FACTORS THAT INFLUENCE THE BRAND OF MOSQUITO COILS THAT RETAILERS IN NAIROBI CHOOSE TO STOCK

BY

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STUDENT'S DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university other than the United States International University in Nairobi for academic credit.

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ABSTRACT

The purpose of this study was to determine the factors that influence the choice of mosquito coil brands stocked by retailers in Nairobi. The brands of mosquito coils available in the market are Raid, Moskill, Combat, Flower, Ridsect and Mortein-Doom. Each packet of mosquito coil contains ten coils and the brand name is clearly marked on the packaging. In the non self-service retail outlets, mosquito coils are mainly sold loose in individual pieces, much like cigarettes except unlike cigarettes individual pieces are not branded. At the point of sale, the consumer’s key opportunity to distinguish one brand from the other is considerably limited by the absence of a brand mark or name on individual coils. These phenomena may influence the retailer’s behavior with respect to choice of brand to stock and recommend to customers in his or her shop. Therefore an understanding of these factors is an important element for companies marketing mosquito coils to incorporate in their overall marketing strategy.

A descriptive research design was adopted in this study. The population under study was the non self-service retailers in Nairobi otherwise known as dukas and kiosks. Stratified random sampling design was employed based on a population of 13265 dukas and kiosks in Nairobi obtained from the latest retail census undertaken by Research International in 2000. The sample size was 403 retailers or three percent of the population. Data for the study was obtained through questionnaires administered using personal interviews to the shopkeepers in the selected retail outlets. These questionnaires were designed based on the research objectives. Data was analysed using SPSS software. Tables and pie charts were used to present the analysed data.

The study found that only 31% of consumers request for mosquito coils by brand name when shopping. The study also found that the brands which have high profit margins are more widely stocked than those which have lower profit margins. The study also revealed that 65% of retailers consider regular availability at the wholesale level to be an important factor in determining the brand of mosquito coils to stock. Finally the study found that only 34 % of retailers consider stated consumer needs to be an important factor in determining choice of brand to stock.
Based on these findings, the study concluded that the important factors that determine the brand of mosquito coils that retailers in Nairobi choose are profit margin and availability of the brand at the wholesale level. On the other hand since only a small proportion of consumers make their purchase of mosquito coils by brand name, this is not a major factor in determining the choice of brand the retailer chooses. Similarly consumer needs that are expressed to the retailer at the point of purchase are not a major factor in determining the choice of mosquito coil brand to stock.

The main recommendations of the study were that owners of mosquito coils brands seeking to increase sales and gain market share should invest in distribution to ensure their brands are regularly available at the wholesale level. In addition they should ensure that a competitive profit margin for the retailer is incorporated in the pricing structure. Brand owners should work on identifying a unique benefit for their brand and a means by which the consumer can identify the brand as an individual coil. The study also recommends that further research should be carried out to test whether the findings are applicable in other parts of Kenya.
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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the problem

Mosquito coils are widely used low cost insecticides within the lower income households in Kenya. According to the Kenya Bureau of Standards the smoke obtained from a mosquito coil contains an active ingredient used to prevent adult mosquitoes from biting, particularly during the hours of sleep. Pyrethrins and pyrethroids as active ingredients act as repellent agents causing the mosquito to suffer immobilization, paralysis and finally death. The widest use of mosquito coils according to the Kenya Bureau of Standards occurs in those areas of the tropics and sub-tropics where, during the hours of sleep, it is either inconvenient or impracticable to seal rooms completely to keep away mosquitoes.

The Kenya household insect control market is dominated by two types of products, that is, aerosol liquids insecticides and mosquito coils. Monthly retail audits conducted by Research International (2002) indicated that the market was worth Kshs. 550 million at consumer prices with coils contributing 41 percent in value terms.

Aerosol liquids or sprays, which are premium priced, are targeted at the middle and upper income households while mosquito coils are targeted at lower income households living in houses where it is impracticable to seal rooms completely from entering mosquitoes during hours of sleep. Single units of aerosol insecticides spray costs between 120.00 and 230.00 Kenya shillings in 2003, while a pack of 10 coils cost about 25.00 Kenya shillings.

According to Research International, Kenya Retail Audit (January 2003), 83 percent of mosquito coils in Kenya were sold through small grocery retail shops referred to as kiosks and dukas. During the manufacturing process the coils come off the production line in pairs which are referred to within the industry as ‘double coils’. Each packet of mosquito coils contains 5 pairs or 10 coils. Although branded on the packaging, mosquito coils are mainly sold loose in pairs or individual pieces, much like...
cigarettes, except unlike cigarettes individual pieces are not branded. The kiosk and duka retailer is therefore possibly in a unique position to push one brand in preference to others, as the consumer's key opportunity to distinguish one brand from the other is considerably limited by the absence of a brand mark or name on individual coils. According to Quelch & Kenny (Harvard Business Review on Brand Management 1999), retailer support is critical to the success of any marketing initiative as retailers are increasingly selective on which brands to stock.

According to Research International, Kenya Retail Audit (December 2002), Nairobi constitutes 28 percent of the total mosquito coil market in Kenya. A survey was carried out among a randomly selected group of non self service retailers in Nairobi to determine the factors that influence the brand of mosquito coils that they chose to stock. The study was intended to provide useful input in the developing of a marketing strategy for companies that market these brands.

1.2 Statement of the problem

Mosquito coils are packaged and offered to the consumer as branded products. The brands of mosquito coils available in the Kenyan market are Raid, Moskill, Combat, Flower, Ridsect and Mortein-Doom. According to Research International, Kenya Retail Audit (January 2003), 83 percent of mosquito coils in Kenya were sold through small grocery retail shops referred to as kiosks and dukas. The full packets show the brand name while the individual pieces do not. This means that most customers have no benefit of seeing the brand name. Therefore the brand name cannot be used as a means of product identification to aid in the selling process and hence the study to establish the factors that influence the retailers in determining the brand of mosquito coil to stock.

1.3 General objective of the study

The general objective of the study was to establish the factors that influence the brand of mosquito coil that retailers in Nairobi choose to stock. This information could be useful to companies marketing mosquito coils in the formulation of appropriate marketing strategies for their brands.
1.4 Specific Objectives

The study sought to

(i) determine the proportion of consumers who make their purchases based on brand name

(ii) determine the extent to which profit margins influenced the choice of mosquito coil brand stocked by the retailers.

(iii) determine the importance of availability of the brand of mosquito coil at the wholesale level in influencing the choice of mosquito coil brand stocked by the retailers.

(iv) determine the consumer needs that influence the choice of mosquito coil brand stocked by the retailers

1.5 Justification of the study

The study was intended to provide useful information on the factors that influence the choice of brand stocked by retailers to brand owners or marketing teams of the eight mosquito coil brands in the market. Such information could be used to assist in the formulation of better informed marketing strategies for the companies that market these brands.

The study was also intended to be of use to companies considering launching new brands into the mosquito coil market in Kenya to enable them better understand the factors that influence non self-service retailers in determining the brands of mosquito coils to stock.
1.6 Scope of the study

The study was conducted within Nairobi City boundaries. The population studied was the 13265 non self-service retail outlets also referred to as dukas and kiosks in Nairobi, based on Research International Kenya Retail Audit Census (March 2000). The large geographical area and population of retailers presented limitations in carrying out the survey. In order to cope with these limitations stratified random sampling was employed. Nairobi was divided into 43 locations (see Appendix 4). Random sampling of these locations was done to obtain six locations from which random sampling of retailers within the selected locations taking into account relative population per location was conducted. The field work, data entry and analysis parts of the research project were undertaken between October and December 2003.

1.7 Chapter Summary

The objective of this study was to determine what factors influence the brand of mosquito coil that retailers will stock in Nairobi. This has a significant influence on market share because according to available market information (see literature review) most non self service outlets stock only one brand, out of the eight brands in the market implying that the retailer is in a uniquely powerful position to influence which brand consumers buy because individual coils, unlike for example loose cigarettes are not branded. The results of this study were intended to assist current or potential new entrants into the mosquito coil market in Kenya in formulating a better informed marketing strategy for their brands.

Chapter two covers the literature review of this project. A review of published information relevant to the objectives of this study is undertaken. In the third chapter, the methods and procedures that were used to carry out the study are detailed. This includes a clear description of the scientific methodology followed in research design, population and sampling determination, data collection methods, fieldwork and data analysis.
CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter contains a review of literature from relevant sources including, journals, marketing text books, retail audits, media monitoring reports and previous research thesis to enable a better understanding of the research problem. This information is reviewed according to the research objectives.

2.2 Consumer request for mosquito coils by brand name at the point of purchase

According to Kotler (2000) a brand is a name, term, sign, symbol or design, or a combination of them, intended to identify the goods or services of one seller or group of sellers and to differentiate them from those of competitors. According to Palmer (2000), the term ‘branding’ pre-dates modern marketing and is generally believed to have originated in agricultural practices of the middle ages. Farmers who allowed their cattle to graze on common land needed some means of distinguishing their cattle from those owned by other farmers. They therefore ‘branded’ their animals with a branding iron, leaving an indelible mark which would clearly identify to whom an animal belonged. Palmer (2000) argues that branding lies at the heart of marketing strategy and seeks to remove a company from the harsh competition of commodity-type markets. By differentiating its product and giving it a unique value, a company simplifies consumer choices in markets which are crowded with otherwise similar products.

According to Feldwick (2002) the need for product differentiation gave rise to the concept of branding. Feldwick (2002) describes a brand as a guarantee of authenticity and replicability. Consumers believe in brands because they largely keep their promises. Using the example of a bottle of Heinz tomato ketchup. He makes the point that if every bottle tasted different from the last, the brand would have little meaning. The product itself may sometimes change but its promise should remain. Indeed certain products like newspapers change constantly by their very nature. However,
consumers still expect the product to live up to the promise the consumers associate with the particular brand. According to Feldwick (2002), one of the most striking examples of the real value to the customer of the brand experience was found in the analgesic market, as reported in the British Medical Journal (Braithwaite and Cooper 1981). Patients taking their own preferred brand of analgesic as opposed to a chemically identical own-label product claimed faster relief from pain. Consumers therefore derive a sense of reassurance from using a particular brand and will probably ask for that specific brand by name at the point of purchase.

Kapferr (1994) says that companies face many possibilities when branding their products. He suggests that a brand name should include the following desirable qualities.

- It should suggest something about the product benefits
- It should suggest product qualities such as action or colour
- It should be easy to pronounce or recognize
- It should be distinctive
- It should not carry poor meanings in other countries and languages

The mosquito coil brands in the market have captured some of the attributes quite well. For example, Riddes suggests something about the brands’ action (to get rid of insects) while Moskitt is even more specific in suggesting that the brands intended action is to kill mosquitoes. Raid and Doom are both easy to pronounce and also suggest something about the product benefits.

According to Kotler (1999) successful brands have two qualities; brand vitality and brand stature. Kotler suggests that a brand has brand vitality when it is differentiated in the consumers mind from other brands and when the differentiation is relevant to the consumer needs. He goes on to add that the brand has stature when it commands high esteem and high familiarity in its target market. The extent to which mosquito coil brands are differentiated in the consumers mind should be reflected in the proportion of consumers who ask for specific brands at the retail level.
Doyle (1998) described brand building as the only way to build a stable, long-term demand at profitable margins. Advertising expenditure data from Steadman and Associates (2003) shows that Flower Raid, Moskill, and Mortein-Doom mosquito coil brands are all advertised on Radio. Hence brand building is a part of the marketing strategy for mosquito coils. The relative market shares of these brands are indicated below.

**Table 1: Relative Market Shares for Mosquito Coils**

<table>
<thead>
<tr>
<th>Brand</th>
<th>Market share (Kenya)</th>
<th>Market share (Nairobi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raid</td>
<td>33%</td>
<td>51%</td>
</tr>
<tr>
<td>Moskill</td>
<td>27%</td>
<td>29%</td>
</tr>
<tr>
<td>Flower</td>
<td>25%</td>
<td>0%</td>
</tr>
<tr>
<td>Ridsect</td>
<td>10%</td>
<td>13%</td>
</tr>
<tr>
<td>Mortein-Doom</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>Others</td>
<td>3%</td>
<td>6%</td>
</tr>
</tbody>
</table>

*Source. Retail International Retail Audit, 2002*

Weller, (1974) identifies brand demand as when people ask for a particular brand by name because they feel that it is superior to competing brands in a way that is important to them and provided that it is conveniently available they will not accept alternatives. Consumer request for mosquito coils by brand name should therefore influence the brand that the retailer will stock. However it is important to identify to what extent this factor impacts on the choice of brand that non self-service retailers will stock given that most coils are sold loose and individual pieces do not have a brand mark. This is particularly so since Research International, Kenya Retail Audit (2003) shows that most retailers will stock one and occasionally two brands.
2.3 Profit margin

According to Cox (1989) profit margin is the difference between the cost price of an item of merchandise and its selling price. He describes profit margin according to the following equation.

\[
\text{Profit margin} = \frac{\text{selling price-buying price} \times 100}{\text{Selling price}}
\]

Cox (1989) distinguishes profit margin from profit markup which he describes as

\[
\text{Profit markup} = \frac{\text{selling price-buying price} \times 100}{\text{buying price}}
\]

Cox (1989) argues that retailers are concerned with profit margin on individual product lines that they sell as margins are a key ingredient to managing shops profitability.

According to Quelch and Kenny (Harvard Business Review on Brand Management 1999), there is a continuing power struggle between retailers and manufacturers on profit margin. They argue that when manufacturers weaken brand loyalty through their own actions, they fall prey to the retailers desire to demand higher slotting fees and gain a larger share of profit margins. According to Dell and Fredman (2000) low cost and high profit margins are a recipe for an exceptional business and a key contributing factor to the phenomenal success of Dell Computer Corporation since it was founded by Michael Dell in 1984. Saunders (1977) affirms that buying competitively contributes significantly to a firm’s profitability. He adds that buying competitively involves comparing supplier prices in order to optimize profit margins.

In a study of product distribution channels in Thika town, Ng’ang’a (2000) found that retailers expect a high profit margin on the sale of products that they stock. According Walters (1994) if a retail business is to be successful, then profit margin management is critical. Among the factors that Walters (1994) identifies as playing a crucial role
in profit margin maximization is the procurement activity. With respect to mosquito coils, since there are many brands in the market the duka and kiosk retailer may choose which brand to stock based on profit margin. Wileman and Jary (1997) found that when retailers source for products from suppliers among the key factors that influence profit are buying clout and savvy. While buying clout was largely associated with the size of the retailer, savvy on the other hand has to do with the keen awareness by retailers that optimizing profit margins was a key ingredient for success.

According to Rachman (1975) retailers are constantly striving for advantages over their competitors. He identifies one of the means of achieving these advantages as buying merchandise for less in the form of lower prices. This indicates that profit is important to the retailer as paying a lower price will enable him/her sell at a higher profit margin per unit. According to Rachman (1975) this is particularly so when the retailing environment is dominated by small retail firms which makes it extremely competitive as entry is relatively easy and the competitors numerous. With respect to mosquito coils the prospect of the retailer being motivated by profit margin is very possibly enhanced by the fact that coils sold in non self service retail outlets are often sold loose and since individual pieces are not branded the retailer is in a unique position to ‘push’ the brand that carries a higher profit margin.

2.4 Availability of the brand of mosquito coil at the wholesale level

Stanton (1975) defined channels of distribution as the route taken by the title to goods as they move from the producer to the ultimate consumer. He identifies the parties that carry the title as the manufacturer, the wholesaler, the retailer and the consumer. According to Stanton (1975) the wholesaler plays a key role in the traditional distribution channel for consumer goods where the manufacturer is trying to reach several small retailers.

Dale and Banfield (1985) describe the main functions of a wholesaler as

- To help producers break bulk. Wholesalers buy in bulk from the manufacturers and split this quantity by selling in smaller lots to retailers
To help manufacturers reduce the cost of reaching thousands of retailers located all over the country by acting as a one-stop shop. Wholesalers can purchase goods from many manufactures and help make a wide range of goods available to retailers more conveniently.

The manufactures of mosquito coil brands therefore need to make their products available at the wholesale level in order to ensure their brands are accessible to retailers.

According to Dale (2002) wholesale numeric distribution which is the percentage of wholesale outlets within a geographic area in which a particular brand is available, has a direct influence on retail numeric distribution. Dale argues that companies such as Unilever and Nestle have been successful in getting retailers in remote trading centers in Africa and Asia to stock their products because these companies have invested in making their products available at the wholesale level. This suggests that the more widely available a brand of mosquito coil is at the wholesale level the more likely it is to be stocked by the retailer.

In his thesis on the retailer-wholesaler relationship in Nairobi, Mursal (2002), identifies specific factors including proximity and the availability of a wide range of goods and services as critical factors in determining the choice of wholesaler that the retailer will develop a long term relationship with. Mursal identified availability of a wide collection of merchandise as the single most important factor that retailers looked for in determining their choice of wholesalers from which to buy their supplies from. According to Mursal (2002), 56% of retailers considered that this was an important factor in selecting a wholesale supplier. Mursal also found that 35% of Nairobi retailers prefer a wholesaler who forecasts customers’ demands and ensures reliable availability of stock especially for seasonal products. Mosquito coils fall within this category of seasonal products as consumption is particularly high during the rainy season when prevalence of mosquito’s is high and therefore the possibility of a retailer stocking a particular brand of coil is likely to be enhanced if the brand is regularly available at the wholesale outlet or outlets that the retailer obtains his supplies from.
2.5 Consumer needs that influence the retailer’s choice of brand to stock

According to Smith (1998), the psychologist Adam Maslow identified a hierarchy of five levels of human needs.

- Basic physiological need for survival
- Need for protection and security
- Social needs such as love and belonging
- Esteem needs such as status or self esteem
- Self-actualization needs which involve self development

Mosquito coils protect households against mosquito bites which can cause disease, and therefore contribute towards fulfilling the human need for protection and security.

According to Lewinson and DeLozier (1989) the act of buying starts with a motive. Motivation refers to the process by which consumers are incited to action and is triggered by an unsatisfied need. A need is the lack of something that is necessary to the well being of the individual. From a retailing perspective according to Berman and Evans (2001), needs are a persons basic shopping requirements consistent with his or her present demographics and life-style. Consumers living in areas where mosquitoes breed may be motivated to resolve their unsatisfied need for protection against mosquito bites by purchasing one of the many brands of mosquito coils available in the market.

Kotler (2000) distinguishes between stated customer needs and unstated needs. Stated needs are those that customers express verbally when shopping while unstated needs have to do with the actual expectations of the customer making the purchase. Kotler gives the example of a stated need as when a customer walks into a shop and says he wants an inexpensive car. He suggests that such a customer’s real or unstated need may be a car whose operating cost and not its initial price is low. According to Ehrenberg and Pyatt (1971) a consumer may ask a store assistant for the latest washing machine model available (stated need); while the consumers real or unstated need is social prestige leading to the attraction to a washing machine with features thought to be upmarket. This study is concerned with stated needs as in the absence of
a brand name on the individual mosquito coil, the duka and kiosk owners may be influenced by consumer needs that are expressed in other ways other than brand name at the point of purchase. Olson (1977) argues that consumers often make purchase decisions based on physical attributes that they believe to be signals of need satisfaction such as smell, colour and shape. According to Olson, the perceived quality of a product affects consumer behaviour and subsequent buying decisions. Garvin (1987) identifies performance, reliability, aesthetics and perceived quality as some of the factors that influence consumer behaviour. Consumer of mosquito coils may express some of their needs to the retailers using physical attributes such as smell or colour if they associate these physical attributes with product quality.

According to Amarchand and Varadharajan, (1989), the function of attending to varying needs and tastes of customers is basic to the success of retailing. Therefore it is important to determine the needs that consumers who buy mosquito coils from duka and kiosks in Nairobi express to the retailer as some of these may influence the brand that the retailer chooses to stock.

2.6 Chapter Summary

In this chapter a review of the available literature related to the specific objectives of the study has been undertaken. This included a review of published information from relevant previous research from various sources including, journals, marketing text books, retail audits, and other relevant sources of information such as media monitoring reports, in line with the objectives of the study to enable a better understanding of the research problem.

The next chapter describes the research methodology employed. This includes a description of the research design, population and sampling design as well as the data gathering methods employed followed by a detailed description of the research procedures and data analysis methods used in the study.
CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

In this chapter an explanation and description of the methods and procedures used in conducting the study are undertaken. This includes what type of research design was selected followed by a review of the population, sampling frame, sample size and sampling method used. This is followed by a look at the data gathering methods employed as well as a detailed description of the research procedure after which a description of the data analysis methods employed is detailed.

3.2 Research design

Malhotra (1996 p, 91) defines a research design as “a framework or blueprint for conducting a marketing research project. It details the procedures necessary for obtaining the information needed to structure or solve marketing research problems. Although a broad approach to the problem has already been developed, the research design specifies the details of implementing that approach.” In this study a descriptive research design was adopted since according to Malhotra (1996), descriptive research assumes that the researcher has some prior knowledge about the problem and that the study will be typically based on a large representative sample. These two characteristics were applicable to this study.

3.3 Population and Sampling Design

3.3.1 Population.

The population of interest in this study consisted of the 13265 non self service retail outlets otherwise known as dukas and kiosks in Nairobi obtained from the latest retail census undertaken by Research International in 2000. These dukas and kiosks are relatively small shops that stock a few household items compared to supermarkets which stock a wide range of goods. Dukas and kiosks break bulk and are situated in
residential areas where their customers live. The respondents were the shopkeepers who manage these retail outlets.

3.3.2 Sampling Design

3.3.2.1 Sampling frame
The sampling frame was the list of 13265 dukas and kiosks in Nairobi based on a census conducted by Research International (March 2000). The number of retailers per administrative location is enumerated in the census report (see Appendix 4). This enabled enhanced sampling accuracy and a balanced allocation of field manpower resources for the data collection exercise.

3.3.2.2 Sampling Technique
To ensure fair representation and generalization of findings to the general population, probability sampling technique was used. Stratified random sampling was employed as Nairobi is divided into 43 administrative locations. Random sampling of six locations from the census (see Appendix 4) was done. The six randomly selected locations were Githurai, Kariobangi, Kangemi North, Korogocho, Ruai and Starehe. This was followed by random sampling of non self service retailers within the selected locations using the left turn rule adopted from retail audit practice by Research International to select the required number of dukas and kiosks required to attain the desired sample size, taking into account the relative population of each of the six randomly selected locations.

3.3.2.3 Sample size
The sample size was 403 retail outlets or three percent of the population. This was large enough for conclusive inferences to be drawn of the general population. The number of randomly selected retailers per location was Githurai 101, Kariobangi 36, Kangemi North 63, Korogocho 93, Ruai 19 and Starehe 91.
3.4 Data collection methods

Primary data were obtained from shopkeepers in the dukas and kiosks selected. Data collection was done using the survey method. The data collection instrument was a questionnaire containing closed and open ended questions developed and organized on the basis of the specific research objectives to ensure relevance to the research problem. The questionnaire was administered through personal interview by visiting the respondents or shopkeepers at their respective retail outlets.

3.5 Research Procedures

To evaluate its effectiveness as an instrument for data collection, the questionnaire was pilot tested by administering it to a limited number of 30 respondents to enable the researcher revise and review the questionnaire where necessary. Nairobi was divided into administrative areas or locations. Random sampling of these areas was conducted followed by random sampling of dukas and kiosks within the selected locations. The data collection started at the nearest randomly selected location to the researchers offices to enable closer supervision in order to iron out any initial administration hurdles and proceeded clockwise until completion. Questionnaires were administered by face to face interviewing of the shopkeepers at their respective retail outlets as this guaranteed a high percentage response rate.

3.6 Data analysis methods

Results of the questionnaire were analyzed using SPSS software descriptive statistical techniques include frequencies, measures of central tendencies and measures of dispersion. Pie charts and tables were used to present the analyzed data based on the specific objectives of the study.

3.7 Chapter Summary

In this chapter a detailed review of the research methodology employed in the study was undertaken. This includes a description of the research design, population and sampling design as well as the data gathering methods employed. This was followed by a detailed description of the research procedures and data analysis methods used in the study.
CHAPTER FOUR

4.0 RESULTS AND FINDINGS

4.1 Introduction
This chapter’s objective is to present and explain the data gathered rather than draw interpretations or conclusions. The findings are presented and analysed based on questions fielded to the respondents which were in turn based on the research objectives. The data is presented in tables and pie charts. A brief description in words of what is shown in the tables or figures is provided. A summary of the results and findings of the study is provided at the end of the chapter.

4.2 Consumers who make their purchases based on brand name.
This section presents data on the number of brands stocked by the retailer, the proportion of retailers selling loose coils, the proportion of times each brand is sold loose and the proportion of consumers who purchase coils by brand name.

4.2.1. Number of brands stocked by the retailer.
Data on the number of brands stocked by the retailer were analyzed and presented in figure 1.

Figure 1: Number of brands stocked by retailers
Figure 1 shows that 73 percent of the dukas and kiosks stock one brand while only 4 percent of retailers stock more than two brands
4.2.2. Proportion of coils sold loose

Data on the proportion of coils sold loose as opposed to coils sold in full packets were analyzed and presented in Table 2

Table 2: Proportion of coils sold loose.

<table>
<thead>
<tr>
<th>Location</th>
<th>Coils sold loose</th>
<th>Coils sold as full packs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>Githurai</td>
<td>74</td>
<td>18</td>
<td>27</td>
</tr>
<tr>
<td>Kangemi North</td>
<td>54</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>Karobangi</td>
<td>31</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Korogocho</td>
<td>82</td>
<td>20</td>
<td>11</td>
</tr>
<tr>
<td>Ruali</td>
<td>16</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Siarehe</td>
<td>79</td>
<td>20</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>336</td>
<td>83</td>
<td>67</td>
</tr>
</tbody>
</table>

Table 2 shows that 83 percent of consumers by loose coils while only 17 percent buy mosquito coils in full packets.

4.2.3. Relative sales of brands as loose coils

Data on the relative sales of brands as loose coils were analyzed and presented in Table 3

Table 3: Relative sales of brands as loose coils.

<table>
<thead>
<tr>
<th>Brand</th>
<th>Githurai</th>
<th>Kangemi N.</th>
<th>Karobangi</th>
<th>Korogocho</th>
<th>Ruali</th>
<th>Siarehe</th>
<th>Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
</tr>
<tr>
<td>Raid</td>
<td>52</td>
<td>16</td>
<td>45</td>
<td>14</td>
<td>27</td>
<td>8</td>
<td>49</td>
<td>15</td>
</tr>
<tr>
<td>Moskili</td>
<td>26</td>
<td>27</td>
<td>11</td>
<td>3</td>
<td>24</td>
<td>8</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>Ridssect</td>
<td>3</td>
<td>14</td>
<td>1</td>
<td>0</td>
<td>11</td>
<td>3</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Mortens Doosm</td>
<td>7</td>
<td>21</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Combat</td>
<td>2</td>
<td>40</td>
<td>0</td>
<td>0</td>
<td>20</td>
<td>6</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>Coiletnet</td>
<td>2</td>
<td>25</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>33</td>
</tr>
</tbody>
</table>

Table 3 shows that of the four main brands Ridssect is sold loose 86 percent of the time while Raid is sold loose 81 percent of the time.
4.2.4. Proportion of consumers who purchase coils by brand name

Data on the proportion of the last ten consumers who asked for mosquito coils buy brand name were analyzed and presented in Table 4.

Table 4: Proportion of consumers who purchase coils by brand name.

<table>
<thead>
<tr>
<th>Location</th>
<th>Consumers asking for coils by brand name</th>
<th>Consumers not asking for coils by brand name</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>Githurai</td>
<td>34</td>
<td>8</td>
<td>67</td>
</tr>
<tr>
<td>Kangemi North</td>
<td>19</td>
<td>5</td>
<td>44</td>
</tr>
<tr>
<td>Kariobangi</td>
<td>12</td>
<td>3</td>
<td>24</td>
</tr>
<tr>
<td>Korogocho</td>
<td>24</td>
<td>6</td>
<td>69</td>
</tr>
<tr>
<td>Ruai</td>
<td>8</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>Starehe</td>
<td>29</td>
<td>7</td>
<td>62</td>
</tr>
<tr>
<td>Total</td>
<td>126</td>
<td>31</td>
<td>277</td>
</tr>
</tbody>
</table>

Table 4 shows that only 31 percent of consumers shop for mosquito coils using a brand name while 69 percent do not ask for coils by brand name at the point of purchase.
4.3. Importance of profit margin

This section presents data on profit margin for the different brands of mosquito coils in the market

4.3.1 Profit margin by brand

Data on the profit margin by brand were analysed and presented in Table 5

Table 5: Profit margin across different brands.

<table>
<thead>
<tr>
<th>Brand</th>
<th>Mean buying price (Kshs)</th>
<th>Mean selling price (Kshs)</th>
<th>Mean profit margin (Kshs)</th>
<th>Number of outlets stocked</th>
<th>Percentage of outlets stocked</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raid</td>
<td>1.86</td>
<td>2.86</td>
<td>1</td>
<td>336</td>
<td>83.4</td>
</tr>
<tr>
<td>Moskill</td>
<td>1.84</td>
<td>2.85</td>
<td>1.01</td>
<td>95</td>
<td>23.6</td>
</tr>
<tr>
<td>Ridssect</td>
<td>2.03</td>
<td>2.98</td>
<td>0.95</td>
<td>23</td>
<td>5.7</td>
</tr>
<tr>
<td>Mortein Doom</td>
<td>1.95</td>
<td>2.83</td>
<td>0.92</td>
<td>34</td>
<td>8.4</td>
</tr>
<tr>
<td>Combat</td>
<td>1.83</td>
<td>2.75</td>
<td>0.92</td>
<td>6</td>
<td>1.6</td>
</tr>
<tr>
<td>Coilnet</td>
<td>1.91</td>
<td>2.92</td>
<td>1.01</td>
<td>7</td>
<td>1.7</td>
</tr>
<tr>
<td>Motox</td>
<td>2</td>
<td>2.75</td>
<td>0.75</td>
<td>1</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Table 5 shows that Raid which is stocked in 83 percent of retail outlets and Moskill which is stocked in 24 percent of retail outlets offer a similar mean profit margin of 1.00 shillings and 1.01 shillings respectively which is between 5 to 6 cents higher than Ridssect and 8 to 9 cents higher than Mortein Doom which are stocked in 6 and 8 percent of outlets respectively.
4.4 The importance of regular availability of mosquito coil brand at the wholesale level

This section presents data on the type of wholesale supplier selected by retailers as well as data on the importance of regular availability at the wholesale level in determining brand stocked by the retailer.

4.4.1. Type of wholesale supplier selected

Data on the type of wholesale supplier that retailers choose to buy their coils from were analyzed and presented in figure 2.

![Pie chart showing the distribution of wholesale suppliers.]

**Figure 2: Type of Wholesale Supplier Selected.**

Figure 2 shows that 70 percent of retailers buy their coils from the small wholesalers located within their suburb while only 30 percent select the large wholesalers located further away in the commercial business centers.
4.4.2. Importance of regular availability at the wholesale level

Data on the importance of regular availability at the wholesale level as a factor in the choice of brand of mosquito coils stocked by the retailer were analyzed and presented in Table 6.

Table 6: Importance of Regular Availability

<table>
<thead>
<tr>
<th>Importance</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not important</td>
<td>142</td>
<td>35.2</td>
<td>35.2</td>
</tr>
<tr>
<td>Very important</td>
<td>261</td>
<td>64.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>403</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 6 shows that sixty five percent of retailers consider regular availability at the wholesale level to be an important factor in selecting the brand of mosquito coils to stock while only 35 percent of retailers do not
4.5. Consumer needs that retailers consider in selecting brand of mosquito coil to stock

This section presents data on the needs that are stated by the consumer to the retailers at the point of purchase.

4.5.1. Consumer needs that retailers consider in selecting brand(s) of mosquito coil to stock.

Data on the needs that are expressed by the consumer to the retailer at the point of purchase were analysed and presented in Table 7.

Table 7: Consumer needs that retailers consider in selecting brand(s) of mosquito coil to stock.

<table>
<thead>
<tr>
<th>Stated need</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy to separate double coils/ does not break</td>
<td>41</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Burns effectively</td>
<td>18</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Brown color</td>
<td>55</td>
<td>14</td>
<td>28</td>
</tr>
<tr>
<td>non-irritating smell</td>
<td>15</td>
<td>4</td>
<td>32</td>
</tr>
<tr>
<td>kills mosquito's completely</td>
<td>6</td>
<td>2</td>
<td>34</td>
</tr>
<tr>
<td>No need stated</td>
<td>268</td>
<td>66</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>403</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 7 shows that 14% of retailers stated that brown color was an important consideration while 10% mentioned easy to separate double coils into singles without breakage as an important consideration. Each of the other needs mentioned by consumers were considered important by less than 5 percent of retailers.
4.6 CHAPTER SUMMARY

In this chapter the research findings were presented based on questions fielded to the respondents which were in turn based on the research objectives. The data is presented in tables and pie charts. The study verified that 73 percent of retailers in Nairobi stock only one brand of mosquito coils and that 83 percent of customers buy mosquito coils from dukas and kiosks loose, as opposed to full packets. Only thirty one percent of consumers ask for a coil by brand name at the point of purchase. The study also found out that the most widely stocked brands Raid and Moskill offer a higher mean profit margin than other less well stocked brands such as Ridsect and Mortein-Doom.

The study also revealed that 65 percent of retailers consider regular availability to be an important factor in selecting wholesale supplier of mosquito coils. Finally only a total of 34 percent of retailers mentioned various stated consumer needs that they considered important in determining choice of brand to stock with 14 percent saying that color was also an important consideration while 10 percent mentioned ease of separation without breaking when separating double coils into singles as an important consideration.
CHAPTER FIVE

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction
This chapter covers a summary of the important elements of the previous sections of the study followed by a discussion on the findings of the study. Thereafter the conclusions and recommendations drawn from the research findings are presented.

5.2 Summary

The general objective of the study was to establish the factors that influence the brand of mosquito coil that retailers in Nairobi choose to stock. This information could be useful to companies marketing mosquito coils in the formulation of appropriate marketing strategies for their brands.

Specifically the study sought to:

- determine the proportion of consumers who make their purchases based on brand name.
- determine the extent to which profit margins influenced the choice of mosquito coil brand stocked by the retailers.
- determine the importance of regular availability of the brand of mosquito coil at the wholesale level in influencing the choice of mosquito coil brand stocked by the retailers.
- determine the consumer needs that influence the choice of mosquito coil brand stocked by the retailers.
A descriptive research design was adopted. The population under study was the non self-service retailers in Nairobi otherwise referred to as dukas and kiosks. Stratified random sampling design was employed based on the universe of dukas and kiosks in Nairobi obtained from the latest retail census undertaken by Research International (March 2000). The sample size was 403 retailers or three percent of the population universe. Data for the study was obtained through questionnaires administered to the shopkeepers in the randomly selected retail outlets. These questionnaires were designed based on the research objectives. Data was analyzed using SPSS software and tables and pie charts were used to present the analyzed data.

The study found that only 31 percent of consumers ask for a coil by brand name at the point of purchase. The study also found out that among the four main brands Raid and Moskull which are stocked by 83 percent and 24 percent of retailers respectively offer the retailer a profit margin which is between 5 percent and nine percent higher than Ridsect and Mortein Doom which are stocked by 6 percent and 8 percent of retailers respectively. Sixty five percent of retailers consider regular availability to be an important factor in selecting wholesale supplier of mosquito coils. Among the stated consumer needs that retailers identified as factors that influence brand stocked were color which was mentioned as an important factor by 14 percent of retailers and ease of separation of double coils into single coils which was mentioned by 10 percent of retailers as an important consideration.

5.3 Discussion

5.3.1 The proportion of consumers who make their purchase based on brand name

The findings of the study show that 83 percent of retailers sell coils loose as opposed to full packets (see Table 2) which makes it difficult for brand owners to successfully differentiate their brands. The study also found that only 31 percent of consumers make their purchase decision based on brand name at the point of purchase (see Table 3), suggesting that brand awareness may be low among consumers and that achieving brand differentiation which is necessary for successful brand building is a major challenge for mosquito coil manufacturers. Den Weller, (1974) identifies brand
demand as when people ask for a particular brand by name because they feel that is superior to competing brands in a way that is important to them and provided that it is conveniently available they will not accept alternatives. According to Palmer,(2000) branding lies at the heart of marketing strategy and for a company to remove itself from the harsh reality of commodity type markets it should seek to differentiate its product by giving it a unique value which will enable consumers select it over otherwise similar brands. Companies marketing mosquito coils in Nairobi appear to recognize this since their products are branded and three of the key brands, Raid, Moskill and Mortein Doom are advertised on Radio. These findings however suggest that at the present moment retailers are not likely to be seriously influenced by consumers who ask for coils by brand name in determining the choice of brand to stock as such consumers are in the minority. This presents a significant challenge to mosquito coil brand owners seeking to improve their market share, particularly so since 73 percent of retailers stock only one brand and only 4 percent of retailers stock more than two brands (see figure 1)

5.3.2 The extent to which profit margin influences the choice of brand stocked by the retailer.

The study shows that among the four main brands Raid and Moskill which are stocked by 83 percent and 24 percent of retailers respectively offer the retailer a profit margin which is between 5 percent and 9 percent higher than Ridges and Mortein Doom which are stocked by only 6 percent and 8 percent of retailers respectively (see Table 5) Retailers are constantly striving for advantages over their competitors and Rachman (1975) identifies one of the ways of doing this as buying merchandise for less in the form of lower prices. According to Rachman (1975) this is particularly so when the retailing environment is dominated by small retail firms which makes it extremely competitive as entry is relatively easy and the competitors numerous. According Walters (1994) if a retail business is to be successful then profit margin management is critical. Among the factors that Walters identifies as playing a crucial role in profit margin maximization is the procurement activity. With respect to mosquito coils, since there are many brands in the market, the duka and kiosk retailer may choose which brand to stock based on profit margin. The prospect of the retailer being motivated by profit margin is very possibly enhanced by the fact the consumers
ability to distinguish between different brands is limited by the absence of a brand name on the individual coils.

5.3.3 The importance of regular availability at the wholesale level in influencing the brand stocked by the retailer.

The study found that 65 percent of retailers consider regular availability at the wholesale level to be an important factor in determining the brand of mosquito coils to stock (see Table 6). According to Stanton (1975) the wholesaler plays a key role in the traditional distribution channel for consumer goods where the manufacturer is trying to reach several small retailers. Dale (2002) points out that availability of a brand at the wholesale level has a direct influence on the number of retailers that will stock the brand. Mursal (2002) found that 35% of Nairobi retailers prefer a wholesaler who forecasts customers’ demands and ensures reliable availability of stock especially for seasonal products. Mosquito coils fall within this category of seasonal products as consumption is particularly high during the rainy season when prevalence of mosquitos is high.

5.3.4 Consumer needs that influence the choice of mosquito coil brand stocked by the retailers

The study shows that there are some consumer needs expressed to the retailers at the point of purchase that a few retailers consider in their selection of brand to stock. Fourteen percent of retailers consider color to be an important consumer need while 10 percent consider ease of separation of double coils into single coils without breaking as an important consumer need. (see Table 7). Kotler (2000) distinguishes between stated customer needs and unstated needs. Stated needs are those that customers express verbally when shopping while unstated needs have to do with the actual expectations of the customer making the purchase. Olson (1977) argues that consumers often make purchase decisions based on physical attributes that they believe to be signals of need satisfaction such as smell, color and shape. According to Olson (1977), the perceived quality of a product affects consumer behaviour and subsequent buying decisions. Garvin (1987) identifies performance, reliability, aesthetics and perceived quality as some of the factors that influence consumer
behaviour. Retailers who mentioned consumer needs such as colour and ease of separation without breaking as considerations taken into account in determining choice of brand to stock are behaving consistent with the observation by Amarchand and Varadharajan (1989), that the function of attending to varying needs and tastes of customers is basic to the success of retailing.

5.4 Conclusion

The general objective of the study was to establish the key factors that influence the brand of mosquito coils that retailers in Nairobi choose to stock. The following are the conclusions drawn based on the findings and discussion:

The proportion of consumers who make their purchase of mosquito coils by brand name is not a major factor in determining the choice of brand the retailer chooses to stock as only 31 percent of consumers ask for specific brand names at the point of purchase.

The profit margin offered by the brand is an important factor in determining the brand that the retailer chooses to stock as the brands with the highest margins; Raid and Moskull are the most widely stocked. However profit margin does not explain why Raid is stocked more widely than Moskull although the two brands have similar profit margins. This means that there are other important factors other than profit margin that retailers consider in choosing the brand of mosquito coil to stock.

Regular availability of the brand at wholesale level is an important factor in determining the choice of brand that the retailer in Nairobi chooses to stock as 65 percent of retailers stated that this was an important consideration in making their decision. Since 70 percent of retailers buy their mosquito coil supplies from wholesalers located within their suburb and only 30 percent buy their coils from the large wholesalers located in the commercial business centers, regular availability is particularly important at the wholesale level in the suburbs.

Consumer needs expressed to the retailers at the point of purchase are not a major factor in determining the choice of mosquito coil brand to stock as only a total of 34
percent of retailers indicated particular needs mentioned by the consumer that influence the choice of brand to stock.

5.5 Recommendations

The following recommendations are made based on the findings and conclusions of the study.

Mosquito coils brands seeking to increase sales and gain market share should adopt the following measures

5.5.1 Invest in distribution to ensure their brands are regularly available at the wholesale level and in particular focus their distribution on the smaller estate wholesalers located close to retailers.

5.5.2 Ensure that a competitive profit margin for the retailer is incorporated in the pricing structure because brands with a higher profit margin are much more widely stocked by the retailer.

5.5.3 Suspend advertising to the consumer if already doing so until brand differentiation with respect to loose coils can be attained.

5.5.4 As the proportion of consumers who ask for coil by brand name is not big enough to heavily influence the retailers choice of brand to stock brand owners should work on identifying a unique benefit for their brand and a means by which the consumer can identify the brand as an individual coil. However this unique benefit and its means of physical identification need to be inexpensive since the users of coils have relatively low disposable income as evidenced by their tendency to buy coils in singles and doubles rather than in full packs of ten. Once this has been achieved investment in brand building initiatives such as advertising communication should be re-instated.

5.5.5 The study focused on they key factors that determine choice of brand stocked by the retailer in Nairobi. As most brands of mosquito coils are offered on a national
basis it is recommended that further research should be carried out to test whether the findings are applicable in other parts of Kenya.
REFERENCES


- 31 -


Research International. (December 2002). Kenya Retail Audit, Insecticides Data Book.


Appendix (I): Implementation Schedule

<table>
<thead>
<tr>
<th>Activity to be carried out</th>
<th>Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Start</td>
</tr>
<tr>
<td>Proposal writing</td>
<td>August, 1</td>
</tr>
<tr>
<td>Data Collection</td>
<td>October, 16</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>November, 1</td>
</tr>
<tr>
<td>Report writing</td>
<td>January, 2</td>
</tr>
<tr>
<td>Binding and production</td>
<td>January, 23</td>
</tr>
<tr>
<td>Total Time</td>
<td>-</td>
</tr>
</tbody>
</table>
## Appendix (II): Implementation Budget

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount Budgeted - Kshs</th>
<th>Total - Kshs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PROPOSAL DEVELOPMENT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stationary</td>
<td>5,000.00</td>
<td></td>
</tr>
<tr>
<td>Computer hours</td>
<td>6,000.00</td>
<td></td>
</tr>
<tr>
<td>Telephone</td>
<td>5,000.00</td>
<td></td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td></td>
<td>16,000.00</td>
</tr>
<tr>
<td><strong>DATA COLLECTION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research Assistant</td>
<td>30,000.00</td>
<td></td>
</tr>
<tr>
<td>Interviewers</td>
<td>12,000.00</td>
<td></td>
</tr>
<tr>
<td>Transport</td>
<td>20,000.00</td>
<td></td>
</tr>
<tr>
<td>Telephone</td>
<td>5,000.00</td>
<td></td>
</tr>
<tr>
<td>Stationary</td>
<td>7,000.00</td>
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</tr>
<tr>
<td>Miscellaneous</td>
<td>5,000.00</td>
<td></td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td></td>
<td>79,000.00</td>
</tr>
<tr>
<td><strong>REPORT WRITING</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer time</td>
<td>8,000.00</td>
<td></td>
</tr>
<tr>
<td>Stationary</td>
<td>6,000.00</td>
<td></td>
</tr>
<tr>
<td>Report production and binding</td>
<td>7,000.00</td>
<td></td>
</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
<td></td>
<td>116,000.00</td>
</tr>
</tbody>
</table>
Appendix (III)  QUESTIONNAIRE

FACTORS THAT INFLUENCE THE BRAND OF MOSQUITO COILS THAT RETAILERS IN NAIROBI CHOOSE TO STOCK:

Section 1: Background information

Name of Retail shop: ____________________________

Location  __________________________________________

1. Do you sell mosquito coils? Yes ________ No ________

   (If answer is yes, please proceed to next question; if answer is no, please thank
    the retailer and move on)

2. How long have you sold mosquito coils in your shop?
   a) Less than one year  
   b) More than one year

   (If answer is less than one year, please thank the retailer and move on)

Section 2: Proportion of consumers who purchase coils by brand name

3. Would you please show me which brands of mosquito coils you currently have in
   stock? Circle all the brands that you can positively identify below:

   a) Combat  
   b) Moskull  
   c) Raid
   d) Flower  
   e) Ridsect  
   f) Doom
   g) Other (please specify) ____________________________

4. Out of the last ten customers that purchased mosquito coils from you, how many
   bought coils loose in single or double pieces as opposed to a full packets?

   One out of ten ______ Two out of ten ______ Three out of ten ______
   Four out of ten ______ Five out of ten ______ Six out of ten ______
   Seven out of ten ______ Eight out of ten ______ Nine out of ten ______
   Ten out of ten ______
5. Out of the last ten customers that purchased mosquito coils from you how many asked for the coil by brand name?

One out of ten  Two out of ten  Three out of ten
Four out of ten  Five out of ten  Six out of ten
Seven out of ten  Eight out of ten  Nine out of ten
Ten out of ten

Section 4: Importance of profit margin

6. (a) Would you please tell me the price you pay the wholesaler for each brand of coils you have in your shop, as well as the price you sell each brand to the consumer.

<table>
<thead>
<tr>
<th>BRAND</th>
<th>wholesale price per carton/dozen (ksh)</th>
<th>wholesale price per coil (ksh)</th>
<th>retail price per coil (ksh)</th>
<th>Profit margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Combat</td>
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<tr>
<td>Moskill</td>
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<td></td>
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</tr>
<tr>
<td>Flower</td>
<td></td>
<td></td>
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<tr>
<td>Ridsect</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Doom</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Other</td>
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</tbody>
</table>

Section 4: Importance of Regular availability of the brand at the wholesale level

7. Is regular availability of the brand of mosquito coils at the wholesale level an important factor in determining which brand of coil to stock?

a) Not important  b) Very important
8. What is the name of the wholesaler you usually buy your coils from?

<table>
<thead>
<tr>
<th>NAME OF WHOLESALER</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
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</table>

Section 5: Consumer needs considered by the retailer in determining brand of mosquito coil to stock.

10. Can you tell me of any needs that consumers mention which that may influence the brand(s) of mosquito coils that you purchase?
   a) 
   b) 
   c) 
   d) 

Thank you for your time.

NAME OF INTERVIEWER: __________________________

DATE: __________________________
Appendix IV: Population of Nairobi Dukas and Kiosks by Administrative location

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>NO. OF KIOSKS AND DUKAS</th>
</tr>
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<tbody>
<tr>
<td>Ngara</td>
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<tr>
<td>Starehe</td>
<td>343</td>
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<tr>
<td>Kangemi South</td>
<td>43</td>
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<tr>
<td>Kawangware</td>
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<tr>
<td>Mutuini</td>
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<tr>
<td>Riruta</td>
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<td>Waithaka</td>
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<td>Dandora</td>
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<tr>
<td>Embakasi</td>
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<tr>
<td>Imara</td>
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<td>Njiru</td>
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<table>
<thead>
<tr>
<th>LOCATION</th>
<th>NO. OF KIOSKS AND DUKAS</th>
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Total 13,265

Source: Research International Retail audit census (2000)