

STUDIES ON THE SUPPLY AND PRICE MANAGEMENT IN VETERINARY PHARMACEUTICAL UNITS

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Abstract

Nowadays, veterinarian's activity takes place in a highly dynamic and changing environment; thus, the managers of economic units having as main activity the sale of veterinary products should have leadership and organizational qualities that allow them to develop a successful business in a competitive environment. The purpose of this study was to highlight the main aspects related to veterinary pharmaceutical units supply, and the manner in which price management is done. The study was conducted in 25 veterinary pharmaceutical units (pharmacies and pharmaceutical points) in Bucharest and consisted of a market survey in order to identify the factors that influence supply, the criteria by which suppliers are selected, rhythm and mode of supply, as well as aspects related to stocks' management and control, pricing criteria, markup and its influencing factors. The results showed that the supply of veterinary pharmaceutical units is typically performed daily or weekly and is influenced by season, prices and profitable offers from suppliers. In an overwhelming percentage, veterinary pharmaceutical units' stocks are electronically managed by using software that facilitates staff's work, and most of the surveyed veterinary pharmaceutical units keep a safety stock. The most important factors that influence price levels are mainly represented by the competition, discounts, offers and benefits from suppliers, and the most common markup for veterinary pharmaceutical units is between 20-50%. Following the studies, it was concluded that modern management and marketing principles related to the supply, stocks and prices are properly applied in the surveyed veterinary pharmaceutical units.

Key words: markup, prices, stocks, supply, veterinary pharmaceutical units.

INTRODUCTION

Nowadays, veterinarian's activity takes place in a highly dynamic and changing environment; thus, the managers of economic units having as main activity the sale of veterinary products should have leadership and organizational qualities that allow them to develop a successful business in a competitive environment.

At present, in Romania, the conditions of organization and functioning of veterinary pharmaceutical units, as well as the procedures of sanitary veterinary registration/authorization of veterinary pharmaceutical units and activities are regulated by ANSVSA Order no.

83/2014.

Thus, veterinary pharmacy is a veterinary pharmaceutical unit which holds and retail sells veterinary medicinal products, animal feed, medicated feed and other veterinary products, instruments and medical equipments, medical devices and accessories for animals. Veterinary pharmaceutical point is a veterinary pharmaceutical unit having as main activity the retail sale of veterinary medicinal products which are not subject to prescription (OTC), other veterinary products, instruments and medical equipments, medical devices, accessories for animals and feed.

The supply is defined as the provision of appropriate technical and material items, at the place and time required, with a minimum cost

and a maximum profit (Bășanu and Pricop, 2001). Thus, the main objective of supply is to search for the best materials at the lowest costs and from the best sellers (Moga, 2009). The functioning of a veterinary pharmaceutical unit can only be cost-effectively, by using material resources at the best economic level; thus, irrational use of materials, dissipation and unjustified costs must be avoided (Bășanu and Fundătură, 1993).

In terms of stocks, it is advisable to adopt a rational approach related to the optimal amount to store, optimal amount to purchase and optimal resupplying interval (Bășanu and Pricop, 2001). Stocks represent the amounts of veterinary pharmaceuticals products that accumulate in veterinary pharmaceutical units' warehouses, in a certain volume, with a specific structure, for a fixed period of time and with a particular purpose (Bășanu and Pricop, 2001). At the current juncture of supply, stocks of medicinal products in danger of expiring greatly diminished, and therefore supply costs decreased significantly (Cernea, 2004).

The price can be defined as the monetary expression of the exchange value of a product (Moga, 2009). In a market economy, the general rule is that the prices and fares are freely determined through competition, based on supply and demand rule.

The markup is the parameter by which a product is bought at a purchase price, to which a certain percentage is applied, obtaining this way the selling price of the product. The dimensions of markup should ensure both operating costs and obtaining profit (Carată, 2008; Moga, 2009).

The purpose of this study was to highlight the main aspects related to veterinary pharmaceutical units (veterinary pharmacies and veterinary pharmaceutical points) supply, and the manner in which price management is done.

MATERIALS AND METHODS

The study was conducted in 25 veterinary pharmaceutical units (pharmacies and pharmaceutical points) in Bucharest and

consisted of a market survey in order to identify the factors that influence supply, the criteria by which suppliers are selected, rhythm and mode of supply, as well as aspects related to stocks' management and control, pricing criteria, markup and its influencing factors.

The used method was the quantitative assessment using questionnaires that included questions about involved issues, each question having multiple possible answers (Table 1).

The research questionnaire is an investigation method consisting of a series of written questions, logically and psychologically ordered, which determine from the surveyed persons answers to be recorded in writing; the aim is to collect data that generates information intended to meet the objectives of research.

Table 1. The questionnaire used in the study

| No. | Question | Possible answers |
|-----|--|---|
| 1 | Which is the most important criterion on which you choose the suppliers that you collaborate with? | a) cuts and discounts; b) extended payment deadlines; c) reliability, punctuality; d) low prices. |
| 2 | At what time frame do you perform the supply of your pharmaceutical unit? | a) daily; b) weekly; c) bimonthly; d) monthly. |
| 3 | What are the factors that influence the rate of supply? | a) market demand; b) season; c) convenient prices from the supplier; d) supplier's offers. |
| 4 | What method to control stock accounts do you use? | a) electronic management; b) classical management; c) other method: d) is not performed. |
| 5 | Do you use a safety stock? | a) yes (go to question 6); b) no (go to question 7). |
| 6 | Based on what criteria you have decided to implement safety stock? | a) current offers; b) problems with the suppliers; c) seasonal sales; d) other reason: |
| 7 | Based on what criteria do you establish the prices? | a) competition; b) discounts, offers and benefits from suppliers; c) customers' feedback; d) other reason: |
| 8 | What is the average markup applied in | a) 0 – 10 %; b) 10 – 20%; |

| | | |
|---|---|---|
| | your unit? | c)20 – 50 %; d)50-100%; e)over 100 %. |
| 9 | Based on what criteria do you establish markup for a product? | a) product value; b) availability; c) market demand; d) other criterion: |

RESULTS AND DISCUSSIONS

Question 1. Following the research, the most important criteria on which veterinary pharmaceutical units select their suppliers are: cuts and discounts (7 units; 28%), low prices (7 units; 28%), extended payment deadlines (6 units; 25%) and reliability, punctuality (5 units; 20%). This question has caught a great deal of attention from the questioned staff because, from their point of view, the supplier is the starting point in a business. As veterinary pharmaceutical units closely interact with the suppliers, the suppliers must meet certain eligibility and competitiveness criteria.

Question 2. Most veterinary pharmaceutical units (18 units; 72%) perform the supply daily, while 6 units perform the supply weekly (24%). One unit (4%) reported bimonthly supply; monthly supply was not reported. The units that reported a daily supply mentioned that they collaborate with many suppliers which deliver the merchandise on different days of the week.

Question 3. After processing the data, it has been found that the rate of supply is influenced by season (9 units; 36%), supplier's offers (8 units; 32%), market demand (4 units; 16%) and convenient prices from the supplier (4 units; 16%). The season influence the rate of supply by increasing the sales of drugs (e.g. external and internal antiparasitic products), cosmetics (shampoos) and accessories (clothes for dogs, collars, leashes), resulting in an accelerated supply rate. In relation to supplier's offers, they are generally constant, because there will always be some products on offer, even if they are not always the same. The suppliers apply favorable prices when launching new products to market, when stocks are too high in certain products with short shelf life, or when launching a new product on the market that will

replace another well-known existing product.

Question 4. In terms of the methods to control stock accounts, 84% of the surveyed units reported the use of electronic management of stocks (21 units), and only 16% (4 units) control stocks by classical management. The other two possible answers were not chosen, because all veterinary pharmaceutical units prefer to record inputs and outputs for better evidence, which helps them for future orders. Thus, these methods can avoid situations as overstocks, stocks-run out or slow-moving or motionless stocks, and therefore long periods of material and financial resources immobilization. Veterinary pharmaceutical units perform electronic management of the stocks using billing and inventory management software, such as FacturisTM, PharmecTM or FarmaTM, while classical management is achieved by products' subtracting based on fiscal receipt at the end of each day. Electronic management is preferred because it is much easier to use, working time is reduced, but there are also disadvantages such as high costs, especially in case of pharmaceutical units whose profits are not high.

Question 5. After processing the data, the following results were obtained: 80% of the surveyed units use a safety stock (20 units), and the remaining 20% (5 units) do not operate a safety stock. Safety stock is specifically designed to ensure sales continuity in the event of supply pauses caused by legal holidays or supplier problems, or when current stock is finished. Most of the surveyed veterinary pharmaceutical units opted to create a safety stock, because it is useful in critical situations, and it is renewed from time to time to prevent the possibility of veterinary products to reach their shelf life.

Question 6. Following the survey, it was found that veterinary pharmaceutical units implement the safety stock based on the following reasons: problems with the suppliers (11 units; 44%), seasonal sales (6 units; 24%) current offers (4 units; 16%) and other reasons (e.g. legal holidays) (4 units; 16%). Regardless of the relationship between veterinary pharmaceutical

units and suppliers, there may be situations when problems occur, and the delivery can not be made for various reasons (vacation, lack of ordered products in stock, etc.). When suppliers make advantageous offers to veterinary pharmaceutical units, the managers of these units tend to buy a larger amount, and thus create their safety stock, because it is much profitable to buy the same product for a lower price, or buy more and as a gift to receive certain products for free, compared to another period of the year when the same product costs more. Depending on the season, veterinary pharmaceutical units create a safety stock meant to be helpful when the demand is high (e.g. internal and external antiparasitic products, antiallergic drugs, accessories, etc.). As for legal holidays, sometimes veterinary pharmaceutical units provide services within these days, and customers may request different veterinary products; as a general rule, suppliers do not operate on public holidays.

Question 7. Pricing criteria were as follows: competition (13 units; 52%), discounts, offers and benefits from suppliers (9 units; 36%) and customers' feedback (3 units; 12%). In a market economy, the price of a product can not be much higher than the competition, because customers will hesitate to buy from that unit. This is the reason why a commercial unit takes into account the price of the same product sold by the competition. When suppliers make offers or discounts, pharmaceutical units are able to turn these discounts and offers to their customers, this resulting in a lower price for the final buyer. Customers' feedback is also important, any customer wishing for lower prices. In this regard, there is always a minimum price limit because the prices must ensure the recovery of investments, full coverage of costs and a satisfactory profit.

Question 8. The average markup applied in the surveyed veterinary pharmaceutical units was determined at the following levels: 20 – 50% (20 units; 80%), 10 – 20% (3 units; 12%), and 50 – 100% (2 units; 8%). The applied markup must cover both the operating costs of pharmaceutical units, and making a profit.

Thus, most of veterinary pharmaceutical units achieve this balance by using a markup ranging between 20-50%, with an average of 25-30%.

Question 9. After processing the data, it was found that the markup for a product is established depending on the value of the product (13 units; 52%), market demand (7 units; 28%) and product's availability (5 units; 20%). The value of the product influences its markup by the value of purchase price from the suppliers. As a general rule, if a product is purchased at a lower price, the markup will be higher, and vice versa. However, some pharmaceutical units practice the same markup, regardless of the product's value. Market demand is an important factor in establishing the markup. Customers are the ones who, indirectly and unwillingly, decide the implementation of a markup different than usual. The products are more popular, and sales grow, the markup increases, resulting in increased profit. As for availability of products, when some items are rare or difficult to purchase, the markup established by veterinary pharmaceutical units' managers is higher than the markup for products without purchase difficulties.

CONCLUSIONS

The results showed that the supply of veterinary pharmaceutical units is typically performed daily or weekly and is influenced by season, prices and profitable offers from suppliers.

In an overwhelming percentage, veterinary pharmaceutical units' stocks are electronically managed by using software that facilitates staff's work, and most of the surveyed veterinary pharmaceutical units keep a safety stock.

The most important factors that influence price levels are mainly represented by the competition, discounts, offers and benefits from suppliers, and the most common markup for veterinary pharmaceutical units is between 20-50%.

Following the studies, it was concluded that modern management and marketing principles

related to the supply, stocks and prices are properly applied in the surveyed veterinary pharmaceutical units.

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**CLINICAL
SCIENCES**

