorough examination of the financial gain and the reciprocal relationships that currently exist between physicians, medical representatives, medicine wholesalers, and retailers.

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

Introduction:

Almost all drugs on the market, including those that save lives, antibiotics, and schedule H drugs (which cannot be bought over the counter with no a prescription of a qualified physician) are available without a prescription in economically developing countries, according to Ferguson (1981).Antibiotic resistance has been linked to the "unjustified and irrational" use of medications, particularly antibiotics, prompting the World Health Organisation to warn against the risks of self-medication (Etkin, 1992). The World Health Organisation is also worried about doctors prescribing too many medications. Ofloxacin and Ornidazole administered as antidiarrheal are an example of a medicine combination that has iatrogenic effects above those allowed by the World Health Organisation (WHO).

Typhoid fever is often treated with a combination of cefixime and ofloxacin or cefixime and azithromycin. Another problem is that low-quality medications are sold openly. Drug-related issues, including as adverse reactions, allergies, and toxicity, have risen to prominence with the issue of antibiotic-resistant microbes. Over the last two decades, pharmacoepidemiologists, health social scientists, and consumer advocates have done several investigations of pharmaceutical practise. Over-the-counter (OTC) prescription drugs for acute and chronic illnesses, the purchase of dietary supplements (tonics, vitamins) with dubious therapeutic value, and self-regulation of prescribed medicine dosage

have all been investigated in these studies (Madden, Quick, Ross-Degnan, & Kale, 1997). Patients self-medicate for conditions like diarrhoea, fever, and many others because they have developed less symptom intolerance and a more general knowledge of where and how to get common medications. Health is being more commercialised and marketed as a big number of individuals readily "grab for the pill" at the first symptom of illness or malaise (Jayaramman, 1986). In today's society, health is seen as a commodity, something that, for those with sufficient financial resources, may be acquired or maintained via the use of pharmaceuticals. Increases in both food adulteration or environmental pollution have caused widespread alarm about the state of public health in India (Ferguson, 1981). The influence of chemists and pharmacy staff in encouraging patients to diagnose themselves and try new medications has been highlighted. Evidence from many developing nations (Goel, Ross-Degnan, Berman, & Soumerai, 1996) shows that pharmacies serve as hubs of community health information and guidance beyond just the sale of pharmaceuticals.

Pharmacists Grip on Common Ailments and Medications

Common diseases including fever, body ache, sprain and strain, small burn and wound, and diarrhoea are often treated by seeing a chemist or pharmacy attendant, according to some research. They may avoid waiting in queue for the doctor and save money by consulting online instead (Igun, 1987). Pharmacies are compelled to offer treatments that give symptomatic relief since research shows that patients who get their medications directly from pharmacies anticipate a speedier reaction, almost like a "magic effect" that would heal them after a single dosage. For example, when someone visits the pharmacy complaining of diarrhoea, they are often given antibiotics like Ofloxacin as well as Ornidazole instead of the more effective oral rehydration solution. However, this practise contributes to the spread of drug resistance and discourages patients from completing the full course of treatment. With a higher volume of consumers, pharmacy staff in metropolitan areas have less time for one-on-one consultations. Therefore, appropriate guidance is impossible to provide (Greenhalgh, 1987). Research is needed to further comprehend these elements.

Dispensing Medications with and Without a Prescription in a Rural Setting

The availability of necessary medications is crucial to rural healthcare. Dispensing these drugs, explaining them to patients, and assuring patient safety all fall squarely under the purview of pharmacies and pharmacists. But there are several obstacles for rural community pharmacies to survive, such as low volume purchases, tight profit margins, unfavourable insurance practises, and a lack of available pharmacists. When there is no pharmacy in close proximity, patients may have to wait longer for their medications because they either cannot get to the closest pharmacy in time or are too ill to make the trip.

While advances in telepharmacy as well as online mail order pharmacy have led some to believe that distance is less of an issue, many people in rural areas still lack the necessary hardware, know-how, or access to reasonably priced broadband internet to take advantage of these options. Furthermore, there are certain states where telepharmacy is prohibited by law or regulation. Pharmacies and chemists in rural areas will continue to play a crucial and necessary role in the health of their communities.

Pharmaceutical treatment is a vital part of the healthcare system. As integral members of the healthcare team, chemists not only advise patients but also provide guidance to

physicians and case managers. They play crucial roles in spotting drug interactions, reducing the potential for prescription mistakes, and encouraging regular dosing. For instance, Montana community pharmacists provided consultations to patients on blood pressure meds and distributed "Team Up. Pressure Down." (TUPD) materials from the Million Hearts Initiative. Participants' blood pressure medication adherence increased from 71% to 86% after this intervention.

Online pharmacies are progressively filling the function of traditional brick-and-mortar drugstores by providing services beyond only the distribution of pharmaceuticals. Pharmacists not only dispense prescriptions, but also provide immunisations, offer guidance on OTC drugs, and offer assistance to other medical institutions and providers including hospitals and hospices. Access to pharmacy services is especially critical for the health of rural inhabitants since they tend to be older as well as more chronic health concerns than urban residents. An established rapport with a chemist, who, together with the patient's doctor, can assist with medication management, may be of great use to seniors living in remote areas who may be taking many drugs. However, pharmacy services are critical components to meeting the healthcare requirements of all rural populations, regardless of patient age. The Models and Innovations part of this manual provides examples of programmes that show the importance of rural pharmacy.

Rural Hospital Dispensary

There is no universal definition of the rural chemist's duties at either rural or Critical Access Hospitals. A hospital chemist's typical duties include:

i. Hospital, outpatient clinic, and EMS pharmacy management and drug distribution
ii. Medication compounding
iii. Controlling drug supplies
iv. Reconciling and reevaluating the patient's medication regimen before and after hospitalisation
v. Medication treatment management, tweaking, and observation
vi. Personnel and fiscal management in the department
vii. Respect for all State regulations and laws
viii. Plan, create, and update all pharmaceutical services, rules, and procedures
ix. Health literacy training for patients, employees, and future medical professionals
x. Education future chemists
xi. Antibiotic stewardship and the prevention of adverse medication reactions are just two examples of the quality-of-care initiatives in which you may play a leadership role.
xii. Giving people in the community and/or hospital personnel immunisations.

Marketing of Medicines in Rural Setting

In the pharmacy industry, physicians are the end users of the services provided by the pharmacy, and patients will often only purchase the brand of medication that has been recommended to them by their doctors. The function of licencing authorities has to be investigated as well. Prior to November 2013, there were only four drugs inspectors working in the state of Jharkhand, which is an extremely low number considering the number of drugstores in the state. As a result, inspectors were unable to pay regular visits to pharmacies to ensure that they were operating legally and ethically.

There are pharmacies in both rural and urban parts of Jharkhand, with the latter having a somewhat larger selection. The equivalent of Boots in the United Kingdom, Walgreens in the United States, or Mercury Drugs in the

Philippines does not exist. In addition to pharmacies, many supermarkets and pan-beedi shops also carry over-the-counter medications and certain Schedule H narcotics. The term "pharmacy" may refer to a number of different businesses. The pharmacy is said to have between 7,000 and 20,000 different types of medicine. The pharmacy stocks more than just pharmaceuticals; there are also vitamins, minerals, cosmetics, candies, and other useful items for the home. Although there is a professional organisation for chemists in Jharkhand called the Jharkhand Chemist & Druggist Association (JCDA), there are only a few number of "chemist's" in the state where medications are dispensed by a licenced pharmacist.

The Food and Drug Administration of India (FDA) requires a valid licence in order to store and sell medications from any of the recognised medical systems in India. Only a "qualified pharmacist" is eligible to apply for a pharmacy licence.

The Case of Jharkhand – Setting up Rural Pharmacies

Starting a pharmacy in Jharkhand requires an initial cost that varies by both location and store size. A 10 by 10 foot storefront in a low to moderate income area of Jharkhand might cost anything from Rs 300,000 to Rs 400,000. An extra Rs. 200,000 is needed to ensure a complete supply of pharmaceuticals. Wholesalers of pharmaceuticals often extended credit terms to retail pharmacies for an maximum of 21 days. A number of pharmacies that relied on this kind of loan went out of business within six months, leaving their pharmaceutical suppliers unpaid. Entrepreneurs who enter the retail medical industry often get standard business loans from financial institutions. However, banks do not provide pharmacy-specific loans, and the requirements for getting one are identical as those for any other kind of retail company.

However, pharmacy operators may get overdraft capabilities from banks in exchange for a stock guarantee. The profits from operating a drugstore in Jharkhand might be substantial. The average net profit for a small store in a middle-income area of Jharkhand is about Rs. 20,000, while the average net profit for a tiny store in a low-income area of the state is around Rs. 10,000. Monthly net profits of Rs. 50,000 or more are not uncommon in high-income areas, where the cost to open a pharmacy is ten to fifteen times higher than in low- and middle-income areas.

Rapid increase in Volume and Content pharmacies in Jharkhand

Over the last decade, Jharkhand has seen a tremendous rise in the number of pharmacies. It's possible that pharmaceutical company advertising and a dramatic uptick in profits for stores are to blame for the explosion of urban Jharkhand pharmacies. Allopathic pharmaceuticals have minimum 12 percent profit margins. Sales of allopathic medication formulations are substantially greater, at over 90%, while sales of ayurvedic and various other herbal medicines are much higher, at around 30% to 40%. The rise in the number of distributors in the state can be traced back to the fierce rivalry between pharmaceutical companies; these wholesalers, in turn, provide attractive incentive programmes and compromise packages to patron pharmacies, such as a discount of as much as five percent for cash payment.

Competition between pharmacies is high, particularly in regions where stores are concentrated, such as close to a government the hospital, private multi speciality hospital, or other similar medical facility. In cities throughout Jharkhand, rivalry between pharmacies is so fierce that some have resorted

to employing "agents" whose only purpose is to get patients to purchase drugs from their pharmacy rather than another nearer to the hospital. Customers who are "captured" by these agents are then paid a commission by the pharmacy's owner. Customers like this are often stopped inside a hospital's walls.

Agents provide financial incentives and help in locating prescription medications for their clients. These days, it's common practise for drug manufacturers to strike deals with doctors in order to ensure that their products are prescribed by patients and stocked at local pharmacies. This results in lucrative commissions for both the doctor and the store.

Management and Purchase of Drugs

The majority of pharmacies are operated by physicians or medical professionals. The owners of the nursing facility or private hospital often also own and operate the on-site pharmacy. The number of pharmacies in Jharkhand is far larger than the number of pharmacists registered with the state's pharmacy tribunal, suggesting that only a small fraction of those pharmacies really employ pharmacists. Some pharmacists reportedly have several licences granted in their names so they may run many pharmacies.

The FDA of Jharkhand does not do any checks to ensure that just one chemist per pharmacy is granted a licence. Medications in rural areas are often distributed by people without appropriate training or expertise. Dispensing medications at a pharmacy is often done by someone with at least some expertise in the field.

In order to get a licence from the FDA, a pharmacy must employ a "certified pharmacist," as was said before. A qualified pharmacist is someone who has graduated with a Doctor of Pharmacy (Pharm.D.) or Bachelor of Pharmacy (B.Pharm.) degree from an accredited pharmacy programme and is in good standing with their state's pharmacy council. Entrepreneurs may get around this rule by hiring a chemist for occasional work. Undercutting is seen as unethical by the JCDA. However, since no punishment is imposed on a pharmacist, it is routinely practised.

You may get medicines both on and off a doctor's prescription. Local quakes that do not have a degree in medicine but treat patients anyhow sometimes write prescriptions in rural areas. Irrational and inappropriate prescribing practises lead to major health issues and higher treatment costs. Customers who go to a pharmacy without a prescription typically (a)state the name(s) of the medications they need, (b)show an old sample of the medication (a strip or bottle), (c)present symptoms(either their own or those of an immediate family member) to the shop attendant as well as request appropriate medicines, or (d)describe the shape, form, and colour of the medication. Different socioeconomic groups were shown to have distinctive patterns of non-prescription drug request behaviour. Shoppers in low-income areas are often overheard using local pet names for medications while making medical requests.

Customers have sometimes chosen colours themselves. When asking for medication, customers often make reference to the logos and brands that appear on the container. Because the Wellcome Company's horse insignia appears on the Neosporin ointment's packaging, the medicine became known as ghodachap, or "horse brand." Customers use pharmacies to stock up on medications for themselves and their loved ones.

Partially filling a prescription, requesting a different medication, or delaying treatment are all choices that might be influenced by the price of the pharmaceutical. These are vital, but often overlooked, questions that need investigation. Many believe that the higher a

medicine's price tag, the more effective it will be. Customers are dissatisfied since the medication now costs more.

They see the government, the medical establishment, and the pharmaceutical company as a cabal out to make a buck. People purchase over-the-counter drugs and seek for partial prescriptions since they cannot afford to buy all the medications prescribed by their doctors. On occasion, doctors will only prescribe part of a patient's medication regimen during a given office visit. This can cause problems when filling prescriptions, especially for medications like Eltroxin®50, 75, 100 tablets, which typically come in bottles of 100 but are often written for only 30.

Rural Pharmacy Maximizing Profits

Wholesalers, salespeople, and medical reps for pharmaceutical companies all have a hand in encouraging patients to treat themselves. To achieve the shared objective of maximising profits, all parties participating in the pharmaceutical supply chain engage in intricate negotiations. The "Superstockists" of the pharmaceutical industry, also known as Carry and Forwarding Agents, make a 2% profit margin on the inventory they purchase directly from pharmaceutical businesses for whom they act as agents. The profit margin for wholesalers that work directly for a superstockist is 8 percent on the inventory they resell to drugstores. A typical distributor in Jharkhand acts as a representative for 15 different drug manufacturers.

In order to increase sales, pharmaceutical corporations provide wholesalers incentive programmes, which are then passed on to retailers. Direct cash reductions on bills for stock at or above a certain value are a popular technique. The standard credit period between a wholesaler and a merchant is between seven and twenty-five days. There is a discount of 0.5% to 5% applied if a merchant pays his payment in less than a week. Stores may use this rebate to entice returning customers by letting them pay for their prescriptions over time. Wholesalers often incentivize shops to stock a certain volume of a certain drug, among other schemes. The pharmaceutical firms also provide the store with monetary incentives. When a store reaches a certain quota of the company's items sold, the company's medical representative presents them either a voucher or a cheque.

Retailers are likewise fond of bonus incentive programmes. Common examples include offering a free bonus of one or two strips of a medication for every ten purchased. Seven extra strips for every 12 strips sold is possible during some advertising programmes.Pharmacist business owners like incentive programmes. Over-the-counter (OTC) products may be advertised in quite pushy ways. Emal® ampoule (alpha/beta-arteether), one of the most popular antimalarial products, is now offered with a buy-one-get-two deal. This has led to the widespread administration of the antimalarial medication, which is intended for use only in situations of P.falciparum malaria, by quakes generally fever for financial gain.

Large hospital pharmacies are particularly prone to counter-pushing and substitution. Employees that participate in counter-pushing may inform customers that the store no longer carries a certain brand or that the packaging for an item has been updated, or that the drug's active ingredients remain the same despite the change in manufacturer. However, only a small percentage of patients actually buy the alternative treatment. Customers in the low-income area were more likely to accept a generic version of a prescription medication and then double-check with their doctor.

Conclusion

The enormous potential for financial gain has lured many would-be entrepreneurs into the chemistry industry. They can't even read or write, much alone have any medical training or knowledge. There has been a consistent increase in the number of pharmacies operating in Jharkhand over the past ten years as a consequence of the state's booming retail medicine industry. Particularly noticeable is the growth of pharmacies in rural areas, where the initial investment needed to open a store is cheap. A licenced chemist's licence need only be kept and displayed in the store to satisfy legal requirements. The day-to-day operations of a pharmacy are normally handled by untrained countertop attendants who are acquainted with the drugs stored and the ailments for which they are regularly prescribed or promoted.

Conversations with medical reps and salespeople, as well as store owners, who are interested in tracking sales and physicians' prescription patterns, round out their understanding. Scheduled medications may be obtained from Jharkhand pharmacies without a legal prescription, although customers are seldom asked to provide one. Steroids, antibiotics, anti-tuberculosis treatments, and even psychiatric medications may all be purchased without a prescription from a local pharmacy.

People routinely buy antibiotics in bulk because they use them so often for self-medication. Competition in the pharmacy industry is fierce, therefore business owners work hard to maintain relationships with their regulars. Most medications are available without a prescription, and regular clients are sometimes offered a 5% cash discount. "Good customers" are typically given the option to pay later or return their medication for a refund. Self-medication, in the form of purchasing a partial prescription, is influenced by financial considerations. Inventory issues, such the buildup of surplus commodities and stale goods, may arise when management is lacking in training and knowledge. Pharmacy technicians require access to a formal training and education programme where they may acquire the skills they'll need to keep a pharmacy running well. Every drugstore should be required to employ a licenced pharmacist.

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