

Original Research Article

Purchasing attitudes of consumers towards domestic and foreign products sold in community pharmacies: A case study of the Federal Capital Territory, Nigeria

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Abstract

Purpose: To investigate consumer/client purchasing patterns regarding domestically produced and imported goods in community pharmacies in the Federal Capital Territory (FCT), Nigeria.

Methods: A cross-sectional survey of clients of community pharmacies in the FCT was used. Data were collected using a semi-structured questionnaire containing both open-ended and closed-ended questions.

Results: The results showed that 67.6 % of the respondents preferred to purchase foreign products stocked in a community pharmacy, 30.7 % domestic ones, while about 2 – 7 % were neutral. Most consumers preferred to purchase locally manufactured herbal products and beverages, although a majority preferred to buy foreign medicines, other medical products, cosmetics, and toiletries. In decreasing order of consideration, cost, availability, prescription, and experience with the product determined their preference for domestic products, while quality, prescription, and experience with the product dictated their choice of foreign products.

Conclusion: Nigerian consumers prefer foreign drugs, cosmetics, and toiletries because they are aware of their superior quality. However, they prefer locally produced herbal products and beverages.

Keywords: Domestic medical products, Foreign medicines, Purchase choices

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INTRODUCTION

Consumers' behaviour in the decision-making process before purchase of products is well established and documented [1,2]. Numerous studies have demonstrated that a variety of factors influence consumers' purchasing choices, which include the product's country of origin,

brand name, advertising, price, and availability; family and friends; and consumers' ethnocentrism [1,2]. Presently, consumers worldwide are knowledgeable and can choose from an extensive variety of both foreign and domestic products. In most developed countries, ethnocentrism has been observed, as consumers have a strong preference for products

manufactured locally [3]; while in developing countries consumers often prefer and regard foreign products as status symbols. The deleterious effects of a nation's reliance on imports are numerous, and they include threats to the domestic production of goods and services, national security, local industries, and cultural identity.

Majority of African nations, including Nigeria, cannot produce some medicines and other products; as a result, they depend on international corporations to meet their citizens' demands. Medicines used in Nigeria are mainly imported, and distributed through poorly organized and controlled public and private channels.

There is a paucity of information on Nigerian consumers' preferences for locally manufactured or foreign medicines and other products purchased in community pharmacies and the determinants of their choice. This study assessed the purchase behaviour of consumers in the Federal Capital Territory (FCT), Nigeria regarding locally manufactured and foreign products sold in community pharmacies.

METHODS

Study design

This was a cross-sectional study among clients (consumers) visiting community pharmacies in the FCT, Nigeria.

Study location

The study was conducted in the FCT, Nigeria. The FCT is currently made up of 6 Area Councils (AC); Abaji, Abuja Municipal Area Council (AMAC; location of Abuja the capital city of Nigeria), Bwari, Gwagwalada, Kuje, and Kwali.

The study was conducted among clients of community pharmacies located in various urban, semi-urban, and rural communities in 5 AC of the FCT - AMAC, Bwari, Gwagwalada, Kuje, and Kwali.

Sample size and sampling procedure

The respondents were the clients (consumers) of sampled community pharmacies. According to the Register of Pharmacy Council of Nigeria (PCN, formerly known as Pharmacists Council of Nigeria), 685 community/retail pharmacies were licensed in the FCT by December 31, 2020 [4] and this formed the population size. Minimum number of community pharmacies to be visited

was calculated to be approximately 500 using the Cochran formula [5] at 99 % confidence interval and 3% margin of error, and subsequently, a modification of the Cochran formula for sample size calculation in smaller populations [6]. The sample size was calculated as 5 clients per pharmacy to be a minimum of 2500.

Community pharmacies to be surveyed (500) were selected using a multi-stage sampling method. In stage one, the number of community pharmacies to be surveyed in each AC was selected by purposive sampling method and their location in the AC (urban, semi-urban, rural). In stage two, simple random sampling was used to select the community pharmacy in each location.

Inclusion criteria

The respondent must be a client of the community pharmacy, who visited the pharmacy while the researcher was there; 18 years and above; and be willing to participate in the study.

Data collection

Data were collected from the respondents by administration of pre-tested semi-structured questionnaires self-developed by the research team containing both open-ended and closed-ended questions, in electronic Google Forms®. The questionnaire had three sections: Section A - Socio-demographic characteristics; Section B – Consumers' preference for foreign or local products; Section C – Consumers' perceptions about foreign and locally manufactured products purchased in community pharmacies. The questionnaires were administered by the researchers and research assistants who visited the community pharmacies.

Data analysis

Since an electronic questionnaire was used, all responses were visible on Google® spreadsheet on submission through a link. The data in the Google® spreadsheet was then downloaded into a Microsoft Excel® worksheet. Data were analyzed using Microsoft Excel® 2016 and presented as mean ± standard deviation (SD).

Scoring system

Responses to questions in Section C were scored on a five-point Likert scale as strongly disagree - 1, disagree - 2, neutral - 3, agree - 4, strongly agree - 5. The mean and standard deviation (SD) of the responses were determined and the average of the five-point scale, mean =

3.0 was used as a cut-off point; thus, mean ≥ 3.0 indicated agree, whereas below 3.0 disagree.

Ethical considerations

The study was approved by the Federal Capital Territory Health Research Ethics Committee (approval no. FHREC/2021/01/71/29-06-21), and was carried out according to ethical guidelines stipulated by the Committee. All participants provided written and signed informed consent.

RESULTS

Socio-demographic characteristics of the consumers

A total of 2559 responses were collected. Among the respondents, 74.4 % were in the age range of 18 - 40 years, and 54.4 % were males. The respondents resided in rural (11.1 %), semi-urban (31.5 %), and urban (57.4 %) areas of the FCT. The results further showed that most of the respondents (54.2 %) had a first degree as the highest educational qualification, while 0.3 % had no formal education (Figure 1).

Consumer’s preference for local or foreign products

The majority of the consumers (59.8 %) considered a product’s country of manufacture before purchase, and 91.6 % said they use foreign products. Findings revealed that 67.6 % preferred to purchase foreign products stocked in a community pharmacy, 30.7 % domestic products, while about 2 – 7 % were neutral. Respondents stated that they preferred foreign commodities because of their superior quality and guaranteed efficacy, among other reasons. Only 30.7 % of respondents said they would prefer to purchase a Nigerian-made product over an imported one if the prices were the same (Table 1). More consumers preferred to purchase locally manufactured herbal products and beverages; while they preferred to purchase foreign medicines, cosmetics, toiletries, and other medical products (Table 1).

Determinants of consumers’ preference for local and foreign products

Some of the consumers (47.6 %) could recognize a locally manufactured product, while 48.9 % could recognize a foreign product by visual inspection. Some of the respondents could visually identify if a product is domestic or foreign by the quality of packaging; and by the manufacturer’s details including name, address, and country of origin. Other features used to identify the origin of the products are shown in

Table 2. Some respondents said that products with poor quality appearance, packaging, and

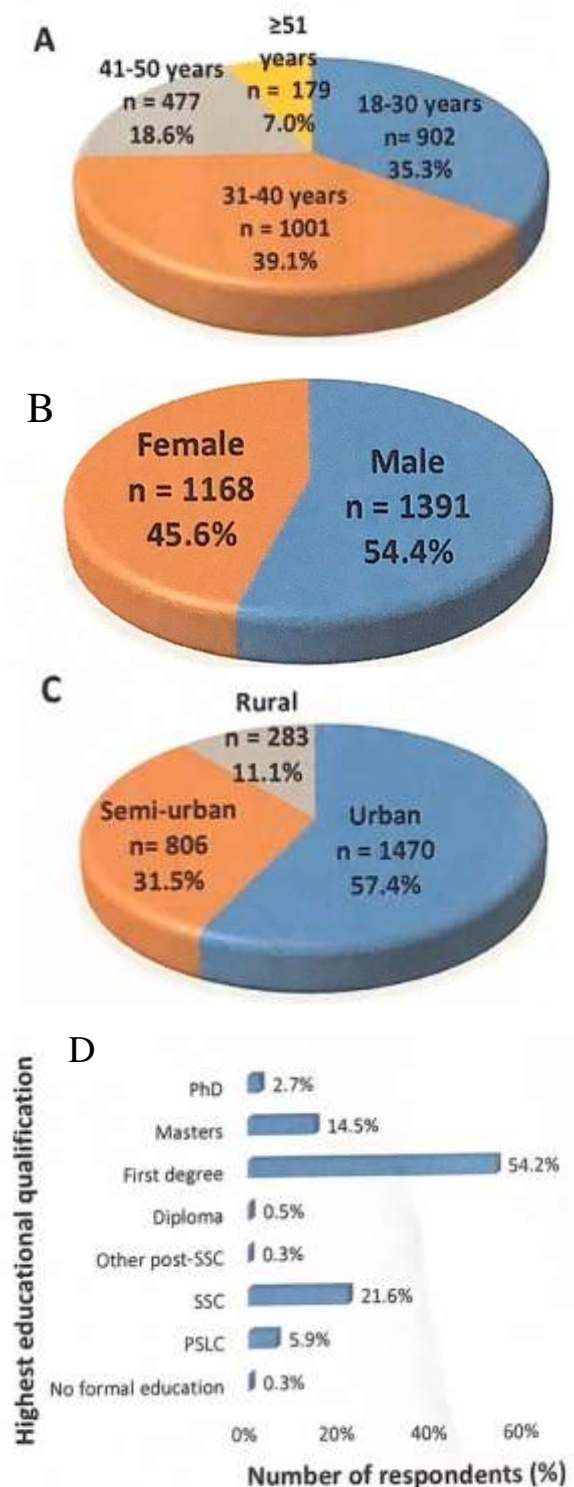


Figure 1: Socio-demographic profile of the respondents showing Age distribution (A), Gender distribution (B), Area of residence (C), Highest educational qualification (D) **Key:** PSLC, Primary School Leaving Certificate; SSC, Senior School Certificate; other post-SSC qualifications such as National Certificate of Education and Community Health Extension Worker

Table 1: Consumers' preference for local or foreign products – purchase patterns

Statement/Question	Response	
	Frequency	%
Do you consider a product's country of manufacture before purchase?		
Yes	1531	59.8
No	1028	40.2
Do you use foreign products?		
Yes	2343	91.6
No	216	8.4
I prefer to purchase locally manufactured products stocked in the community pharmacy to foreign ones.		
Yes	786	30.7
No	1605	62.7
Neutral	168	6.6
I prefer to purchase foreign products stocked in the community pharmacy to locally manufactured ones.		
Yes	1730	67.6
No	778	30.4
Neutral	51	2.0
Why do you prefer foreign products to locally manufactured ones?		
Superior quality	1207	47.2
Guaranteed efficacy	840	32.8
Tested, trusted, and reliable	232	9.1
Authentic/genuine	132	5.2
Availability	24	0.9
Good customer complaint system	24	0.9
Some foreign countries have better regulatory bodies	4	0.2
I usually purchase locally manufactured products in the following categories		
Medicines	2008	78.5
Other medical products (surgical materials, vaccines, etc.)	1134	44.3
Herbal products	1966	76.8
Beverages	1944	76.0
Cosmetics	1514	59.2
Toiletries	1607	62.8
Others	11	0.4
I usually purchase foreign products in the following categories		
Medicines	2362	93.3
Other medical products (surgical materials, vaccines, etc.)	1748	68.3
Herbal products	1607	62.8
Beverages	1931	75.5
Cosmetics	1913	74.8
Toiletries	1716	67.1
Others	6	0.2
If a foreign product and a Made in Nigeria product are priced the same, would you prefer the Nigerian product?		
Yes	785	30.7
No	1774	69.3

other features were locally manufactured; while foreign products were superior (Table 2).

Cost (73.0 %), availability (54.7 %), prescription (48.3 %), recommendation by the pharmacist (46.1 %), and experience with the product (46.1 %) in decreasing importance of consideration determine their choice to buy local over foreign products. While quality (87.2 %), prescription (62.1 %), experience with the product (55.5 %), and recommendation by the pharmacist (51.2 %) in decreasing importance of consideration determined their choice to buy foreign over

locally manufactured products. However, some purchase local products out of patriotism (24.2 %) and ethnocentrism (14.5 %) (Table 2).

Consumers' perceptions of foreign and locally manufactured products purchased in community pharmacies

The consumers disagreed that some Nigerians buy foreign products for acceptance in a particular social group. Nevertheless, 35.2 % agreed and 21.8 %

Table 2: Consumers' preference for local or foreign products – determinants

Statement/Question	Response	
	Frequency	%
What factors determine your choice of local over foreign products? (Select all that apply)		
Cost	1868	73.0
Availability	1399	54.7
Prescription	1235	48.3
Recommendation by the pharmacist	1180	46.1
Experience with the product	1180	46.1
Quality	1041	40.7
Information from others who used the product	725	28.3
Patriotism	619	24.2
Confidence in the quality of products stocked in the pharmacy	504	19.7
Confidence in the product/manufacturer	491	19.2
Intuition	450	17.5
Product marketing/promotion	406	15.9
Preference for locally manufactured products (ethnocentrism)	371	14.5
Others (e.g., absence of an alternative)	1	0.03
What factors determine your choice of foreign over locally manufactured products? (Select all that apply)		
Quality	2232	87.2
Prescription	1589	62.1
Experience with the product	1421	55.5
Recommendation by the pharmacist	1311	51.2
Confidence in the product/manufacturer	914	35.7
Availability	912	35.6
Preference for foreign products	844	33.0
Confidence in the quality of products stocked in the pharmacy	824	32.2
Information from others who used the product	786	30.7
Cost	652	25.5
Product marketing/promotion	566	22.1
Intuition	521	20.4
Can you recognize locally manufactured products by visual inspection?		
Yes	1218	47.6
No	1341	52.4
If Yes, what are the characteristics you look out for to enable you make a decision?		
Poor packaging	563	22.0
Manufacturer's details, including name and address	272	10.6
Inferior container/pack	163	6.4
Poor appearance of product	73	2.9
Inferior label	32	1.3
Product leaflet is inferior	1	0.04
Can you recognize foreign products by visual inspection?		
Yes	1250	48.9
No	1309	51.2
If Yes, what are the characteristics you look out for to enable you make a decision?		
Proper and superior packaging	718	28.1
Manufacturers name and address	194	7.6
Satisfactory appearance	86	3.4
Detailed information about product in the leaflet	25	1.0
Superior product container/pack	8	0.3
Good seal	2	0.1
Proper and superior label	2	0.1

strongly agreed that Nigerians are more likely to pay a price premium for a foreign than local product About 29.9 % agreed, while 18.1 % strongly agreed that they perceive 'Made in Nigeria' products are of low quality, hence inferior, compared to foreign products which they regard as superior. They also agreed that Nigerian consumers believe that 'Made in

Nigeria' products are of low quality, hence inferior; while foreign products are superior. They disagreed that Nigerians prefer domestically manufactured products to foreign ones (mean = 2.9) and dislike purchasing foreign products because it hurts the economy and causes unemployment (Table 3).

Table 3: Consumers' perception of foreign and locally manufactured products purchased in community pharmacies

Statement	Mean \pm SD	Remarks
Some people buy foreign products so that they can be accepted in a particular social group	2.7 \pm 1.5	Disagree
Currently, consumers in Nigeria are more likely to pay a price premium to purchase products made by a foreign firm than that manufactured in Nigeria by a Nigerian firm	3.4 \pm 1.3	Agree
Consumers in Nigeria may perceive lesser risk in buying products from countries with a high reputation	3.6 \pm 1.2	Agree
Consumers in Nigeria will prefer products manufactured overseas by a foreign firm if the product's price/quality mix is perceived to be significantly superior to that of a familiar product manufactured by a Nigerian firm	3.8 \pm 1.1	Agree
Most Nigerians believe that made in Nigeria products are of low quality, hence inferior	3.8 \pm 1.1	Agree
Consumers in Nigeria perceive foreign products as superior	3.8 \pm 1.1	Agree
I perceive Made in Nigeria products as inferior	3.3 \pm 1.2	Agree
I perceive foreign products as superior	3.4 \pm 1.2	Agree
Nigerians prefer domestically manufactured products to foreign ones	2.9 \pm 1.2	Disagree
Nigerian consumers dislike buying foreign products because it hurts the economy and causes unemployment	2.5 \pm 1.2	Disagree
Nigeria has proper and robust/efficient complaint-handling systems to allay fears of consumers on the purchase of local products	2.4 \pm 1.2	Disagree

Mean < 3 = disagree; mean \geq 3 = agree; SD = standard deviation

DISCUSSION

Although consumers' preferences for locally and foreign products have been studied in other countries, the socioeconomic conditions and the healthcare delivery systems in Nigeria are different from other countries. The reasons why such preference exists amongst consumers in urban and rural areas remain largely unknown. The findings of the study revealed that majority of the respondents preferred to purchase foreign products stocked in a community pharmacy.

The study showed that most consumers preferred to purchase foreign medicines for diverse reasons including superior quality, availability, guaranteed efficacy, and reliability. Most African countries including Nigeria lack the capacity to produce the medicines that they need; consequently, they rely on foreign pharmaceutical companies to meet the needs of their citizens. Furthermore, few categories of medicines are produced by Nigerian pharmaceutical manufacturing companies, hence majority of medicines needed by the citizens are imported. The findings revealed that majority of the consumers thought that imported products were superior and of higher quality than those produced in Nigeria. The consumers' assertion that their preference for imported goods is strongly influenced by their demand for high quality shows that they generally think that imported goods are better and of guaranteed higher quality than domestic ones. According to previous surveys, majority of consumers in Africa and developing countries prefer products from

foreign developed countries, because they perceive them to be superior to domestic ones [7,8]. Research has established that consumers' decision to purchase pharmaceutical products, specifically medicines, is influenced by their level of literacy and personal beliefs/presumptions as well as those of their immediate or extended family [9].

These beliefs include the general assumption that medicines manufactured in developed countries are of better quality than those manufactured in developing countries. These presumptions include the widespread notion that pharmaceuticals produced in industrialized nations are generally of higher quality than those produced in developing nations. However, majority of Nigerian consumers in the study preferred to buy locally manufactured herbal products and beverages. This may be partly because the quality of these products produced in Nigeria is excellent and has been maintained, tested, and trusted over time.

Some respondents believe that affordability and accessibility are strong reasons to buy local goods, suggesting that most people do so due to a lack of available finances. Additionally, some domestically produced goods could be readily available, in contrast to some imported goods that might not always be available due to importation difficulties and other problems. According to several studies, cost and accessibility are significant considerations for people in underdeveloped countries like Nigeria

where 50 - 100 % of medicines are paid for directly by the customer [9]. Out-of-pocket (OOP) payments, which include cost of medicines, continue to be a major source of healthcare financing in Nigeria [10,11].

Other socioeconomic variables that may affect a consumer's choice of any product include age, education, income level, gender, and status [3]. Prior research has shown that a variety of factors, including prescriptions, community pharmacists' recommendations, consumer perceptions of products, costs, accessibility, perceived severity of illness, safety, and efficacy, influence consumers' decision-making processes and selection of medicines [12]. Likewise, earlier research showed that factors such as quality, brand recognition, association, packaging, pricing, and advertising affected how consumers made decisions about buying cosmetics [13,14]. With a gross domestic product growth rate of 3.23 %, unemployment rate of 14.2 %, and inflation rate of 15.98 %, Nigeria is a developing nation with a low-to-middle-income mixed economy [15].

Despite a desire to be self-sufficient, Nigeria is primarily dependent on imported goods and services to meet its citizens' needs because of its low capacity to produce capital and consumer goods. For some years now, local industries and products have been facing several challenges which have hampered the growth and development of Nigeria and its citizens. To stimulate the economy, it is imperative to support and strengthen local industries.

Limitations of this study

The study was conducted in FCT only. Results obtained may not apply to other urban cities due to cultural differences and socio-economic status.

CONCLUSION

A majority of Nigerian consumers prefer foreign medicines, cosmetics, and toiletries; although they prefer locally manufactured herbal products and beverages. Demand for high quality influences customers' preference for foreign pharmaceutical products. This should be of concern to Nigerian pharmaceutical manufacturers to produce pharmaceuticals that meet global standards in quality and packaging to improve customers' preference for locally manufactured products.

DECLARATIONS

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Ethical approval

The study was approved by the Federal Capital Territory Health Research Ethics Committee (No: FHREC/2021/01/71/29-06-21) and was carried out according to ethical guidelines stipulated by the Committee.

Availability of data and materials

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Conflict of Interest

No conflict of interest associated with this work.

Contribution of Authors

We declare that this work was done by the author(s) named in this article and all liabilities pertaining to claims relating to the content of this article will be borne by the authors. All authors made a significant contribution to the work reported, whether that is in the conception, study design, execution, acquisition of data, analysis and interpretation, or in all these areas; took part in drafting, revising or critically reviewing the article; gave final approval of the version to be published; have agreed on the journal to which the article has been submitted; and agree to be accountable for all aspects of the work.

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