Universal health coverage in Nigeria: strategies for engagement of patent medicine vendors in rural communities

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Abstract

Background: Universal health coverage has been touted as a key policy objective of most health systems the world over. However, to what extent it has been achieved across continents and countries varies widely, with sub-Saharan Africa faring the least while bearing the highest burden of disease. In these settings, much of the inhabitants are rural and access needed health care from untrained, often poorly regulated commercial drug shops, with concerns over products and service quality frequently expressed. The study undertook to critically explore and understand retail drug market interactions in a rural context with a focus on identifying scope for potential regulatory interventions that aim to improve retail drug market performance.

Methods: The study was underpinned on the neoclassical framework of Structure-Conduct-Performance Paradigm, and data was collected from a sample of patent medicine vendor outlets in Katsina-Ala Local Government Area of Benue State, north central Nigeria, between March and October of 2014. Data was triangulated using semi-structured questionnaires, in-depth semi-structured interviews, structured observations, Key regulatory interviews and review of secondary documentary evidence.

Results: The study established patent medicine vendor outlets to be important sources of essential medicines for inhabitants of the local government area for ambulatory primary health care. Although drug shop retailers were acknowledged as offering reliable sources for a broad range of drugs at relatively more affordable prices, a number of market failures exist.

Conclusions: The study recommends a review of current stand-alone policies guiding the practice of patent medicine retailing in Nigeria to better align it with contextual realities.

Key words: Universal Health Coverage, patent medicine vendor, consumer, regulation, rural areas, Nigeria

Highland Med Res J 2017;17(2):86-91

Introduction

Universal Health Coverage (UHC) is at the centre of current global healthcare delivery debates and agendas, having been recognized at the Alma-Ata Declaration over three decades ago that "Health for All" was a requirement both for enhanced quality of life and global peace and security[1]. UCH implies people getting health care they need, where and when needed, delivered in user friendly ways[2], and embeds mobilization of sufficient resources for health, reduction in reliance on out-of-pocket payment for health services and enhanced efficiency and equity. It is therefore a crucially important component of sustainable economic and social development, poverty reduction and key to enshrining social equity. However, attaining universal health coverage has remained a conundrum for most health systems across the world. In Nigeria for instance, the government has adapted several health reform programmes since the 1980s (including the primary health care paradigm) to deal with the challenge with minimal success.

Consequently, market relationships in the provision of healthcare services have emerged as prominent feature of Nigerian healthcare landscape[3,4,5]. The private sector looms large in the country, providing about 70% of health services and accounting for 65% of total health expenditures[6,7]. Private health markets are pluralistic, consisting of both for-profit and not-for-profit entities offering a wide and diverse range of products and services[8]. The structure of the for-profit healthcare providers is equally varied comprising institutional, group or individual based providers, with the latter rendering full range clinical services or limited to mainly pharmaceutical retailing.

The continuum of drug retailers reported in the literature encompasses a limited number of pharmacies, extensive network of specialised drug shops run by individuals with some health related qualifications or no medical training, numerous general shops and itinerant vendors both having no medical qualifications whatsoever[3,9,10]. These retail outlets are widely used for common health problems of public health importance as malaria, tuberculosis, respiratory infections and sexually transmitted disease[11,12], owing to easy accessibility, quick services, availability of more reliable drugs, courtesy and

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affordability considerations[13,14]. There has therefore been a growing interest in engaging retail drug outlets to expand coverage of appropriate and essential care for common health ailments[15,16]. However, this interest is tempered by high predilection among retailers for frequent regulatory infractions and prioritization of profits over quality considerations with consequent poor treatment outcomes and associated behaviours that increase drug pressure on the society[17]. These socially undesirable practices have provided a basis for resistance from some government quarters against collaboration; preferring stricter regulation or outright ban of these medical entrepreneurs.

The aim of this study was to explore the potential of improving patent medicine vendor practice and their use as channels for expanding coverage of essential healthcare services particularly in rural communities, leveraging on their quantitative importance and geographical spread. We also examined potential policies approaches for improved patent medicine performance that may leverage sustainable public-private partnership for universal health coverage.

Materials and Methods

The study was conducted in Katsina-Ala, Local Government Area in Benue State, north central Nigeria. It is located about 190 Kilometres north east of the state capital, Makurdi and has a total population of 249, 219 [18] who are mostly yam and crop farmers. It is rural with few paved roads, erratic power supply and has no portable water. The Council has a total of 48 government health facilities comprising a State general hospital and 47 local government clinics and dispensaries, complemented by a private pharmacy and 93 patent medicine vendor outlets. Ethical approval for the study was obtained from the ethical clearance committee of Queen Margaret University, Edinburgh and the Benue State Government, Nigeria. Study participants provided informed consent to participate and given the legally sensitive nature of the information to be obtained, retailers were assured that the study was unconnected to neither drug regulatory authorities nor the findings be used for taxation. Furthermore, they were assured of anonymity and confidentiality as strategies to encourage disclosure of information perceived to be commercially or legally sensitive, such as drugs they were not permitted to stock and practices beyond their remit and competencies.

Data were collected for this study using three tools that comprised questionnaires, in-depth interviews and observational studies. Firstly, an outlet census of all patent medicine vendors in the council was undertaken to provide a baseline data on the number and location of outlets as well as serve as sampling frame. All patent medicine vendor outlets were administered structured questionnaires to collect provider data related to socio-demographic characteristics, regulatory visits, compliance with regulations and perceived regulatory infringements. In-depth interviews were then conducted with 10 purposively selected retail outlet owners across the council area to explore further, retailers' perceptions and behaviours in the market. In a similar way,[30] systematically selected patent medicine vendor clients were surveyed using a structured questionnaire and a further 10 purposively picked for in-depth interviews. In addition, Five key informant interviews with government regulatory officials overseeing pharmaceutical supply chain were undertaken to supplement the former data. These were at State Ministry of Health (SMoH), Federal Ministry of Health (FMoH), Consumer Protection Council (CPC), Pharmacist Council of Nigeria (PCN) and National Agency for Food and Drug Administration and Control (NAFDAC). All interviews were conducted in English language and digitally recorded, except for patent medicine vendor outlet clients who could not speak English. These were conducted in their native language and translated into English.

Qualitative interviews were manually analysed along thematic lines, which was constantly refined throughout the analytical process, focusing on aspects with potential for public-private collaboration and engender universal health coverage.

Results

Out the 93 providers sampled, six (6.4%) had only primary level education, 53 (57.0%) completed secondary schools, while the remaining 34 (36.6%) providers indicated they had post-secondary school education. included in the post-secondary level of education group were health related specialties as nursing, pharmacy technology, medical laboratory and community health extension. There were also variations in years of experience in retail drug vending within the sample, ranging from a year to thirty years, with most lying in the 11 to 15 years category.

Patent medicine vendors' perception of their roles are presented as verbatim quotes and analysed.

Perceived health system challenges and barriers

Patent medicine retailers identified multiple gaps in the public health system in terms of inadequately distributed service points, financial barriers and poor availability of drugs and thus viewed their role as providing cheaper alternatives for consumers and improved accessibility to products, provided at extended and flexible work hours. Retailers also felt they complemented the formal health systems by emphasizing referral of serious cases, and receiving prescriptions from them in turn.

"One good thing is this; the grassroots is where the population of the entire local government is based. The

general hospital here is the only general hospital around this place, and it has no drugs, they are either on strike or not functional and that one alone cannot meet the needs of the entire people. So sometimes, we get the drugs to ease the pains of the masses." (R 03)

Another seller puts it more emphatically:
"I want to tell you that without patent medicine dealers in Nigeria, there is no way you can help the condition of patients in this country. There is one pharmacy here. Can one pharmacy be able to attend to everybody in this local government area? It is we that are providing drugs where there is no pharmacy." (R 02)

The importance and hence relevance claimed by patent medicine vendors is explicitly corroborated by a regulatory official:

"Retail medicine vendors are supposed to fill a gap that is created because pharmacists are not in that community." (PCN)

Whilst these drug sellers emphasised their role in complementing the public sector in attaining the overall health agenda of the country, they also conceded to regulatory infringements

"Actually, what you are saying is true, eh, some of the drugs we sell, our license did not cover it, but since we are in local area, where sometimes, we only find one pharmacy or not, we do have those essential drugs." (R 07)

The analysis reflects the important role of patent medicine vendors as a vital source of essential health care in rural settings, a role tempered by low training and pervasive regulatory infringements.

Aspirations and expectations
All interviewees and questionnaire respondents consistently expressed the desire for enhanced knowledge and practice improvement through continuing education and timely and relevant information dissemination from regulatory agencies. They perceived current regulatory interventions as inappropriate and ineffective and desired improved regulation that reflected contextual realities.

Consumer perceptions and expectations
Patent retailers were referred to variously as doctors, chemists, patent medicine vendors or simply as drug sellers, and generally described either as qualified or quack. A provider who was known to have acquired any form of medical or health related qualification such as nursing, nursing assistant, pharmacy technician, medical laboratory technician was seen as qualified provider, while one who understudied an experienced retailer and established a retail outlet was labelled as quack. Patent vendor outlets were therefore adjudged to offer services of varying standards, although overall, these providers were perceived as playing crucially important roles in host communities. They were thought of as providing emergency services and/or temporary treatment before definitive treatment was sought at more opportune time.

These notions are encapsulated in several consumer responses as these:

"Well, I feel the medicine store sellers too are of help, because in emergency situations, they address immediate problems that may arise," (R 04)
"These people are important because they are helpful, especially in times of difficulties when you don't have enough money, like now."(R 06)

Utilization of drug vendors
Multiple reasons for the use of medicine stores were offered such as closeness of provider to home, proxy buying, quick services and suitable opening times, as reflected in some typical responses:

"I have so many children, so when they go ill, I usually consult the retailer on behalf of my ill child." (R 02)

For other consumers, the appeal for patent medicine vendors was short waiting times, drug availability and convenience.
"The retail shops are better because they respond quickly to people's problems, unlike the government hospitals that don't even have drugs. (R 10)

These quotes explicitly reflect the important role of patent medicine vendors as key sources of healthcare and agree with the views of both drug vendors and drug regulators

Banning of patent medicine shops
In Nigeria at the moment, there seems to be a growing consensus among formal regulatory agencies and formal pharmacy operators about scrapping of drug retailing by vendors due to quality and regulatory concerns. Therefore, asked if patent medicine vendor outlets be banned, all consumers interviewed strongly opposed the notion. These are the thoughts of one respondent:

"The government will kill us, because not all of us will be able to go to the town for hospital …" (R 08)

The many deficiencies identified in the market notwithstanding, it is unequivocal that consumers valued this group of medical entrepreneurs highly, and want them retained.

Provider training and qualification
Retail outlet clients desired that providers improve their educational training and enhance their qualifications to boost their competences as revealed in consumer interviews:

"I will advise the federal, state and local

governments to organize workshops that will further enlighten these practitioners." (R 09)

In this sense, both users and providers in patent medicine outlets acknowledged the value of training opportunities to improve practice and outcomes in the market.

Regulation

Consumers also expressed the prospects of improved regulation of practitioners, to ensure that the right standard of health care is provided.

"There should be a regulatory body that should be seeing over their respective affairs, let them not take it as their own personal business, let them be checked." (R 01)

"Moreover, medicine stores are of great importance, so I feel, it should not be closed. If only the government wish to be fair, it should look for better means that will improve services, thereby ensuring that it is qualified personnel that should dispense." (R 09)

These expectations from drug shop consumers are borne out of their perceived inappropriate qualifications and practice, poor regulatory compliance and weak regulatory enforcement.

Patent vendors in the eyes of regulators

Regulatory staff framed patent medicine vendors as untrained pharmaceutical merchandizers, more appropriate for rural areas and licensed to provide only basic household remedies as first aiders. They were also labeled as law breakers:

"In Nigeria first and foremost, we recognize pharmacist, the pharmacy technician and for the purpose of pharmaceutical care and services in the remote areas and basic household remedies, we recognize the patent medicine vendors". (PCN)

Furthermore, another regulator said:

"Retail medicine vendors are supposed to fill a gap that is created because pharmacists are not in that community and because the operators of patent medicine shops are not highly skilled in the art of medicine." (NAFDAC)

Regulators have said patent medicine vendors are untrained and unskilled in the science and art of pharmacy and medicine. They flaunt the rules by engaging in unlawful practices as sale of prescription only medicines, wholesale and handling of cases beyond their competencies. These qualities not doubt constitute real threats to any strategy to partner these entrepreneurs in the delivery of public health interventions.

Regulatory officials identified a range of regulatory strategies and interventions to deal with these market failures such as; standard setting and provider training, information dissemination and awareness creation and coercion and sanctioning. These approaches have however been constrained by inadequate funding, weak institutional capacity and inter-regulatory agency conflicts.

Discussion

In much of the developing world, public paradigm of healthcare provisioning has been the channeling of products and services through public sector facilities and Non-governmental organization for free or at subsidized price. Inequalities in access arising from this model of distribution have been linked to resource constraint and selective provisioning of services.

The study has highlighted the important role played by patent medicine vendors in expanding coverage to essential health care services in a rural community. The finding of retail drug shops locating in remote areas and sometimes being the only source of health care has been widely reported in the literature from central and eastern Africa[19,20,21]. The high acceptance and utilization reported in this study has also been reported in the literature documenting retail drug shop practices elsewhere in Nigeria, Tanzania and Cameroon. Consumers have been shown to use or even prefer drug shops above formal facilities for reasons as closeness to home, availability of reliable drugs, convenient opening hours, cheapness of services and scope for credit[19,17,13]. Also, the vexed issue of pervasive regulatory infractions by retailers and weak regulatory enforcement and supervision has been widely reported in sub-Saharan Africa and other low income countries[22,23,24]. In the Nigerian context, regulations that govern these vendors exist, but implementation has been ineffective for a number of reasons as location in remote and difficult to reach places, inadequate infrastructures and tacit permission of regulatory infringements[25]. Concerns regarding technical quality of services obtained at patent medicine vendor outlets as expressed by consumers and regulatory officials have also been reported previously in Nigeria[26,27,28].

The evidence has highlighted the potential of patent medicine vendors to expand access to essential drugs and potentially serve as a platform for the provisioning of community based public health programmes. However, the steep inclination for regulatory violations poses constraint for a possible public-private partnership. Evidence has also shown that interventions to improve the quality of service delivery at retail drug outlets in sub-Saharan Africa have produced mixed outcomes and their long term impacts are not known[23,29]. This has partly been attributed to the stand-alone nature of these interventions among other factors as it also emerged in the Nigeria study. The study has demonstrated the complex nature of challenges embedded in the market (low competence of providers, regulatory infringement and weak regulation) and therefore, argues for multifaceted approaches that integrates the elements that

enhances provider knowledge, improves consumer and community health literacy and allows feasible mechanisms of regulatory implementation and supervision to improve overall performance of patent medicine vendors and position them for partnership with the public sector[11,17].

A mix intervention comprising accreditation, focused consumer information and enhanced inspectorate has successfully increased access to quality pharmaceutical products and practices among drug shops in rural and peri-urban areas of Tanzania[17,30,31]. In this programme, a drug shop can become an Accredited Drugs Dispensing Outlet (ADDO) by undergoing a specified training, which entitled a retailer to also sell a limited range of prescription-only drugs, receive regular supervision, refresher trainings, business skills training and access to microfinance as incentives[30].

The model has shown that drug vendors' profit maximization motives were tempered by desire for appropriate knowledge base related to rational drug use and took pride to be seen as custodians of powerful healing medicines. Tanzania represent a similar context to Nigeria in many respects and provides an appropriate template which Nigeria can adopt in its tenuous efforts to achieve an ethical retail drug shop market suitable for engagement in the provision of essential public health care interventions.

Conclusion

Market relationships occur in every health system, with more visible presence as the influence of the public sector weakens. The study has demonstrated the significant role and importance of the phenomenon of patent medicine vendors in the widespread provision of health care commodities and services in rural areas, where they may be the first and only source of healthcare. Also, potential points of interventions have been highlighted. To creatively and sustainably engage patent medicine vendors to improve the quality of services as precondition for universal health coverage, multi-faceted strategies involving all key stakeholders, including policy makers, retail providers, inspectorate agencies and the final consumers must be developed.

Whilst health system goal of improved and sustained universal coverage with healthcare is desirable, the means of achieving it remains the subject of debate. For example, the potential role of markets as demonstrated may be encouraging, its undesirable impact on equity and universality has been observed[32]. In order to promote sustainability through the development of health markets, policy trade-offs between equity and universal health coverage and long term efficiency and sustainability need to be considered. This is of crucial policy importance in public-private partnership that seeks to achieve the desirable public health goal of sustainable universal healthcare access.

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