Open Access Library Journal
2023, Volume 10, e10185
ISSN Online: 2333-9721
ISSN Print: 2333-9705

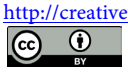
Pricing Strategies of Pharmaceutical Wholesalers in Zimbabwe and Their Impact on Service Provision

Pias Tomupei Musiza

Graduate School of Business, University of Zambia, Lusaka, Zambia
Email: pias@pharmastrategies.org

How to cite this paper: Musiza, P.T. (2023) Pricing Strategies of Pharmaceutical Wholesalers in Zimbabwe and Their Impact on Service Provision. *Open Access Library Journal*, **10**: e10185.
https://doi.org/10.4236/oalib.1110185

Received: April 26, 2023
Accepted: May 23, 2023
Published: May 26, 2023



Abstract

The economy of Zimbabwe is currently going through hyperinflation with inflation well above 586% against the US dollar. The inflationary pressure is causing untold suffering to the nation particularly in the area of healthcare and the cost of medicines. As such, pharmaceutical wholesalers are struggling to fund imports of pharmaceuticals due to lack of low cost foreign currency. Some wholesalers have been forced to close trading in order to preserve value. The decline in the economy has led to severe unemployment rates way upwards of 90% and the informal sector has become the mainstay of "doing business". Pharmaceutical wholesalers are struggling to survive moreso under a severe shortage of foreign currency required for the importation of basic pharmaceutical products leading to the collapse of the pharmaceutical sector. The aim is to study the current crop of pharmaceutical wholesalers' pricing strategies and understand the pricing drivers in order to explore opportunities for cost containment and increase supply and access to imported medicines. Through the use of a purposive sampling approach, one hundred and fifteen (115) registered pharmaceutical wholesale owners and their managers in the city of Harare were interviewed through use of open-ended questions and discussions. The population sample represents ninety percent of the registered pharmaceutical wholesalers. The study used Porter's business strategies theory as the conceptual framework. The data collected was used to analyse, categorize, codify, and tabulate to draw themes central to the research question. These themes included a strategic focus on pricing, impact on retail pharmacy inventory management, impact of patient care, and reimbursement by medical funders. The findings may inform policy-makers in determining/reviewing the standards of pharmaceutical practice and insights critical to resolving the research question.

Subject Areas

Business Management

Keywords

Arbitrage Pricing, Generic Strategies, Pricing Strategies, Pricing Approaches, Zimbabwe

1. Introduction

The ongoing hyperinflationary environment spiralled by the weakening RTGS currency against the US dollar has worsened the already fractured economy of the Republic of Zimbabwe. With inflation at a level of 586%, the value of the RTGS Dollar as a currency of transactions has been severely depleted. This has forced businesses across all sectors to explore alternative means of doing business and preserving value. During the period 2008-2010, the pharmaceutical sector in Zimbabwe experienced a myriad of challenges in a US dollarized economy. However, the pricing and supply challenges improved through dollarization.

Now, over the past three years, the Zimbabwean economy has been under extremely difficult times economically and socially. The decline in the economy has led to severe unemployment rates way upwards of 90% and the informal sector has become the mainstay of "doing business". Businesses have struggled to survive moreso under a severe shortage of foreign currency. The Central Bank of Zimbabwe (RBZ) is unable to provide enough foreign currency required for the importation of pharmaceutical products to enable the health sector to function. The challenge has led to the imminent collapse of the pharmaceutical sector. The development is worrisome when one notes the increase in both non-communicable, communicable diseases and the Covid-19 pandemic associated diseases which require management with basic medicines. As such, it has become a suppliers' market leading to incessant shortages of critical items. The traditional pharmaceutical distribution model has been affected by shortages and arbitrage pricing rules, making basic medicines unaffordable to ordinary patients. Medication has become a luxury as patients now turn to traditional and spiritual healers for possible solutions.

Historically, in the early 1980's soon after independence, the Government of Zimbabwe inherited a capitalist economy and moved to establish a socialist one. During that period, the government reviewed several key policies that underpinned a very robust economy, which was rated amongst the best run worldwide. The Government also addressed key sectors of public enterprise including education, health, agricultural food production, mining, and tourism, which underpinned foreign currency inflows. Expenditure on public-sector employment rose by 60%, and on the civil service by 12% per annum over the course of

the 1980s. Central government expenditure tripled and increased its share from 32.5 percent of GDP in 1979 to 44.6% in 1989 (The Economist. 420 (8997). 9 July 2016) [1]. All that happened under the backdrop of a very highly competitive exchange rate on the financial markets and excess foreign currency reserves.

As the country progressed into the 1990s, the economy began to nosedive leading to reduced expenditure budgets of critical service sectors like education, health, and city council service departments. Generally, the financial markets were markedly affected by extremely repressed interest rates thus discouraging saving. Meanwhile, the appetite for increased public expenditure, particularly in civil service, social services, government subsidies and defence became marked resulting in increased public borrowings, extremely high budget deficits and hyperinflation. Unemployment increased from 35% to current levels of 95% coupled with a decline in wages and discretionary income (EconWPA, 22 December 2005) [2].

The process of pharmaceutical wholesaling and distribution requires high working capital supported by access to cheap foreign currency to meet national pharmaceutical needs. In a market where the cost of money is extremely high and public procurement challenges impact continuity of the supply of cheap and affordable pharmaceutical products, health service provision becomes a mammoth task indeed. With foreign pharmaceutical manufacturers becoming reluctant to supply products in non-bankable markets where the traditional tools of trade exchange no longer hold, the thrust has been on pharmaceutical wholesalers having to self-finance and source foreign currency through orthodox means to meet their financial obligations. The situation has led to scarcity of essential medicines across the country. Where such medicines are available the premium price that patients pay makes it unaffordable. The market has become a predominantly sellers' market.

1.1. Structure of Zimbabwe's Pharmaceutical Industry

The Zimbabwe pharmaceutical wholesale business has very low barriers to entry. According to the Medicines Control Authority Register (2021), the Zimbabwean pharmaceutical industry consists of one hundred and twenty (120) pharmaceutical product wholesalers. Ninety percent of the pharmaceutical wholesalers import generic medicines from Indian pharmaceutical manufacturers and distributors, whilst less than five percent import innovator products from Europe and South Africa. Of the twenty-four main pharmaceutical importers, ten companies account for ninety percent of the pharmaceutical importation in the country. The private sector has various pharmaceutical wholesalers with the major ones among them being Pharmaceutical & Chemical Distributors (PCD), New Avakash, Sky Pharmaceuticals, Greenwood Wholesalers and Pulse Pharmaceuticals. As such, the local pharmaceutical wholesaling and distribution industry is a key partner in the delivery of a robust national pharmaceutical service. The growth in medicine imports is largely due to suppressed local production thus making the country a net importer in the long run. Local manufacturers have been able

to supply only forty-seven percent by item of Zimbabwe's essential medicine requirements (UNIDO, 2010) [3]. According to the 2005 Medicines Prices in Zimbabwe Survey, the cumulative mark ups added to medicines to the final consumer were as high as 138 percent thus making medicines prices beyond the reach of many patients.

The pharmaceutical industry in Zimbabwe is regulated by the Medicines and Allied Substances Control Act (MASCA) and the Dangerous Drugs Act (DDA), together with their corresponding regulations. MASCA is an Act to institute a Medicines Control Authority of Zimbabwe and bestows on such The MCAZ keeps a register of all pharmaceutical wholesalers, veterinary wholesalers, clinics and medical devices as well as the responsible persons who have oversight on the professional distribution, use and dispensing of the same medicines. The Authority also develops and publishes guidelines on various topics covered by the Act in addition to the MASCA.

The local industry is faced with a lot of competition from other external generic manufacturers, mainly from India. The threat of new entries is relatively low due to high product registration costs by the MCAZ. The power of buyers, who include private wholesalers, government, and retail pharmacies, is relatively high as these are price sensitive. With the increase in corruption, the market is seeing a development of product cartels amongst the established pharmaceutical wholesalers and emerging "quasi-distributors" leaving little room for small pharmacies to compete. The threat of substitutes is high given the high number of generic substitutes readily available. Rivalry in the industry is intense with local manufacturers facing stiff competition on market share from external exporters and foreign manufacturers who have local distributorship rights.

1.2. Statement of the Problem

The decline in the economy has led to severe unemployment rates way upwards of 90% and the informal sector has become the mainstay of "doing business" (Zimbabwe National Statistics Agency, 2013) [4]. Businesses have struggled to survive moreso under a severe shortage of foreign currency. The Central Bank of Zimbabwe (RBZ) rations foreign currency required for the importation of basic pharmaceutical products through an Auction system to enable the health sector to function. The development is worrisome when one notes the increase in both non-communicable, communicable diseases and Covid-19 pandemic that can be managed with basic medicines. As such, pharmaceutical market has become a suppliers' market. Chibango (2013) [5] argues that pharmacies in Zimbabwe face serious viability challenges, with 90% struggling to stay in business. In the same light, pharmaceutical wholesalers are experiencing even greater difficulties in sustaining profitability due to poor economy performance and severe regulatory restrictions (Chirisa, Dumba, & Mukura, 2012) [6]. The challenge now is that pharmaceutical wholesalers are maximising profits on a backdrop of scarce foreign currency, spiralling foreign currency parallel markets and incessant shortages. Some are taking advantage of the disparity between the official and parallel

market rates to practice arbitrage pricing. It is the indulgence of such behaviours that has led the researcher to undertake the study and understand the pricing strategies and behaviours of the pharmaceutical wholesalers as well as the impact of such decisions on service provision.

1.3. Theoretical/Conceptual Framework

In this Study, the researcher uses Michael Porter's Business Strategies Theory as the theoretical framework. Porter developed generic strategies that businesses can use to attain profitability (Porter, 1985) [7]. The Study focuses on the four generic strategies that are used to achieve competitiveness in the market from a pricing perspective. The strategies of cost leadership, differentiation, differentiation focus, cost leadership focus are therefore discussed broadly. The researcher linked the business strategies and models to the pricing approaches open for use by the pharmaceutical wholesalers as they pursue their profit motive. The pricing decisions taken by corporations vary based on the type of service or product they deal in. As such, the researcher reviewed/uncovered the pricing mechanisms that are applied by the various targeted pharmaceutical wholesalers for the similar/same products marketed. Mark up pricing, competitor-based pricing, perceived value pricing, price skimming and targeted return on investment pricing are some of the pricing strategies used by organization in the pharmaceutical industry. The researcher also sought to understand whether there is any emerging pricing approach utilized in that regard.

1.4. Significance of the Study

In this Study, the researcher explored the pricing strategies and behaviours of licensed pharmaceutical wholesalers in their distribution of medicines to both the public and private sectors in Zimbabwe. The study was localized in Harare where ninety percent (90%) of the wholesalers are based, as well as Bulawayo and Mutare. From my Study, the findings may inform policy makers in determining/reviewing the standards of pharmaceutical practice to improve service provision. The findings may also provide insights critical to resolving the research question which albeit has become a "thorn in the flesh" for policy makers, practitioners, and the general population of Zimbabwe. Furthermore, based on the findings from the Study, the pricing perspectives and insights will inform the National Pricing Committee on Pharmaceuticals on how to further research and deal with the supposed arbitrage pricing. In this regard, the study fits well to address the contentious phenomena and advance specific strategies and recommendations to deal with the research problem.

1.5. Contribution of Study Results to Practice and Knowledge

The Study sought to understand the insights and issues that drive adoption of specific pricing strategies by the pharmaceutical wholesalers. The research outcomes may serve as a critical benchmark for adoption of national pricing poli-

cies that address the research problem in government, pharmaceutical professional bodies, retail community pharmacy associations, pharmaceutical distribution associations, university academia, other researchers in the field of pharmacy, private sector leaders, and pharmacy industry employees by contributing towards the improvement of medicines availability, accessibility and affordability through judious pricing policies. Downstream effects would also be felt by medical aid societies which provide the necessary pharmaceutical requirements cover for the patients and the patients themselves through understanding the rationale behind a well-orchestrated pharmaceutical service that aids in curtailing arbitrage pricing hence providing service benefits in a rational and sustainable manner. The research contributes immensely to the development of common approach to pharmaceutical pricing thus improving supply through coordinated foreign currency provision in a continuous equilibrium economic market. The research may also be of value to small-to-medium (SMEs) pharmaceutical wholesalers to adapt and adopt enduring pricing strategies that enable business continuity in economically turbulent periods. Large pharmaceutical wholesalers may benefit from the study by gaining insights on how they can competitively price product offerings. Government, through the national pharmaceutical procurement entity, NATPHARM, may benefit by adopting and implementing an enduring pricing strategy for their service. Furthermore, the Study may stimulate industry discussions and engagements on the contentious issue. Overall, the Study adds/expands on the limited corpus of knowledge on strategic management of pharmaceutical industries in Zimbabwe and African continent and can be part of efforts to close the gap on lack of literature on pharmaceutical strategic management and implementation.

1.6. Research Question

In this Study, the research question was: What are the pricing strategies of Pharmaceutical Wholesalers who distribute medicines to both the public and private sectors in Zimbabwe?

1.7. Aim/Goal of the Study

The main objective of this study was to explore and investigate the current pricing strategies of registered pharmaceutical wholesalers and their impact on service provision in Zimbabwe. The qualitative study also investigated the pricing behaviours and pricing response strategies of the identified pharmaceutical wholesalers and explored the impact of such behaviour on service provision.

1.8. Specific Objectives

The specific objectives of the study were as follows:

1) To assess the current pricing strategies used by registered pharmaceutical wholesalers in Zimbabwe.

2) To determine the current pricing behaviours of licensed pharmaceutical

wholesalers in Zimbabwe.

3) To assess the factors affecting the pricing models leading to spiralling prices which are hindering product accessibility by patients in Zimbabwe.

2. Literature Review

2.1. Porter's Business Strategies Theory

Porter's five forces model reflects the way an organization situates itself from an industry analysis perspective in relation to its external environment. By taking a closer analysis of its industry outlook, the organization can benchmark the extent of its performance and competitiveness in its chosen industry. Furthermore, Porter (1980) [8] believes that the intensity of competition in an industry is a function of the relative strength of five basic competitive forces namely the threat of new entrants, threat of substitute products or services, bargaining power of suppliers, bargaining power of buyers and rivalry among existing firms. The threat of new entrants depends on the perceived profitability of an industry, and the ease with which new firms can enter the industry which in turn depends on the barriers to entry and expected retaliation of already existing firms. The seven major sources of barrier to entry are mainly, economies of scale, product differentiation, capital requirements, switching costs, access to distribution channels, cost disadvantages independent of scale, and government policy switching costs. Porter (1980) [8] distinguished three categories of competitive strategies called Generic Competitive Strategies which create a long-term competitive advantage *i.e.* cost leadership strategy, differentiation strategy focus strategy.

Tanwar (2015) [9] quotes Michael Porter and argues that competitive advantage grows out of value a firm can create for its buyers that exceeds the firm's cost of creating it. Value is what buyers are willing to pay, and superior value stems from offering lower prices than competitors for equivalent benefits or providing unique benefits that more than offset a higher price. The pricing decisions taken by corporations vary based on the type of service or product they deal in. Mark up pricing, competitor-based pricing, perceived value pricing, price skimming and targeted return on investment pricing are some of the pricing strategies used by organization in the pharmaceutical industry to name a few.

2.2. Cost Leadership Strategy

Porter (1985) [7] posits that cost leadership strategy requires the sale of a "standard, or no-frills" product combined with "aggressive pricing". Cost leadership strategy-oriented organizations emphasize cost control hence all departments and functional areas are directed by such a maxim in their operations (lean structures), procurement (low-cost raw materials usage), financial (low margins that drive high product uptake), reliable technology, marketing, and general administration duties. Datta (2010) [10] echoes similar postures regarding cost leadership strategy and accedes that it requires the sale of a "standard, or no-frills"

product (Porter, 1985) [7] combined with "aggressive pricing" (Porter, 1980) [8] whilst operating the firm in a broad scope serving multiple industry segments to gain a low-cost advantage. Valipour *et al.* (2012) [11] positions cost leadership strategy as a strategy that takes place through experience, investment in production facilities, conservation, and careful monitoring on the total operating costs through programs such as reducing the size and quality management whilst Stankevičiūtė *et al.* (2012) [12], also argues that once an organization elects to pursue a cost leadership strategy, it must reach a lower cost of a product or a service than its competition. In this regard, efficient cost control becomes a critical success factor for the organization fend off potential competitors. Hsieh & Chen (2011) [13] quoting Bordean *et al.* (2010) [14] and Porter (1985) [7] argue that organizations that implement cost leadership strategy employs several activities like accurate demand forecasting, high-capacity utilization, economies of scale, technology advancement, outsourcing and learning/experience curve. As an example, Hilman & Kaliappen (2014) [15] review the impact of cost leadership strategy and its effectiveness in the hospitality industry wherein distinctive competencies in materials management, operational activities and production processes led to cost effectiveness in the hotel industry.

2.3. Differentiation Strategy

Stankevičiūtė *et al.* (2012) [12] state that companies which use differentiation strategy aim towards unique products that would be more distinguished than others. Such differentiation is often targeted towards issues to do with product design& packaging, use of different technologies in product presentation and quality, the type and level of servicing and even distribution network and channels utilized to access the product or service, as well as the extent to which post purchase service is offered. Hsieh & Chen (2011) [13] propound that differentiation-oriented organizations attempt to create differentiated products and services that are perceived as unique by customers, provide value to them, and create loyalty. The major advantage for differentiation is that it fortifies the organization from competitors. Kavale *et al.* (2016) [16] support the above by asserting that a differentiation strategy calls for the development of a product or service whilst building the critical strengths necessary for market share consolidation through access to leading scientific research, staff expertise, heightened product development systems supported by a robust R&D team as well as building good customer loyalty and perceptions. The organization may also create firm linkages with other suppliers that focus on areas of core competence to exploit value for each other thus enabling specialization and improved procurement and service support between the organizations. With other firms, product mix, distribution channels and service support.

2.4. Focus Strategy

The other generic business strategy according to Porter (1985) [7] is the focus strategy, also known as the niche strategy. Hitt, Ireland, and Hoskisson (2016)

[17] define focus strategy as a marketing strategy that focuses on delivering a product or a service to a specific market segment. The organization objective is to serve the identified target market segment optimally and effectively penetrate it in a way that distinctly differentiates their service level/product from the competitors effectively to create a distinct competitive advantage. The defining difference in strategy implementation and execution lies in an intimate understanding of customer needs to which the organization determines to serve and doing so effectively. Through a conscious, rigorous, and intimate customer relationship building effort, the organization will be best set to translate its customer insights into tangible products/services that are directed by the ever-changing needs of their customer base. Consequently, there is inherent congruence of their product offerings to customer needs which sustains the business concept effectively through trust and loyalty.

2.5. Focused Low-Cost Strategy

In the low-cost focus strategy, the business seeks to be a low-cost producer in a specific market segment by offering services/products that meet/exceed their market requirements. The strategy is commonly applied by new start-ups seeking to have a footprint in a specific industry but can also be adapted by those entities which are already trading in that specific industry. Due to the high cost of market entry and operational costs, newly developed business organizations may also struggle on low-cost margins hence the strategy may not provide the enduring benefits seemingly attendant to the strategy.

It is obvious that a new entrant cannot compete against the market giants directly. Therefore, these companies prefer market penetration with lower prices for their products. Of course, it can be difficult to continue this strategy in the long term, but it is very effective for new entrants. As such, the strategy does not offer long term benefits to new business entrants thus posing a significant risk to financial performance and market penetration in the long run. The ever-changing appetite for new product developments may invoke unsustainably high operational costs in R&D, distribution and manufacturing thereby eroding the fine veil of profits enjoyed by the entity. Often the organization will be forced to default into the differentiated focus strategy where high margins may potentially sustain long term business operations. In differentiated focus strategy, there is need to understand both the broader market as well as the targeted market segment to get a grasp of the valid and compelling differences that constitutes them. The absorbed insights will be useful in making strategy decisions that resonate with the specific market segment to enable sustainable business performance. Having looked at the types of competitive strategies that an organization can select based on its objectives, the next Section deals with the forces at play in an external environment. As such, thorough assessment should be made to determine how such forces will impact the business and prepare on the response strategies to survive in operations.

2.6. Porter's Five Forces Model

According to Porter's Five forces of Competition model, Porter (1985) [7] argues that the potential for a firm to be profitable is negatively associated with increased competition, lower barriers to entry, many substitutes, and an increased bargaining power of customers and suppliers. These forces are namely supplier power, threat of new entrants into the industry; buyers' power; the threat of substitutes as well as competitive rivalry. In the pharmaceutical industry, supplier power can be derived from raw material suppliers for active pharmaceutical ingredients (API); the manufacturers; pharmaceutical wholesalers and distributors themselves; and the labour unions. The distributors procure medicines under company specific distribution agreements which guide business contact, pharmacovigilance as well as marketing codes and covenants which ensure continued product availability and business confidence. Such arrangements preclude the tendency to switch manufacturing principals but do not restrict importation of substitute generic or other branded products. The argument is that most wholesalers require an expansive product offering to allow pharmacies to make their own choices on product selection. To some extent, the practice also aids in reducing monopolistic tendencies by innovator companies who supply them. To that extent primary supplier power is diluted and weak. Due to the limited number of importer pharmaceutical wholesalers, their power in the value chain is strong as pharmacies rely upon them for continued product availability.

Buyers' Power in the Pharmaceutical Industry in Zimbabwe

Structurally, the pharmaceutical industry has diverse players which can be regarded as buyers within the system starting from the hospital pharmacist manning the pharmacy, the distributor buying from yet another distributor, the prescribing physician or doctor, the patient, the medical funder, the medical insurer as well as other supportive service providers. Depending on the critical mass attained by the varied service providers, the balance of buyers' power tends to flow in areas where there are significantly high numbers of constituent service providers. Within the Zimbabwe pharmaceutical industry, pharmacies now constitute 75% of the business with over eight hundred pharmacies providing a pharmaceutical service in the private sector across the country. This is followed by the prescribing physicians who have the potential decision to script the medicines either generically or by brand hence playing a crucial role in terms of what the patients ultimately gets dispensed by the pharmacist. With the current de-emphasis on branded medicines, generic medicines are becoming popular due to affordability and support by the medical funders thus pharmacist play a significant role in terms of determining what the patient ultimately gets dispensed. The increased size of pharmacy service providers and physicians has diluted their bargaining power leading to price wars within the retail sector and consulting services. Horsten (2004) [18] commenting on the impact of competition on the product-market strategies of entities in the pharmaceutical industry in South Africa, propounded that with more and more drugs coming off patent,

cheaper generic alternatives are becoming increasingly available leading to enactment of supportive legislation that promote the heightened importation, distribution, dispensing and supply of such medicines to improve availability and access.

Competitive Rivalry

Kinyua (2014) [19] states that competitive rivalry among firms usually takes the form of jockeying for position using tactics like price competition, advertising battles and product introductions. Whilst such tactics may seemingly provide sanctuaries for maintaining or improving overall organizational profitability and survival, they have a downward impact on long-run profitability due to reduced prices, increased operational costs and high appetite for product innovation in order to differentiate service/products. In the Zimbabwean pharmaceutical industry, there are 120 (one hundred and twenty) pharmaceutical distributors. Whilst the number may seem apparently high for the market size, only twelve are involved in primary importation of pharmaceuticals with the rest relying on secondary distribution for sustenance. As such, there are five main distributors who actively conduct both primary and secondary distribution. Arising from the structure of the industry the level of competitive rivalry within the primary distribution sector is not intense. However, it is quite intense in the secondary distribution sector driven mainly by generics and over the counter medicines. As such, primary distributors enjoy healthy margins particularly in therapeutic areas which are still less congested.

Threat of Substitution

Bruijl (2018) [20] reviewed the relevance of Porter's five forces in today's innovative and changing business environment and concluded that factors that may influence the threat of substitute products and services are switching costs between substitute products or services and industry products, or buyer's addiction to buy substitutes. Horsten (2004) [18] posits that in the pharmaceutical industry, substitution could be anything from generic versions of off-patent drugs to herbal remedies that purport to have the same healing capacity as patented drugs. In the Zimbabwean pharmaceutical industry, the impact of generic medicines as alternatives/substitutes to branded medicines has been felt across the value chain leading to disinvestment by the top pharma companies. Furthermore, whilst the market growth is lucrative at entry of generics, the experience curve is not sustainable in the long run. Bruijl (2018) [20] reports that in 2003, the generic drugs industry in South Africa grew by more than three times the patented medicines sector but became a significant threat to the pharmaceutical industry's research and development initiatives thereby affecting the supply of quality patented medicines.

Threat of New Entrants

In the pharmaceutical wholesaling and distribution industry in Zimbabwe, the major barriers to entry are the high cost of capital needed for set up and operations. With high interest levels from the banking sector coupled with a chronic shortage of foreign currency, setting a new pharmaceutical distribution center

could be a risky exercise. The profit margins are not controlled but are dependent on one's ability to access foreign currency on the auction floors at premium prices which forces the importer to levy high returns as future foreign currency needs are unreliable. The tendency has led to arbitrage pricing in the market leading to product shortages and inconsistent import activities. The market is incessantly unstable politically hence driving down investor confidence. In South Africa, Horsten (2004) [18] reports similar challenges in the pharmaceutical industry whereby the raising new capital to finance company operations is the major barrier to entry. Furthermore, the South African government regulates mark-ups on pharmaceutical products by setting a maximum single exit price (SEP) which limits the level of profitability that an entity can earn. Furthermore, the South African policy on generics forces prescribers to do so in line with use of generic medicines thus further eroding profitability.

3. Research Methodology

The Study was a descriptive, multi-case study using the qualitative approach in order to explore, develop and understand the respondents' experiences around the research problem. The study used a methodological triangulation of semi-structured interviews, questionnaires, and document analysis to collect data from pharmaceutical wholesaling companies in Zimbabwe.

3.1. Research Study Design

The researcher used the qualitative research methodology in this study, more specifically the multi-case study research design which provides more elaborate and intensive interaction and exploration on relationships, themes emotions and processes between the researcher and the participants. Gray (2014) [21] defines qualitative research as an investigation of phenomena, typically in an in depth and holistic fashion, through the collection of rich narrative materials using flexible research design. To this end, the researcher selected a sample of one hundred and fifteen potential respondents comprising of owners, directors, and managers of pharmaceutical wholesalers and distributors in Harare, Bulawayo, and Mutare from the one hundred and twenty registered pharmaceutical wholesalers in the country. All the named cities have locations where registered pharmaceutical wholesalers operate. A researcher initiated Interview Guide with set questions seeking to address the research problem which was fielded to the respondents with open ended questions in a one to one interview.

3.2. Study Site

To achieve this objective, the researcher sent out the questionnaire to all company owners, directors, managers, procurement, and marketing managers in Harare; Bulawayo, Gweru, Kwekwe and Mutare through emails and telephone contact due to constraints posed by the need to maintain Covid-19 regulations in areas outside Harare. The choice of the locations was guided by the presence

of registered pharmaceutical wholesalers actively trading in such areas. Due to limited travel under Covid-19 regulations, participants in outlying were contacted by email or telephone.

3.3. Population Size

In this Study, the population size was one hundred and twenty qualified pharmacists or pharmacy technicians. The inclusion criteria meant that only qualified personnel registered with the Medicines Control Authority of Zimbabwe and currently practicing in wholesaling business with a deep knowledge of their industry and its challenges were deemed able to offer appropriate and insightful responses to the research question. The location for such personnel was anywhere in Zimbabwe's main cities.

3.4. Sampling

In research terms, a sample is a group of people, objects, or items that are taken from a larger population for measurement Denzin and Lincoln (2011) [22]. The sample is chosen from the study population that is commonly referred to as the "target population or accessible population" Steyn (2001) [23]. Purposive sampling approach was used to interview the 115 (96%) registered pharmaceutical wholesale owners and their managers in the city of Harare, the capital city of Zimbabwe as well as Bulawayo and Mutare. Based on a population size of 120, to achieve a Confidence Level of 95% with a margin of error (CI) of 2%, the ideal sample size was calculated at 115. As such, a population sample representing ninety six percent of the registered wholesalers in the database of the Medicines Control Authority of Zimbabwe (MCAZ) was deemed appropriate for the Study.

3.5. Data Collection

The researcher visited some of the pharmaceutical wholesalers at their site and interviewed the owners(s) and their managers individually for confidentiality purposes and collect the data on pricing behaviours/strategies through fielding questions as per key informant interview guide. Other participants were interviewed virtually. The responses were recorded on tape and then decoded. Other participants were contacted by telephone. The interview guide was fielded to each participant with their responses recorded and coded for analysis. The interview was structured in accordance with the set objectives of the study.

3.6. Data Analysis

Yin (2009) [24] proposed that multi-case study research produced vast amounts of data whose analysis was complex and required flexibility, experience, and skill. Data analysis is critical to the study since it exposes the underlying emerging themes necessary for conceptualization of the research problem. Unlike quantitative research, qualitative research has no prescribed way of analyzing data. As such, the researcher reviewed the collected information and revalidated

it for completeness before making inferences. Data coding and categorization was conducted to develop a consistence pattern that delineates description of research phenomena to assist in data interpretation. Triangulation was utilized to validate data quality and enhance validity. Emphasis was placed on credibility, transferability, and dependability to confer trustworthiness.

4. Results/Findings

The response rate for all questionnaires was 73%. Face-to-face, virtual face to face and telephone calls greatly improved the response rate.

4.1. Response Rate

The sample size of the study comprised of 115 managers and owners drawn from pharmaceutical industries in Zimbabwe. The research was able to obtain 73.1% (n = 84) response rate, with only 26.9% of the sample participants not taking part in the research. According to Bryman (2012) [25], a response which is above 60% is considered adequate for statistical analysis. Hence the responses obtained in this research were deemed sufficient. The targeted respondents were identified by their location to provide a percentage distribution compared to the overall respondents targeted for the Study. Harare targeted respondents' sample consisted of the greatest percentage of 81% and 70% cumulatively in relation to the total targeted respondents. This was followed by Bulawayo with 10% of the total targeted respondents' sample and 79% cumulatively with Harare. As a result, eighty-one (81%) percent of the targeted respondents were from Harare and Bulawayo with the remaining 21% distributed amongst Mutare (4%), Gweru (3%) and Kwekwe (2%). The relative distribution of target respondents shows the great importance of both Harare and Bulawayo as key hubs of pharmaceutical wholesalers in the distribution chain. (Table 1)

Distribution of Targeted Respondents by Location and Sex

Table 2 shows that the targeted respondents were predominantly male (62) with females contributing 53 respondents. Of such targeted respondents, the majority were females resident in Harare (48) and 45 males. The other cities were mainly constituted of males (17) and only 5 females. As such, there is no

Table 1. Sample distribution by location.

City (Location)	Frequency	Percentage (%)	Cumulative %
Harare	93	81	70
Bulawayo	12	10	79
Mutare	5	4	83
Gweru	3	3	85
Kwekwe	2	2	100
Total	115	100	

Table 2. Distribution of targeted respondents by location and sex.

City (Location)	Males	Females	Total
Harare	45	48	93
Bulawayo	8	4	12
Mutare	5	0	5
Gweru	3	0	3
Kwekwe	1	1	2
Total	62	53	115

Source: Survey data.

distinct sex distribution in both Harare and Bulawayo as both contributed an equal number of targeted respondents. However, most targeted respondents were male (54%) with females contributing 46%.

Actual Response Rate by Communication Mode

At the completion of the Study, the following were the actual respondent statistics on the data collected. This represents the actual sample that completed the survey, questionnaire, face to face interviews, virtual face to face, telephone as well as emails. Out of the 115 targeted respondents enrolled for the Study, 84 respondents participated in the Study. The response rate was 73.1%. Martella, Nelson and Morgan (2013) [26] suggest that a research response rate of 50% is adequate for analysis reporting, 60% is good, while 75% is considered reliable. In this Study the overall response rate was 73.1% hence the findings herewith presented are considered reliable. Furthermore, Table 3 indicates the contribution of each communication mode to the total response rate.

From Table 3, it is evident that face to face virtual calls played a significant role in gathering insights from the respondents with 42.8% of the respondents interviewed virtually. An almost equal contribution was achieved from the other three (3) modes namely, telephone interview (19%), face to face (17.8%) as well as email (20.2%). Furthermore, the table shows the impact of technological platforms in contributing to seamless communications in research today. The virtual face to face method was easy to set up provided the respondents had a reliable internet and Wi-Fi service, and a working email address to set the meetings on either MS-Teams or Zoom meeting. All the respondents were first emailed to get their consent on the communication mode of their choice before setting up.

Distribution of Responders by Location

The distribution pattern for the actual responders based on their location was analysed below. The bulk of responders, 73.1% compared to targeted responders, came from Harare which contributed 80.9% of the actual respondents. The location is where most of the pharmaceutical wholesalers are concentrated. Bulawayo had 66.7% of the targeted responders participating in the Study. Cumulatively, the two cities had 90.5% of the residing instead of resident between them, *i.e.*, 76 of the 84 actual responders. The other smaller cities, *i.e.*, Mutare, Gweru

Table 3. Actual response rate by communication mode & distribution of responders by location.

Communication Mode	Total Respondents		(%) Contribution	
Face to face interview	15		17.8	
Face to Face Virtual Interview	36		42.8	
Telephone interview	16		19	
Email	17		20.2	
Total	84		100	
City	**Targeted Responders**	**Frequency**	**Responders (%)**	**Cumulative %**
Harare	93	68	73.1	80.9
Bulawayo	12	8	66.7	90.5
Mutare	5	3	60	94
Gweru	3	3	100	97.6
Kwekwe	2	2	100	100
Total	115	84	73.04	100

and Kwekwe, had only 8 responders amongst them. Overall, of the 115 targeted responders, 73.04% (84) of them participated in the Study with the majority residing in Harare and Bulawayo (76), 90.5%. The high concentration of pharmaceutical wholesalers in Harare and Bulawayo is because both cities are the first and second capital cities of Zimbabwe. As such, both cities are the economic hubs for industry and commerce in Zimbabwe. The proximity of pharmaceutical wholesalers to international airports and local administration offices for medicine importation facilitates convenient freight and clearing of imports and exports. Furthermore, the demand for pharmaceutical service is highly concentrated between the two cities. As such, the insights emanating from the responders in the two territories are critical to understanding the issues affecting pricing strategies within the pharmaceutical sector in Zimbabwe.

Distribution of Actual Responders by Location and Sex

The respondents were requested to indicate both location and sex on the Research measurement tool. The request was necessary to identify the spatial distribution of respondents as well as their sex. Males were dominant respondents in the Study at 60.7% and females at 39.3%. Furthermore, most of the males were based in Harare (46.4%) and most women were also based in Harare (34.5%). The result reflects on both the national importance of Harare and to some extent, Bulawayo, in pharmaceutical service delivery. (Table 4)

Distribution by No. of Employees in Company

The Study assessed the number of employees in each of the respondents' work settings to order to determine its size. The distribution of employees in each company assessed is listed below. Only five (5) major wholesalers were identified which had +50 employees whereas most wholesalers (24) were in the range

Table 4. Distribution of actual responders by location and sex.

City (Location)	Males	Females	Total
Harare	39 (46.4%)	29 (34.5%)	68
Bulawayo	5 (5.9%)	3 (3.5%)	8
Mutare	3 (3.5%)	0	3
Gweru	3 (3.5%)	0	3
Kwekwe	1 (1.2%)	1 (1.2%)	2
Total	51 (60.7%)	33 (39.3%)	84

of 16 - 20 employees. An almost equal distribution was noted amongst both the 11 - 15 employees range (18) and the 21 - 25 employees range (19). No wholesaler had any employees within the 41 - 45 and 46 - 50 employee ranges.

Type of Pharmaceutical Wholesale Business

From the targeted sample of pharmaceutical wholesalers, the researcher identified six distinct categories of the wholesale business. These are categorised as below:

- **Category 1:** Pharmaceutical wholesalers who are classified as primary distributors for locally manufactured products.
- **Category 2:** Pharmaceutical wholesalers who are classified as primary distributors for local products but also import medicines from outside primary distributors as well.
- **Category 3:** Wholesalers who are **primarily secondary** distributors of locally manufactured products who sources products from the primary local wholesalers.
- **Category 4:** Pharmaceutical wholesale distributors who are primarily **secondary** distributors who **local products as well and imported products**.
- **Category 5:** Primary distributors for imported pharmaceuticals only. Generally, this type of wholesale is regarded as the primary source of imported products.
- **Category 6:** Local primary **manufacturer with distribution service**. These pharmaceutical "wholesalers" are predominantly local manufacturers who have an in-house distribution service that supplies both the primary wholesaler for local products as well as have a direct service to the large retail and group pharmacies who can buy bulk and enjoy the discounts.

The type of pharmaceutical wholesale business was also assessed to determine the extent of product portfolio for the business. Forty-six percent (46%) of the target respondents worked in a pharmaceutical setting involved in the secondary importation of both locally manufactured products as well as imported pharmaceutical preparations. The imported products were sourced from a secondary source whilst 23.5% of the respondents worked in primary local distributors involved in direct importation of products from the primary source. There were very few (1.7%) working for companies involved in primary sourcing of locally

manufactured products only. Thirteen (13%) of the respondents worked for local manufacturing companies which are also involved in direct marketing of their products to the retail sector thus obviating the need to have a distribution network.

Age of Business

The respondents were also requested to indicate the age of their businesses from establishment. The results showed that most of the pharmaceutical distributors are still young in business with 27.4% under 5 years in operation followed by those between 6 - 10 years and 11 - 15 years at 15.4% and 13.1% respectively providing a cumulative 77.4% of the distributors in the industry being under 15 years of service. It was also noted that those above fifteen years (22.6%) constitute the bigger pharmaceutical wholesalers.

Current No. of Distributed Products by Wholesalers

Arising from the Study regarding the number of distributed products by wholesalers, it was noted that only two (2) of the manufacturers who engage in direct distribution to retail community pharmacies have between 26 - 30 products. Thirteen (13) of those manufacturers and distributors have more than 30 products, bringing to a total of 15 manufacturers and distributors involved in direct distribution to pharmacies. Secondly, we also note that in terms of primary distributors, only 2 local distributors had more than 26 - 30 products on their products list for sale to retail pharmacies. This demonstrates the high appetite by manufacturers to engage in direct distribution to the pharmacies. As a result of their direct to market strategy, very few distributors engage in distribution of local products as their effort is diluted by manufacturers with direct market interest albeit at reduced profit margins. Regarding primary distributors engaged in both local and import (Category 2), it was noted that only 5 of the wholesalers are involved with a product list of between 16 - 20 products. Many of these distributors, 22 of them, stock over 30 imported products, bringing a total of 27 pharmaceutical wholesalers involved in this approach. The rational for this behaviour is based on the level of profitability that their activities entail. Since this is import based, there is an opportunity for premium pricing based on the value/cost of foreign currency that they receive from the auction floors. Primarily, most of these distributors engage in Premium Pricing or value-based pricing for the import products and Cost-Plus Pricing for the locally available products.

With respect to secondary distributors of local products (Category 3), only seven (7) wholesalers are engaged in this practice and the total number of products that are marketed are between 20 - 21 for 5 companies and 26 - 30 for 2 companies. This is primarily because it is a secondary activity hence their pricing approach is predominantly the premium approach on the basis that there will be filling a need due to currency stock out. Such a practice promotes cartels leading to collusion and arbitrage pricing in the market which is prevalent based on opportunities that arise because of product hoarding.

With respect to secondary distributors for both local and import (Category 4),

the practice is extremely glaring in the sense that the majority (53%) of the distributors are involved in this activity. Furthermore, close to 23 companies are involved in this type of distribution with over 30 products; 21 companies involved with 21 - 25 products and then a few of them with only 11 - 15 products. The rationale behind this phenomenon is the fact that most of the secondary distributors capitalize on buying from primary import distributors without having to source foreign currency for themselves. Furthermore, such wholesalers do not have the necessary external networks that allow for direct importation of primary products through distribution agreements. In the same vein, one also notes that because of their limited access to funding, such distributors are not as highly capitalised to the extent of the primary distributors hence they survive on premium pricing strategies to a large extent followed by market skimming pricing strategy where inventory levels allow. This often then leads into arbitrage pricing due to shortages that they can potentially create in the market.

Eleven (11) of the wholesalers (Category 5) are involved in direct importation of the primary source. As hinted earlier, this is because they have established key strategic alliances with the external manufacturers where they monitor products coming into the country as well as their distribution in an ethical manner. As such, their pricing is predominantly cost-plus based and to some extent apply external reference pricing in line with global prices for orphan or old medicines. Often the importers are the ones that then sell products to both the secondary distributors as well as other direct to market pharmacies.

4.2. Pricing Strategies

Pricing is the most important aspect of any business, in short though, an understanding in pricing results in an average increase in profits.

Category* 1: *pricing strategies

Majority of the local distributors (Category 1) prefer using the competition-based pricing strategy as this is the modest process of determining price and exemplifies the basic idea behind surviving in business.

Category* 2: *pricing strategies

In terms of pricing strategy, 45.4% use valued based pricing for imported products 31.8% utilize the premium price/market skimming strategy. Only 27.2% use IRP as a strategy whilst 18.2% use cost-plus approach predominantly for the locally sourced products. As such, there is a mix of pricing strategies utilized by the wholesalers dependent on the product portfolio in order to meet their profit objective. Interestingly, there is an attempt to apply international reference pricing particularly to imported orphan medicines as well as "old medicines."

Category* 3: *pricing strategies

Category 3 had only seven responders. It targets mainly those wholesalers who are involved only in the distribution of locally manufactured products. They rely on the efficiency of local manufacturers to continually maintain stock for their

survival in business. This type of wholesaler depends on creating strong supplier relationships for a healthy supply chain whilst maintaining good relations with their customers predominantly in the private or public hospital market to drive volume and enjoy economies of scale. They also enjoy special payment terms from the local manufacturers as they create significant market share for the local products. As such, their marketing and sales initiatives are predicated on relationship marketing as well as contract supplies relationships. They are also able to reach the remote areas where the local manufacturers are unable to reach thereby saving transport costs for the local manufacturer.

Category* 4: *pricing strategies

Most pharmaceutical wholesalers (63%) fall under this category. It consists of the new startups and those that have failed to expand their business beyond basic trading. Such wholesalers are involved in secondary distribution of both local products as well as imported ones. They are generally owner managed. Such distributors are not as highly capitalised to the extent of the primary distributors hence they survive on premium pricing strategies (45.2%) to a large extent followed by differentiated pricing (30.2%) strategy where inventory levels allow.

Category* 5: *pricing strategies

A few of the wholesalers (11) are involved in direct importation of the primary source. This group of distributors also uses a mix of Competitor Based Pricing strategy (63.6%) as well as premium pricing strategy. As previously noted, they have established key strategic alliances with the external manufacturers who allows them to offer prices higher than their rivals. Based on the profile of the imported product, they also use differentiated pricing strategy (27.2%) purposely to expand their client base. Market skimming pricing (9.1%) is also a pricing strategy used by these distributors in pricing to get the attention of desirable customers.

Category* 6: *pricing strategies

Local manufacturers consider the conversion cost of API raw materials and are guided by their internal pricing policies to set a price for a finished product. Sixty percent (60%) of the manufacturers use cost-plus pricing in making a price determination for their finished products. Competitor pricing method is used by 26.7% of them where there are products of same class or substitutes. Only one (1) manufacturer sometimes uses differentiated pricing/or market skimming as a strategy.

4.3. Challenges Faced by Distributors

All importers' experiences lack of credit terms from pharmaceutical wholesalers outside the country due to the perceived country risk leading to a demand for cash upfront payments. As such, all transactions are done on a strictly cash before supply basis. The lack of foreign currency increases appetite for USD denominated bank loans to fund imports due to reduced foreign currency inflows. For those lucky enough to access it, it is premium priced hence most of them

seek affordable rates at the Auction through RBZ. Furthermore, the lack of information on market needs causes poor product demand forecasting with external suppliers to incorporate into their product demand plans leading to inconsistent supply patterns comprising future demand levels. As such, external suppliers end up de-prioritizing Zimbabwean import orders.

The lengthy disbursement delays by RBZ do not facilitate prompt importation activities by the wholesalers causing delayed payments resulting in long lead times thus driving up import costs which are then passed on to the patient. Furthermore, the lack of transparency and consistency in tariff codes allotment to facilitate charging of correct duties at airport clearance has created documentary mistrust on validity on prices and import documents to the wholesalers. Some responders reported clearance delays of up to two weeks before tariffs are aligned thus stalling the prompt passage of consignments at the clearing port. To spread unit cost, the external manufacturers and distributors set very high MOQs making it difficult for the small wholesalers to play a part.

Strategies Employed by Wholesalers to Address the Challenges

In a bid to drive down costs and remain competitive, 33% of the secondary importer and local wholesalers have engaged in downward vertical integration to create internal efficiencies and create downstream economies of scale. The primary importers and primary local wholesalers are not yet engaged in this strategy. In this regard, the wholesalers are creating a chain of retail community pharmacies whose needs are fed from their distribution centers. As such, the secondary importer and local wholesalers are leveraging internal business operations, taking advantage of wide product width and depth, with substantial external direct to pharmacy business transactions to create competitive advantage in the long run.

The Study established that Category 5 and Category 2 wholesalers place greater emphasis on niche marketing due to the nature of their product portfolios on imported products. The advantage of that strategy is that they enjoy premium margins on their chosen portfolios and their market has the capacity to pay thereby improving their cash flows and ability to place subsequent orders without having to go via the Auction system for funding. The symbiotic business survival between the primary and secondary importers with the local ones enables the local importers to engage in secondary distribution for the same product albeit at lower profit margins. However, the prevailing discount pricing options for cash purchases in foreign currency ensures that the secondary importer remains profitable enough to sustain their businesses.

5. Discussion & Interpretation of Findings

The previous Section dealt with the presentation of research findings on the pricing strategies used by pharmaceutical wholesalers in pricing medicines for onward distribution down the value chain to the retail pharmacies and patients. A deeper analysis of the status on the usefulness of the pricing mix was done

citing its impact on the overall price structure by reviewing how each wholesale type is approaching the different pricing mechanisms. Furthermore, the challenges presented by each pricing approach to the overall service were analyzed by looking at both the pros and cons of each approach. The challenges that are faced by the pharmaceutical wholesalers in the application of their approaches were also highlighted as well as their impact of demand creation and service provision. Lastly, the distribution efficiencies which culminate from such approaches were also reviewed to form the corpus of knowledge regarding the current state of pharmaceutical service demand within the healthcare system in Zimbabwe. The several factors impacting importation and clearing were also reviewed as well as the strategies currently applied by the distributors to mitigate the effects of the shocks that are affecting the general economy and pharmaceutical service. Suffice to say the study on the overall net effect of the application of such strategies was not undertaken as it was felt that such analysis requires a deeper approach beyond and outside the scope of this Study due to the multifaceted nature of their implications.

From the Study, it was found that it is imperative that all procurement pathways be fully funded in order to create a robust pharmaceutical service that drives improved health care service delivery. Gavaza *et al.* (2008) [27] notes the devastating effects of poor national resources allocation in the health sector and its impact on service delivery in a hyperinflationary environment with high unemployment levels and poverty like Zimbabwe. The market then becomes a suppliers' market. By drying up the resources needed to fund for medicines' local manufacturing or importation, the wholesalers are constrained in their quest to provide robust pharmaceutical care down the value chain. The Study found out that there are several loopholes and challenges regarding product availability both from local manufacturers as well as imports thereby compromising supply. As such, the system has not been able to deliver a sound service. The scarcity of medicines has often led to downstream distribution inefficiencies in product allocation resulting in hoarding by some wholesalers. The skewed product distribution results in unfair pricing practices especially on the high demand products for chronic diseases cited above. The supply imbalances promote the emergence of local "round tripping" of the scarce product as the product batches move from one distributor to another with high mark ups being levied at each stage of storage. Furthermore, there is shortage of foreign currency necessary to facilitate importation of both APIs as well as finished products by manufacturers and wholesalers respectively. From the Study, it was learnt that currently two platforms exist through the Reserve Bank of Zimbabwe in conjunction with the Ministry of Industry and Commerce where access to foreign currency is supposedly allocated through a public auction system where the businesses bid for foreign currency. The long delay in disbursement means the bidder's funds would be tied up to the bank until the time of disbursement. The practice has resulted in high monetary interest rates which the importers load onto the final product cost overheads resulting in high prices.

Demand Quantification

The respondents indicated a dearth of information on demand or disease patterns necessary to make judious quantification of needs. Whilst some 31% of the pharmaceutical wholesalers acknowledged an idea of the process for quantification and national needs, the majority of respondents were clueless on how to forecast demand or what the market needs were. Due to limited knowledge on demand and product quantification, there is little effectiveness in the application of the scarce foreign currency thus impinging on equitable product distribution. More focus is applied on profit motive rather than improved service provision through effective product distribution. Furthermore, the tendency by the importers is to focus on those products which give a high return on investment.

Need for a National Pharmaceutical Pricing Agency

In India, the National Pharmaceutical Pricing Authority was enacted in 1997 under the Department of Chemicals and Petrochemicals (now Department of Pharmaceuticals since July 2008). In South Africa, pharmaceutical pricing has been a contentious issue leading to the proclamation of various legal statutes and regulations to control pricing matters in both private and public sectors of the pharmaceutical industry. The Competition Commission of South Africa (CCSA) in conjunction with the National Department of Health as well as the South African Pharmacy Council held several deliberations to come up with a transparent way to resolve pricing challenges leading to the adoption of a Single Exit Price (SEP) policy. In the Study, 73% of the respondents noted the absence of a regulatory unit that enforces a mutually agreed and workable national pricing framework for pharmaceuticals within the country. Sixty five percent (65%) of the respondents pointed out to the need for a regulatory body based on the lines of the Indian and South Africa experiences alluded above.

Lack of Effective Stakeholder Engagement

In the Study, several stakeholders were identified as part of the pharmaceutical service ecosystem whose contribution to the pricing decisions is critical to sustenance of effective service delivery. The constituent stakeholders play a significant role in driving uptake and creating a business ethos that ensures long term sustainability of the industry. From the above, 55% of the respondents reported that whilst there are several stakeholders who play a great interest and role in the provision of the pharmaceutical service, their involvement in the pricing decisions is very peripheral and non-committal. In the absence of a unified approach to pricing decisions, the distributors engage in practices that advance their own agenda leading to various forms of arbitrage pricing and unfair trading practices which compromise provision of a quality pharmaceutical service. Furthermore, 37% of the respondents reported that whilst there have been attempts to incorporate other key stakeholders in price determination processes, such efforts have not yielded any meaningful discourse hence the distributors were reluctant to re-engage.

Absence of a Pharmacoeconomic and Pricing Department in MoHCC

South Africa has instituted various mechanisms to render the pricing of pharmaceuticals more transparent, including the Single Exit Price (SEP) that clarifies the price at which a manufacturer may sell a medicine to logistics service providers or medicine dispensers (Bangalee & Suleman, 2016) [28]. The SEP policy allows the various stakeholders to realize, participate, institute, and enforce transparency in the pricing mechanisms for all pharmaceuticals imported or locally manufactured in South Africa. However, Bangalee & Suleman (2016) [28] caution that as more countries look to South Africa for lessons from its pricing policies, an understanding of the manufacturer's price, logistics fees and their relationship has become increasingly necessary to support the principle that the SEP leads to more transparent prices. However, there will be a need to continually monitor the transparency of the process itself to ensure that external manufacturers remain reliable with their disclosures to avoid transfer pricing (Bangalee & Suleman, 2018) [29].

From the Study, it was noted by the respondents that there are no pricing control measures/mechanisms or any regulatory frameworks by any Government agency or Ministry which guide the limits to which pharmaceutical pricing can be approached. Whilst such a policy would be commendable to allow for market adjustment to external shocks, in a market where product supply is scarce and foreign funding is limited, the practice gives abundant room to unscrupulous and arbitrage pricing. Furthermore, there is policy inertia regarding understanding of the pricing structure within the industry and policy makers would tend to "thumb suck" approaches to pricing concerns when they arise. The majority of respondents (82%) stated the necessity of having an overseeing watchdog resident within the Ministry of Health and Child Care to superintend over the pharmacoeconomic and pricing issues related to pharmaceuticals and ancillary medical products.

Establishment of an RBZ & MoF Pharmaceutical Working Committee

The Reserve Bank of Zimbabwe, through the Auction floors conducts and facilitates weekly competitive bidding for foreign currency by the respective pharmaceutical wholesalers. The banking system uses such information to charge foreign currency transmission requests by the bid winning parties. In turn, the winning bidders are supposed to acquit their transactions as proof of final importation at the conclusion of such transactions. From the Study results, 76% of the respondents complained about the high-level disparities caused by the foreign currency Auction system conducted by the Reserve Bank of Zimbabwe. These include, in part, long delays in disbursements; invoking forex retention policies which erode USD hedging by companies as well as high interest rates; and high bank charges. Furthermore, Government introduced a foreign currency retention policy whereby all transaction proceeds of a forex nature attract 15% retention on the declared earnings deducted at the point of deposit into the bank account which is then converted at the RBZ prevailing auction rate. Fifty three percent (53%) of the respondents proposed the need to establish a Reserve Bank of Zimbabwe and Ministry of Finance Pharmaceutical Working

Committee whose mandate would be to provide the Ministry of Finance with a more accurate assessment of financial needs for the private pharmaceutical industry, a framework for foreign currency disbursements and usage monitoring, assessment of impact of such initiatives on the national supply of medicines as well as setting up a pricing policy that reflects the level of support and need for consistency and compliance to the adopted pricing mechanism.

Monitoring of the Macroeconomic Environment

All of the respondents described the need for them to continuously monitor the macroeconomic environment in order to manage potential risks of doing business in Zimbabwe. The notion that "change can happen anytime" is heavily embedded in their risk aversion inclinations. Such a perspective is fueled by the incessant policy changes that occur both at monetary as well as fiscal policy level by Government and its Central Bank.

Streamlining of the AHFoZ Reimbursement Policy and Database to Price Changes

The Association of Healthcare Funders of Zimbabwe, "AHFoZ", is the body registered to superintend over medical insurers in Zimbabwe. Furthermore, the organization also works as the watchdog for the medical insurance companies to maintain professional conduct, deal with any deviations as well as ensure adherence to legislative pieces that affect their operations. Pharmaceutical wholesalers and distributors, therefore, play a critical role in cost-containment measures down the value chain. As such, their pricing strategies need to take into account the affordability challenges met by their patients downstream. Sixty three percent (63%) of the respondents highlighted awareness of their activities in driving medical insurance subscription levels up due to increased medical and pharmaceutical costs.

The discussion transcended and integrated the components of pharmaceutical service with regard to funding arrangements, foreign currency allocation and its effect on supply, in-bound logistics management, reimbursement policies as directed by medicines costs, the role of stakeholder management in managing the pharmaceutical supply system. The views raised in the discussion and interpretations are critical to a fuller understanding of the issues affecting the pharmaceutical service in Zimbabwe right now.

6. Contribution to the Body of Knowledge

The Study sought to understand the phenomenon of pricing strategies of pharmaceutical wholesalers in Zimbabwe. As such, the Study contributes to the existing corpus of knowledge in pharmaceutical distribution by providing frameworks for pricing strategies based on the current typological architecture of pharmaceutical distribution thereby providing a platform for policy formulation, management, coordination and implementation with a view to broadening accessibility, affordability and availability of medicines. Through a cogent analysis of the value chain activities within specific distributor settings, the Study managed to delineate and categorize six types of pharmaceutical distributors whose

business thrust, and focus are uniquely distinct based on their strategic inclination, product sourcing perspective and target market segment. The varied typologies inherently confer pursuit of different pricing strategies and profit motives which motivate and rationalize choices of pricing policies. Whilst there are very distinct approaches and differences to pricing for locally manufactured and branded imported medicines, the veneer of variation in pricing approaches is very thin. The macroeconomic challenges which are impacting product availability, funding vehicles and debt servicing arrangements as well as reimbursement policies and credit risk management to the pharmaceutical retail sector heighten business risk and fuel the high appetite for arbitrage pricing tendencies by the pharmaceutical wholesalers and distributors. Despite the several challenges faced in the pharmaceutical distribution business, it was noted that the distributors are quite resilient by formulating and devising strategies to counter the challenges in order to survive. Key amongst the strategies for survival is the need to have a reliable source of foreign currency or external funding that can meet the financial demands of their operations.

By transitioning and bridging between the literature perspectives and their application on the two business models, the Study exposed the knowledge gap that exists as they are applied in challenging scenarios despite the application of the transcending conceptual frameworks that guide the pharmaceutical value chain activities.

7. Recommendations

Based on the findings from this Study on the pricing strategies of pharmaceutical wholesalers in Zimbabwe and the impact of such strategies on service provision, the following recommendations are propounded. There is a need for the MoHCC to acknowledge and support the distributor initiatives. By facilitating smooth procurement service, the MoHCC will create an enabling environment for better service delivery. The MoF together with other key stakeholders will need to facilitate sustainable funding vehicles. There is a need for all the various stakeholders in the medical industry to coalesce around a sound determination of national pharmaceutical needs. Arising from a deeper understanding of national needs, the MoF can allocate specific funds for importation of medicines in the private sector for which the wholesalers can access on a fixed exchange rate. The local manufacturers can also be catered for to improve availability of low cost VEN medicines. There is a need for a multisectoral approach to resolving funding issues bedeviling the pharmaceutical sector. As such, the constituent stakeholders should play a significant role in driving uptake and creating a business ethos that ensures long term sustainability of the industry through creation of a National Pharmaceutical Agency within the MoHCC to regulate the conduct of pharmaceutical wholesalers with a National Pricing Committee that oversees pricing and pharmacoeconomic issues. Through the Pricing Committee, specific pricing strategies should be crafted noting the distributor typologies whilst seeking to curb rent seeking pricing behaviours by some of them through a ra-

tional approach that balance both product supply and market needs and affordability. The roles of both national regulatory body and ZIMRA and the supportive nature of their roles will need to be fully financed within the scope of the wholesaler activities from registration, post-marketing, advertising, and importation. As such, there is a need to set charges that are consistent with the service they provide. The external manufacturers with relative prices can be created to provide guidance to the clearing process. Further to the adoption of the above recommendations, finally, there is a need to develop a coherent pricing model that incorporates all the various cost centers involved in the importation process. Such a process will aid audit checks for compliance on the pricing process and provide insights on how the private pharmaceutical wholesalers are behaving thereby avoiding situations of finger pointing on pricing should there be a public outcry.

8. Study Implications for Future Research

Arising from the findings of the Study and its recommendations, this Study proposes the following key areas of further research endeavours:

- The role played by pharmaceutical wholesalers in ensuring availability of quality, affordable medicines across the full disease spectrum is very critical. As such, the key stakeholders along the pharmaceutical value chain and the related medical and supportive industries need to be acknowledged and prioritized.
- As noted earlier, the Study focus did not deeply indulge itself in understanding the drivers of behaviours towards arbitrage pricing as it was deemed too complex and beyond the scope of this Study. As such, studies that focus on the nature of behavioral attributes that drive the practice will need to be undertaken to determine the collective approaches that can be used in guiding the pricing processes. The pricing models arising from the concept of pharmaceutical distribution can be translocated across the value chain thus increasing their application in the retail, and medical insurance industry as well as local pharmaceutical manufacturing.
- The Study did not delve much on the mechanics of service delivery assessment. The influence of health treatment assessments (HTAs) is still yet to be applied within the Zimbabwean medical service. The concepts of best practice sharing in service provision can be applied within the similar context to buttress findings from this Research to improve approaches in creating value for the patient.

9. Limitations of Study

Firstly, the theoretical framework used for the Study was deduced from perspectives operating from a non-Zimbabwean environment. The approach taken by the theories assume an orthodox economy value system in which predictability and continuity of economic activities is guaranteed. The situation obtaining in

the Zimbabwean macroeconomic, political as well as social environment is unique and unpredictable hence the market situation and its operating environment can change greatly within a short span of business planning. As hinted in the background to the Study, such theories may not essentially capture the essence of the operating environment accurately because the theoretical framework used within other external markets are based on studies conducted in business enterprises operating in different socioeconomic, political as well as cultural and technological environments.

Secondly, the shortcomings of a research methodology used may affect the quality of data and results obtained from the respondents. The phenomena around the fit of methodology to the research problem have been fully enunciated in the Research Methodology section. The researcher acknowledges the richness of data from face-to-face interviews and deems it the most appropriate data collection method for this type of Study. However, the method could not be applied across the full research sample due to the limitations placed by the prevailing Covid-19 situation. Recognizing the exploratory nature of the Study within the Zimbabwe pharmaceutical landscape and its intricacies, the researcher is confident that the essential elements and themes impacting the research problem were identified and that the research objectives were fully met. Thirdly, the use of the quantitative method in the Study would have given a rounded approach to the Research. Whilst, such an approach would have been deemed appropriate and compelling, the Researcher appreciates the significant limitations of such an approach in the first instance due to novelty of the Study within the Zimbabwean pharmaceutical industry. It was deemed appropriate to utilize the qualitative approach as part of the exploratory study. This was necessary to isolate the specific themes around the Research problem without engaging in the complexity of the challenges experienced. Despite the above-mentioned limitations, the objectives of the Study were fully met.

10. Conclusion

The role of the distributor in maintaining sanity in pricing approaches was discussed as well as how it is impacting community pharmacies' service provision and ultimately the patient down the value chain. The analysis done from a qualitative perspective unravelled the deep insights that propel behaviours by the distributors in this regard. The multifaceted nature of the research problem, its drivers as well as recommendations arising from inferred descriptive analysis of the research problem were all presented. A cursory view of the nexus that exists between business management theory and practice was undertaken with a view to informing how corporate pricing policy decisions are formulated, structured, and implemented. Furthermore, the researcher hinted on potential areas for future research and their direction to enrich the field of study. Study limitations were also exposed to guide the constraining issues that impinged a fuller study on the research problem.

Conflicts of Interest

The author declares no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

References

[1] (2016) Bailing out Bandits. *The Economist*. https://www.economist.com/middle-east-and-africa/2016/07/09/bailing-out-bandits

[2] Blessing Chiripanhura (2005) The Impacts of Labour Market Liberalisation and Government Commitment to Reform: Zimbabwe, 1991-2000. Labor and Demography 0512013, University Library of Munich, Germany. https://ideas.repec.org/p/wpa/wuwpla/0512013.html

[3] United Nations Industrial Development Organization (2010) Pharmaceutical Sector Profile: Zimbabwe. Global UNIDO Project: Strengthening the Local Production of Essential Generic Drugs in Least Developed and Developing Countries.

[4] Central Census Office (2012) Provincial Report: Harare Metropolitan Province, Zimbabwe National Statistics Agency.

[5] Chibango, C. (2013) Zimbabwe's Medical Brain Drain: Impact Assessment on Health Service Delivery and Examination of Policy Responses: A Literature Review. *European Journal of Sustainable Development*, **2**, 43-58. https://doi.org/10.14207/ejsd.2013.v2n2p43

[6] Chirisa, I., Dumba, S. and Mukura, T. (2012) Innovative, Adaptive and Survivalist Strategies by Small Business Enterprises in Zimbabwe (1990-2009): Implications for Policy and Planning. *International Journal of Academic Research in Business and Social Sciences*, **2**, 114-132.

[7] Porter, M. (1985) Creating Competitive Advantage: Creative and Sustaining. The Free Press, New York.

[8] Porter, M. (1980) Competitive Strategy. The Free Press, New York.

[9] Tanwar, R. (2013) Porter's Generic Competitive Strategies. *IOSR Journal of Business and Management* (*IOSR-JBM*), **15**, 11-17. https://www.iosrjournals.org/ https://doi.org/10.9790/487X-1511117

[10] Datta, Y. (2010) A Critique of Porter's Cost Leadership and Differentiation Strategies. *Chinese Business Review*, **9**, 37-51.

[11] Valipour, H., Birjandi, H. and Honarbakhsh, S. (2012) The Effects of Cost Leadership Strategy and Product Differentiation Strategy on the Performance of Firms. *Journal of Asian Business Strategy*, **2**, 14-23.

[12] Stankevičiūtė, E., Grunda, R. and Bartkus, E.V. (2012) Pursuing a Cost Leadership Strategy and Business Sustainability Objectives: Walmart Case Study. *Economics and Management*, **17**, 1200-1206. https://doi.org/10.5755/j01.em.17.3.2143

[13] Hsieh, Y.H. and Chen, H.M. (2011) Strategic Fit among Business Competitive Strategy, Human Resource Strategy, and Reward System. *Academy of Strategic Management Journal*, **10**, 11-32.

[14] Bordean, O., Borza, A., Razvan, N. and Crisan-Mitra, C. (2010) The Use of Michael Porter's Generic Strategies in the Romanian Hotel Industry. *International Journal of Trade, Economics and Finance*, **1**, 173-178. https://doi.org/10.7763/IJTEF.2010.V1.31

[15] Hilman, H. and Kaliappen, N. (2014) Do Cost Leadership Strategy and Process Innovation Influence the Performance of Malaysia Hotel Industry? *Asian Social*

Science, **10**, 134-141. https://doi.org/10.5539/ass.v10n10p134

[16] Kavale, S., Namusonge, G. and Mugambi, F. (2016) The Effects of Product Differentiation Strategy on Corporate Growth in Selected Microfinance Institutions in Kenya. *International Journal for Research in Business, Management and Accounting*, **2**, 13-28.

[17] Hitt, M.A., Ireland, R.D. and Hoskisson, R.E. (2016) Strategic Management: Concepts and Cases: Competitiveness and Globalization. Cengage Learning, Boston.

[18] Horsten, S. (2004) The Impact of Competition on the Product-Market Strategies of Entities in the Pharmaceutical Industry. Master's Thesis, North-West University, Potchefstroom.

[19] Kinyua, M.N. (2014) Strategies Adopted by Multinational Pharmaceutical Firms in Kenya to Respond to Competitive Rivalry in the Pharmaceutical Industry. Master's Thesis, University of Nairobi, Nairobi.

[20] Bruijl, G.H.Th. (2018) The Relevance of Porter's Five Forces in Today's Innovative and Changing Business Environment. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3192207

[21] Gray, K. (2014) Harm Concerns Predict Moral Judgments of Suicide: Comment on Rottman, Kelemen and Young (2014). *Cognition*, **133**, 329-331. https://doi.org/10.1016/j.cognition.2014.06.007

[22] Denzim, N.K. and Lincoln, Y.S. (2011) Introduction: The Discipline and Practice of Qualitative Research. In: Denzin, N.K. and Lincoln, Y.S., Eds., *The Sage Handbook of Qualitative Research*, 4th Edition, Sage, Thousand Oaks, 1-32. https://www.amazon.com

[23] Steyn, G.M. (2001) Focusing on Guiding Principles of Quality to Redesign Educational Institutions. *South African Journal of Education*, **21**, 17-24.

[24] Yin, R.K. (2009) Case Study Research: Design and Methods. 4th Edition, SAGE, Thousand Oaks.

[25] Bryman, A. and Cramer, D. (2012) Quantitative Data Analysis with IBM SPSS 17, 18 & 19: A Guide for Social Scientists. Routledge, London. https://doi.org/10.4324/9780203180990

[26] Martella, R.C., Nelson, J.R., Morgan, R.L. and Marchand-Martella, N.E. (2013) Understanding and Interpreting Educational Research. Guilford Press, New York.

[27] Gavaza, P., Rascati, K., Brown, C., Lawson, K. and Mann, T. (2008) The State of Health Economic and Pharmacoeconomic Evaluation Research in Zimbabwe: A Review. *Current Therapeutic Research*, **69**, 268-285. https://doi.org/10.1016/j.curtheres.2008.06.005

[28] Bangalee, V. and Suleman, F. (2016) Towards a Transparent Pricing System in South Africa in Pharmaceutical Logistics Fees. *South African Health Review*, **2016**, 221-231.

[29] Bangalee, V. and Suleman, F. (2018) Is There Transparency in the Pricing of Medicines in the South African Private Sector? *South African Medical Journal*, **108**, 82-83. https://doi.org/10.7196/SAMJ.2017.v108i2.12815