Abstract

Background: Patent medicine vendors (PMVs) is one of a major source of medicines for ailments in Nigeria. Criticism of PMVs focuses on drug quality, dispensing practices, and their lack of formal health care training. While studies in African context have documented the customer-PMV interactions, and the economic behavior of PMVs, there is dearth of information on its small scale business behavior as both roots and routes of drug service delivery. This qualitative investigation considered PMVs as owners of small businesses, and sought their business perspectives in comparison with views of other small business owners in Igbo-Ora, Nigeria.

Method: This study utilized an iterative approach to data collection among 51 vendors. In-depth interviews about participants’ businesses were collected from PMVs (n=16), food vendors (n=7), clothing sellers (n=7), provisions sellers (n=9), motor parts dealers (n=7), and others (n=5). Data was analyses using content analysis technique.

Findings: Accounts from participant reveal differences between how PMVs and other business owners perceive their businesses, amount of education necessary to learn the trade as well as the level of professionalism and cleanliness required to operate successfully. Unlike other groups, PMVs routinely are asked for highly technical information at point of purchase. PMVs work largely under strong influence of trade associations due to high control measures imposed by regulatory agencies.

Conclusion: Although selling medicine is a small-scale enterprise, PMVs’ work is coordinated by regulatory agencies to provide technical services to their clients. Their business model is based on possessing adequate knowledge about their products and maintaining standards.

Keywords: Patent Medicine Vendor, Business Behavior, Business and Health, Entrepreneur
Introduction

Patent medicine vendors (PMVs) have become a major stakeholder in healthcare delivery in both rural and urban communities of developing nations. ‘Medicine selling’ has become a business that has tentacles in all corners of Africa where people buy medicinal products to solve their health problems [1-3]. By definition, a PMV has no formal pharmacy training and sells orthodox pharmaceutical products on a retail basis for profit. Although the summary definition did not clearly designate the PMV as a healthcare provider, the PMV enterprise is still the primary source of orthodox drugs for both rural and urban populations [2-3]. PMVs have both functional and legal dimensions to their practice. The functional part is the process of selling a product, while the legal component delineates which products the PMVs can and should sell [1].

“Patent medicine” refers to proprietary drugs that are considered safe to sell to the general public in prepackaged form including common drugs like analgesic tablets and cough syrups. Such medicines are to be sold in their original packets just as they come from the manufacturer. The package must not be altered, and drugs must not be extracted from the package for sale in lesser or greater number. In reality, PMVs have been observed selling both packets and counting out tablets from large tins to meet the need and ability to pay-off their customers [4].

Studies have documented that the bulk of customer-PMV interactions simply involve the selling of medications that the customer has requested [5]. Likewise, studies in African context have established that this behavior of PMVs resembles any other successful small scale business that responds to the demand of its customers [6-11]. Hence, one finds PMVs legally selling generic drugs like paracetamol and anti-malaria, while at the same time illegally selling antibiotics and psychotropic drugs that are outside the scope of their license [6-11]. The consumer views these dual behaviors as possible questionable, but definitely helpful and as part of the normal commercial and health landscape in many countries, though other countries have cracked down on illegal sales [12-13]. The glocalization [14] of PMVs for its global and universal existence in service delivery; global (in coverage) and local (in orientation) [15-16], is intrinsically sufficient to explore its small scale business behavior as both roots and routes [17] of drug service delivery.

PMVs featured in form of small and medium scale business. Small and medium scale businesses (SMSBs) are very important contributors to economic growth: they are considered as key providers of services to larger rural dwellers that larger firms cannot access due to their locational disadvantages. SMSBs are also major nurseries for the development of skills needed to service rural dwellers [18]. One important and striking behavior of PMVs is the process of selling patent and other medicines along with household products such as soap powder in shops and sometimes by hawking or riding motorcycles through the back streets of city slums or out in distant rural village [1, 19 - 21]. The economic behavior of PMVs reflects Jones and Tilly’s [22] assertion in SMSB orientation that it clearly permeates the histories of successful local businesses and suggests encouragement rather than discouragement of service delivery that allows hybrid of a link with local life, culture and relations. In a bid to agitate for safe delivery and make service accessible to rural dwellers for achieving better quality of life through localized entrepreneurs, it is
and cereal in their shops [1, 19-21]. On the other hand, PMVs are usually the prime source of medicines where formal health systems are weak [2]. Other questions are: how do the PMVs organise for boost up capital of different kinds required to get foothold in the business? And what are the dynamics of interactions and services which the PMVs render to the community? These questions can be answered by exploring both the small scale business behavior [17] as well as the drug service delivery from the perspective of the PMVs themselves and compare their perceptions to other small and medium scale businesses (SMSBs) operating in the same neighborhood.

Methods
This qualitative study was conducted at Igbo-Ora, the headquarters of Ibarapa Central Local Government, in Oyo State. It compared the economic behaviours and activities of the PMV with those of owners of other businesses in the town of Igbo-Ora, a community of about 100,000 populations and with agriculture and related activities as the main means of livelihood. Civil servants form another major occupational group.

A variety of health services exist in the community: a general hospital managed by the State Ministry of Health and the University of Ibadan, four local government dispensary/maternity units, four private clinics, approximately 50 patent medicine shops [24], and numerous indigenous healers. The community is endowed with both government and privately owned primary and secondary schools and a tertiary institution—school of agriculture that offers a national diploma program. Many food vendors operate around the town.

Data were collected through structured in-depth interviews among purposively selected small entrepreneurs (N = 51) in different occupational groups. Those groups include PMVs (n = 16), Food sellers (n = 7), Clothing sellers (n = 7), Provisions
sellers (n = 9), Motor parts dealers (MPD: n = 7), and Other Sellers (n = 5). In this study, “Other Sellers” refers to individuals selling either books/stationery or mobile phone accessories. PMV economic behavior was compared with other entrepreneurs in the community through a pretested interview guide that addressed the following key areas of business and trade behavior: Training and learning the trade; Getting started in the profession; Running the business; Trade associations; Customer communication at point of purchase; and Regulation and monitoring.

The analysis of the transcribed interviews was done using a codebook created by the researchers. The codebook provided a stable frame from which the researcher systematically coded [25], which is the process of identifying themes—that is, analytic categories in text [26-27]. The codebook guided a deductive application of codes to chunks of text in the transcripts in relation to the research questions being asked. Additional codes were inductively generated using an exploratory “grounded” approach [28] and they emerged from the business owners’ voices themselves, as suggested by Charmaz [29]. Twenty-seven codes were initially developed as part of the codebook. The codes were then combined into broader categories of themes for interpretation. Comparisons and trends were then identified using data matrices as suggested by Maxwell [30] using Atlas.ti version 7.1 qualitative data computer software (Scientific Software Development, Berlin) and Microsoft Word [31]. Atlas.ti v7.1 allowed for stratification of data by gender, location, and age. The overall result is produced and presented using content analysis technique and supported by direct verbatim quotation of responses to substantiate the content analysis. The overall results are then presented.

Results
The study participants consisted of 16 PMVs and 35 people in other trades including sellers of clothing, motor parts, cooked food, provisions, and other items. The stated motivations to start a particular business distinguished the two groups of small business owners. “Having interest” in a trade was a salient motivation among all the groups, followed by the desire to make a profit. A difference that emerged among the PMV respondents was a desire to care for their community. In the words of a male PMV, “I chose this trade because I like to be treating people health-wise.”

Getting Started
Two broad ways of learning the work emerged among the respondents. Formal training using an apprenticeship approach was more common among PMVs and Motor Parts Sellers than other groups. PMV training lasts between 1-4 years and is most commonly conducted by either a family member such as one’s father or by another already established PMV. In addition, there was mention of the need for a high school diploma. PMVs also recognized the need for continuing education as expressed by one female PMV who said, “New things continue pumping into our system, we as medicine dealers need regular and continuous training in order to prepare us to meet some contingencies and challenges of this job.” Both PMVs and MPDs mentioned that their professional guilds/associations issue a certificate to people who have completed their apprenticeship.

People in other businesses explained that they did not need any formal training to do their jobs. They thought, as a female food seller noted, that, “No formal training was necessary; rather market awareness and experience in business are helpful.” They explained that some basic literacy and numeracy skills were helpful. Although no formal apprenticeships were mentioned,
some of the other sellers said they worked alongside parents or relatives until they could take over the business or start their own.

Participants explained that their professions are similar to others in terms of objective: making money/being profitable. In terms of differences, no group provided such a detailed and multifaceted profile of differences as did the PMVs. PMVs perceived their business as quite different from others’ in terms of training, initializing, and maintenance. For PMVs, training requires a higher educational background. Initializing the business is capital intensive by renting a shop, getting a license, and buying the stock. Maintenance of the PMV business requires professionalism, neatness and cleanliness. One male PMV stressed the start-up capital by saying, “The only thing I consider different in running this business is the issue of huge capital, because one needs to make shelves, and acquire a license before starting up the business unlike other businesses which can just start at a petty rate.”

In addition to training, PMVs perceive a need to acquire a certain attitude and demeanor and indicated that they perform a “professional job,” unlike other businesses. This may be a perception, due in part, not only to the training/education necessary but also the “neatness” required of PMVs. Neatness translated to good sanitation and personal hygiene unlike businesses that are dirty as, “when you lay your hands on something dirty, for instance selling machine oil (MPDs), one cannot keep tidy always, even food sellers, one cannot compare the neatness of selling foods or machine oil to selling drugs”. [Female/PMV] Members of all groups identified the ‘start-up money’ as the primary resource necessary to start their business. Some respondents discussed the details of the specific monetary amount required to begin their respective businesses. PMVs mentioned start-up amounts between ₦100k and ₦250k. Amounts mentioned by others included ₦100k-400k for MPDs, ₦50k-200k for food sellers and ₦100k-150k for provisions sellers. All groups mentioned three main sources of their initial finance: individual savings, loan from family members, and loan from cooperative societies or a combination of these. No group differed in this regard. A PMV shared how he got his starting capital: “During the time I was learning the trade I was able to farm to make money and from this I was able to raise about half of what I needed to start up my business. Then, immediately, I wanted my freedom to start, so my dad gave me some money and I added it to what I had from farming and I was able to start the business” [Male/PMV].

Running the Business
Participants had been running their business between 3 and 22 years, and from this experience, most recommend their businesses to any interested individuals. Likewise, most felt it was relatively easy to start their businesses. For those expressing a reluctance to recommend, the challenge of getting start-up funds was the most common concern. PMVs were the only ones who mentioned a specific challenge such as ‘the time it took for training’ and ‘the licensing processes.

All occupational groups conduct business throughout the day. However, MPDs open earlier than other groups, around 7:00 or 730 a.m. They explained that their customers wanted an early start on auto repairs. While PMVs also sell throughout the day, they tend to sell most of their goods at night compared to other groups which sell more evenly throughout the day. Participants reportedly source their products primarily from surrounding cities and less often from neighboring countries such as Republic of Benin and Ghana.
There is a lot of variation in the frequency of stock re-order and it much depends on market conditions or “how quickly products are moving”. Market conditions also dictate where wholesale goods are bought. For instance, a Male provision dealer expressed his preference buying in Ibadan, the State capital of Oyo State, as a cheaper source of goods. “I prefer to go to Ogunpa Ibadan for purchase because the rate of selling the product can be cheaper than at Idumota in Lagos. It depends on the market. If the market moves fast, then I go every five times in five days but assuming there is no market then I go once in a week.” Small business people need to “consider the market” before deciding when to replenish stock. Supplies and purchasing frequency and lead-time range from 1.5 to 4 weeks for most occupational groups. PMVs indicated that they go to the urban wholesalers every month while provisions dealers go to market every 1.5 weeks.

Most of the business owners considered their own businesses both profitable and stable. Participants knew of some business owners who had dropped out, but they ascribed business success or failure to individual business acumen and motivation/dedication. Reflecting this view, a Female PMV explained how the commitment of a business owner is a determinant: “Business is business. Many people who start it end up closing while others can continue...some shift their business to another town while others drop out completely as a result of the inability to run a business well, due to their negative attitude and non-dedication to their business.”

Some shop owners were more circumspect and discussed how market fluctuation and market competition determined whether businesses succeed or fail. A female provision dealer was expressively passionate about the role of unstable market forces and business competitors in one’s success or failure: “Those in the business till today are using it to sustain their family members. Some continue just because they do not have any other business. Others that have dropped out could not get enough money to keep up their livelihood and because of market competition from other people who started after them.”

In a smaller town there are few enforced restrictions on where someone can locate a shop. Thus, participants based their choice of location on both business and personal factors such as: “close to family”, “good for business”, “next to the main road”, “family house”, and “previous owner quit”. Only those whose business primarily focuses on mobile phones said they do not need a permanent location but a simply a “seat, table, and umbrella.” Securing a business space is difficult, according to all occupational groups. Business owners seek busy areas where customer turnover is high and oftentimes rely on family for help in setting up shop. Finding a location on the roadside within the land owned by the family compound was ideal, financially. For most participants, their shop is their primary and only business. There is a small subset of people who are engaged in other work, mainly the PMVs. Some work in the health sector, have farms, or are teachers. Also, some of the PMV shops also stock provisions. They are motivated by the extra money that a second job will bring. A female PMV that had a second job in the same health field explained: “Well, I can say that I have been doing auxiliary nursing before setting up this business (PMV) but what this business is bringing for me at the end of the month is a little bit more than what I earn as an auxiliary nurse in a private hospital so I settle for this business (PMV) as my main source of income. The two jobs are similar and they complement each other. In addition, they both fetch me more
money and at the end of the month I am able to put my hand in my purse and bring out more money....” [Female/PMV].

Monitoring and Regulation
Generally, there is little monitoring and/or regulation on the products being sold among the six occupational groups. However, PMVs face a more substantial amount of regulation. PMVs are expected to sell only products that are registered with the National Agency for Food and Drug Administration and Control (NAFDAC) and may be subject to checks from the National Drug Law Enforcement Agency (NDLEA). A PMV explains that, “For NAFDAC and NDLEA, they come to the town unnoticed and they get around shops—medicine dealer shops—and when they come across any expired, fake, or banned products from any shop they would close the shop and take the owners to their office for proper investigation.” [Female/PMV]. Fortunately, no PMVs reported any confiscated goods. The consequences would be serious for business as one PMV explained, “None of my products have been banned and I pray that they don’t because it can kill the business in this community of ours. For instance, if any of the community members hear that a shop has been banned...due to quality issues then no member of that community, even a sibling or a family, will come to that shop and buy anything anymore.” [Male/PMV]

In contrast, provisions, MPDs, and other sellers do not worry about products being banned or confiscated because no monitoring agencies are in place. Clothing Sellers did not report any products being confiscated but explained that their trade association could do so if situation warrants. In addition to government agencies, all formal businesses reported belonging to a trade association. PMVs have a compulsory trade association, National Association of Patent Medicine (NAPMED) that has branches in the towns, Local Governments, States and ultimately at the national level. There are local associations in town for other trades, but shopkeepers do not have to join mandatorily. The size and strength of the different trade associations varies. For example, one Food Seller reported, “A trade association exists in the town but my involvement is a loose one...” Whereas a PMV explained, “There is a trade association for this type of business in town, and I am a member, and we do things collectively, and whenever someone has a problem, the trade association rises up to solve the problem easily.” PMV trade associations differ from other groups’ in the way that they are helpful to their members. Generally, other groups’ trade associations help in areas including advisory roles, financial support, and conflict resolution among others. As explained by a male PMV: “Because of the existence of government regulators, NAPMED offers to mediate between members and NDLEA, NAFDAC, and even the professional group, The Pharmacy Association of Nigeria, which is often antagonistic toward PMVs. As a member of an association one must pay dues and come to meetings regularly. Whenever there is an issue concerning NAFDAC, or NDLEA coming to our shops, such as the day before yesterday when it happened... the association is able to rise up through her executive nature and solve such a problem promptly. Thus, NAPMED is unique in that they offer protection in addition to other financial and general support.” [Male/PMV]

Perception of Community and Customers
Generally, the business owners affirmed that there is good social interaction, communication, advising, and small talk with their customers and community members, for example, “people can communicate with ease ... in my shop,
including family members who visit” expressed, a male MPD. Such communication may not relate directly with their businesses.

In contrast, the PMVs mentioned that the interaction they had with family, neighbors and customers was geared more specifically to the help they could render concerning people’s health. Some talked of helping family and other community members free of charge among PMVs. PMVs expressed the extensive benefits that their families reap from access to free medicines and basic care. A female PMV tied this to the interdependent nature of Yoruba communities in Nigeria, revealing a blur between the private and the public domains through their medicine selling. PMVs are very conscious of the benefit they bestow on family and other community members through their trade. She explained that, “Apart from making my life easier, whenever any of my family members fall sick, even slightly, they come to me and I give them drugs to use. Even when they go to the hospital and are given a prescription list then I will make sure that I supply them with the one that I can afford from my stock. The community members who fall sick but cannot afford to pay for the prescribed drugs come to me and we agree on terms...maybe he/she can pay a little amount and then pay the rest on an installment basis because 'health is wealth'. I consider doing this because if the person is not healthy enough to provide the basic needs for his immediate use, it means the whole family is in trouble. Besides, the issue of family bond in this community is strong...one may want to turn away someone asking for credit and later find out that his/her immediate family member is the person in need. [Female/PMV].

PMVs occupy a unique position where they are able to and actually do provide health counseling/education to those waiting to purchase medicines. PMVs explain that they not only provide instructions and information on products that they dispense but also educate the community members on issues of public health as explained by a female PMV, “The responsibility we have to our customers and every member of the community is to counsel them on issues that are particularly important to their health because most people do not know how to go about simple sanitation and this is very important especially for elderly and children under 5 years.”

In addition to education, some PMVs also reportedly provided basic first aid services to customers. PMVs are very different from other occupational groups in this regard. While other groups do not see themselves rendering special responsibilities in their trades, PMVs explained that their special responsibilities are related to lending credit or developing payment plans for customers. Only MPDs, among other sellers, indicated that sometimes, due to the high cost of motor parts, they also would develop payment plans for their customers. This not only help customers in fulfilling the payment but also enable themselves to retrieve their own money from customers. Customer-communication patterns differ across various occupational groups. PMVs, unlike most other groups, are often asked for information related to appropriate usage of the drug, cost comparisons between similar drugs, and those related to appropriate treatment for particular ailments. Nearly all PMV participants reported being asked such questions at point of purchase such as how to use the product.

Provisions Sellers sometimes are asked about new products, but generally, “customers do not normally ask for explanation on how to use the products they buy, they always ask about the quality of the materials I have in the shop” explained one Provisions Seller. Food, Motor Parts,
Clothing, and Other Sellers do not report being asked about products at point of purchase.

PMVs explain that there is no one-size-fits-all approach to customer communication, as each customer comes in with a different set of needs. Some individuals have prescriptions from a physician while others come in due to a “minor ailment like backache, body ache, mild malaria...” [Male/PMV]. PMVs discuss not only the use and effects of the medicines but also the price to ensure it is affordable because, “You have to consider this price, as we are selling mostly to poor people” [Female/PMV].

MPDs indicate that most times “customers choose the products because mechanics request what they need” and thus do not require much explanation if at all. Food Sellers explain that most people choose food items without a lot of explanation. “Most customers have decided what they want to buy and their mind cannot be changed. Some come on the advice of others before buying but they still would confirm this when they come,” said a food seller. Similarly, Clothing Sellers do not provide a lot of explanation to their customers because “most people have made up their minds about the desired products to buy.” Provisions and Other vendors report that customers come to their business “with their minds already made up” and neither ask questions nor request for explanations.

Discussion
In Igbo-Ora, where this study was carried out, the skilled artisans belong to a distinctly higher stratum in the informal sector. Data showed that participants earn reasonable incomes and have chosen a skill or set up their business as a permanent means of making a living.

The findings of the study further suggest that the informal sector makes an important contribution to skill acquisition in the economy through a system of informal apprenticeship. This method is a traditional and inexpensive way of skill transfer. Kazi [32] considered the skill acquisition in the informal sector as beneficial as there exists an opportunity for employee, where such occurs, to learn skills which he/she would not be able to afford otherwise. Further, the evidence indicates that the apprenticeship system enables workers to improve skills and shift to new trades with relative ease and at little cost. Further empirical research on internal differentiations between the boss and the apprentice across business group is essential to guide policy in the area of employment and income distribution.

The emphasis on basic education and a consistent period of training appears to have become a modern panacea to all challenges to development in business world at all levels. Specific to PMVs, appropriate education with training -need before entering into the ‘business’ underscores their capacity to provide adequate amount of safe services in the community. A review on the popularity and extent of patronage of Medicine Sellers in sub-Saharan Africa, during recent child illnesses [33] emphasised their availability for use as not-so-important as ensuring having the capacity to provide safe and appropriate medicines in correct amounts in the communities they serve. The same concern was raised by Adikwu [11] that PMVs’ continued existence without adequate control would lead to further problems in the sale and utilization of drugs envisaged under the essential drugs programme. Hence, ensuring favourable practices and safe delivery, close monitoring and regulation of PMVs’ practices was suggested in Nigerian studies [34-35].

The sources of opening capital for most businesses considered in this study are strictly the same. PMVs and other groups did not differ in this respect. Kazi [32] also observed that the financing of initial
investment was predominantly from the entrepreneur’s own earnings and occasionally by loans from the family. Just as Kazi [32] noted, none of the respondents mentioned bank credit as a source of funds but most of them cited lack of finance as the most important constraint to expansion. Leach [23] also noted that access to credit is rarely easy for the poor but women are likely to experience much greater difficulty than men in processing even small loans from banks, especially in rural communities. As noted, glocalization [14-16] of PMVs in health and small scale business services necessitate training and retraining in the services. While training duration or training at all, is not compulsory for some other trades involved in this study, initial training as well as frequent training on the job was observed as necessary for PMVs. This is accentuated by the nature of their job, which include quality drug dispensing and health services. For instance, Iheoma, Daini, Lawal, Ijaiya, and Fajemisin, [36] observed that refresher trainings for PPMVs have the effect of increasing the level of knowledge and practices in some area including appropriate prescription practices for diseases such as diarrhea treatment and for family planning counselling. Also, in a study of operations and roles of patent medicine sellers, Durowade, Bolarinwa, Fenenga, and Akande [37] opined that organizing capacity building workshops for the PPMVs can help strengthen their quality of health service and collaboration with other stakeholders.

In some cases, training may not be as important as access to credit. This is evidential in this study that some trades demand less training duration but high start-up capital. While it was argued that a small amount or cooperative thrift is all that is required to get a small business off the ground, some have also argued that providing credit is the most cost-effective form of support to poor women [23]. In rural area where many dwellers are poor, people lack the minimum amount of capital necessary to get a foothold, hence need for a boost up to the first rung [38]. Sachs [38] described the boost up to include the human capital needed for each person to be economically productive; business capital such as the machinery, and facilities used in industries and services; infrastructure critical to business productivity; natural capital that provide the environmental services needed by human society; public institutional capital including government services and policing that underpin the peaceful and prosperous division of labour; and knowledge capital which is the scientific and technological know-how that raises productivity in business output and the promotion of physical and natural capital. Clearly, not all the needed capital described by Sachs [38] are present in rural community where PMVs operate. However, if a PMV sells drugs with or without prescription, offer services like weight, blood pressure measurements, stock drugs, collaborate with the pharmacists in drug purchasing, collaborate with the formal health sector in patients’ referrals, and being a member of National Association of Patent and Proprietary Medicine Dealers (NAPPMED) [37], such a PMV must have satisfied the minimum amount of capital necessary to get a foothold [38].

**Conclusion**

Accounts from participants in this study reveal differences between how PMVs and other business owners perceive their businesses, amount of education necessary to learn the trade as well as the level of professionalism and cleanliness required to operate successfully. Unlike other groups, PMVs routinely are asked for highly technical information at point of purchase. PMVs work largely under strong influence of trade associations due to high control measures imposed by regulatory agencies. Although selling medicine is a small-scale
enterprise, the purveyors of the trade see their work differently from other small businesses. Their business model is based on possessing adequate knowledge about their products and maintaining standards. PMVs can increase human resources for health because they want to improve both their work and business prospects.

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