

## **Influence of Customer Demographics (Age, Gender and Religion) On Consumer Preferences for Health Services Among Private Hospitals in Nakuru County, Kenya.**

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**ABSTRACT:-** Private healthcare system in Kenya have grown tremendously over the last two decades due to various reasons, among them lack of adequate and quality public healthcare services and introduction of user fees. This study therefore aimed at empirically examining the determinants that have influenced consumers' choice for private health service providers in Nakuru County. In achieving this broad objective the study sought to examine the extent to which customer demographics (age, gender and religion) influences consumers' preference. Descriptive survey design was adopted in the study. Structured questionnaires was be used to gather primary data from in-patients with minor ailments in these hospitals through the assistance of the staff. Study sample size was 136 in- patients, where the sampling technique which was employed on determining individual respondents was convenient sampling method after choosing the hospitals purposively. Descriptive statistics (mean, standard deviation and frequencies) and inferential statistics particularly Pearson correlation and regression were used to test the relationship between variables under study whereas research hypotheses was tested at 0.05 significant levels. Customer demographic was positively related to consumer preference although weak ( $r = 0.248$ ,  $p < 0.05$ ) and statistically significant. This study concludes that patients' preference is determined by a complex interplay between a variety of patient and provider characteristics. Patients often attach greater importance to their own previous healthcare experiences or to doctors' recommendations than to comparative information. Additionally, patients base their decisions not only on outcome indicators but on a variety of provider characteristics. Findings from this study should not be underestimated. It will provide important source of knowledge for managers within the healthcare institutions, as well as the service industry in general. Health Care provider must focus towards the understanding the factors that influence the choice of health services.

**Key Words:** Demographics, age, gender religion and consumer preference

### **1.1 BACKGROUND OF THE STUDY**

Globally, the health provider industry has shifted in focus from providing quality care alone to providing both quality and service in their provision for health services. Now more than ever, individuals demand a high level of information, personalization and autonomy when making their health care decisions (Prakash, 2010). Today's patients can access medical records electronically, schedule appointments and order prescriptions through online patient portals, and even communicate with physicians via text message. This increase in the ease of access to information, as well as the newfound rapidity in patient-provider communications, has necessitated a greater concern with overall patient satisfaction. Patient satisfaction has become so critical because it is a motivating factor in patient retention, evidenced by hospitals with higher reported levels of patient satisfaction also claiming high levels of patient loyalty and retention (Prakash, 2010).

According to Motwani & Shrimali (2014), with the growing importance of service marketing mix, hospital administrators are becoming increasingly marketing oriented. Hospital administrators are keen to identify the factors which may affect patients' decision selection of hospital. They also identified that in hospital service price transparency, placing hospital services at convenient location of patients, behavior of medical staff, tangibility and process through technology plays important role in differentiating services from competitors.

The Kenyan health sector comprises of the public system, with major players including the Ministry of Health (MOH) and parastatal organisations, and the private sector, which includes private for-profit, NGO, and FBO facilities. Health services are provided through a network of over 4,700 health facilities countrywide, with the public sector system accounting for about 51 percent of these facilities. The public health system consists of the following levels of health facilities: national referral hospitals, provincial general hospitals, district hospitals, health centres, and dispensaries. National referral hospitals are at the apex of the health care system, providing

sophisticated diagnostic, therapeutic, and rehabilitative services. The two national referral hospitals are Kenyatta National Hospital in Nairobi and Moi Referral and Teaching Hospital in Eldoret. The equivalent private referral hospitals are Nairobi Hospital and Aga Khan Hospital in Nairobi. Provincial hospitals act as referral hospitals to their district hospitals. They also provide very specialized care. The provincial level acts as an intermediary between the national central level and the districts. They populations and between districts and provinces (66 percent of the population of Western Province is below the poverty line, compared with 46 percent in Central Province). They are related to gender, education and disability. The goal to reduce health inequalities can only be achieved effectively by involving the population itself in decisions on priority setting and consequently in the allocation of the resources. (MOH, 2010).

In a renewed effort to improve health service delivery, the Ministry of Health and stakeholders have reviewed the NHSSPI service delivery system in order to devise a new strategy for making it more effective and accessible to as many people as possible (MOH, 2004). The recommended changes are contained in the Second Health Sector Strategic Plan. This plan proposes to improve service delivery by using the following levels of care delivery. Level 1, the community level, is the foundation of the service delivery priorities. Once the community is allowed to define its own priorities and once services are provided that supports such priorities, real ownership and commitment can be expected. Important gains can be reached to reverse the downward trend in health status at the interface between the health services and the community. Village Health Committees (VHC) will be organised in each community through which households and individuals can participate and contribute to their own health and that of their village. Levels 2 and 3 (dispensaries, health centres, and maternity/nursing homes) will handle Kenya Essential Package for Health (KEPH) activities related predominantly to promotive and preventive care, but also various curative services.

Levels 4-6 (primary, secondary and tertiary hospitals) will undertake mainly curative and rehabilitative activities of their service delivery package. They will address to a limited extent preventive/promotive care. In this way, the existing vertical programmes will come together to provide services to the age groups at these various levels. The plan adopts a broader approach a move from the emphasis on disease burden to the promotion of individual health based on the various stages of the human cycle: pregnancy and the new-born (up to two weeks of age); early childhood (two weeks to five years); late childhood (6-12 years); youth and adolescence (13-24 years); adulthood (25-59); and the elderly (60+ years),(MOH 2010).

This requires a fundamental change in the existing governance structures in order to allow such a community ownership to take place. Future planning needs to recognize that “reversing the trends” cannot be achieved by the government health sector alone. Active involvement and partnership with other stakeholders in the provision of care is needed. A functioning health system should be established that relies upon collaboration and partnership with all stakeholders whose policies and services have an impact on health outcomes. The system should give a frame for sector-wide approach arrangement and bring flexibility for rapid disbursement of budgetary resources. A human resource plan will need to be developed to better staff the lower health facilities for effective primary health care. The new plan should strengthen monitoring evaluation and reporting system. Additional resources should be dedicated to commodity security, especially for vaccines, reproductive health commodities, and essential drugs. Gradually introducing the National Social Health Insurance Fund (NSHIF) to provide universal health care will help to reduce the current inequalities in access to care. (MOH 2010).

As the World Health Organization (WHO) observes, “Private provision is a substantial and growing sector that is capturing an increasing share of the health market across the world.” Today, private health institutions and providers play a major role in both developed and developing countries. Even the National Health Service in the United Kingdom, long an icon of state-funded universal health care, is currently undergoing major structural changes, opening services up to competition with the private sector, ostensibly to improve efficiency. Private provision of health services does not change the role of the state as the ultimate guarantor of the realization of health rights obligations, but it makes implementing its responsibilities more difficult(Chapman, 2014).

Fragmentation of the health system complicates oversight and the promotion of a rights-based approach to health. Segmentation of the health system, with a poorly functioning public sector catering primarily to the poor and better quality private health institutions catering to the more affluent, tends to undermine support for investing in improvements in institutions for the public provision and financing of health care and likely erodes commitment to the right to health as well. Additionally, the goals and priorities of private health care institutions tend to differ, often significantly, from the values and norms in the human rights paradigm. Working effectively with and through private-sector providers also requires management skills and complex health information systems that many governments, particularly those in poor and middle-income countries, often lack (Chapman, 2014).

### **1.1.2 Private health sector**

Private-sector health delivery covers many different realities. It includes both for-profit commercial companies and not-for-profit actors and institutions. It incorporates faith-based and other nongovernment non-

profit organizations, as well as individual health care entrepreneurs and private for-profit firms and corporations. It may also entail private sources of financing, such as shifting from public funding of health to private health insurance. In some countries with well-developed public health systems, private health provision plays a relatively minor and supplementary role, but in some others there are extensive networks of private providers for ambulatory, hospital, and in-patient care (Lawson *et al.*, 1999).

In developed countries, private provision usually entails care by well-trained medical professionals in settings with sophisticated equipment. Individual entrepreneurship is also prevalent in middle income countries, but large private firms, including multinational corporations, are capturing a growing share of the market, particularly the high-income segment, and increasingly competing for contracts with public and social security systems. As part of a health care system, the primary health Hospital has enormous importance in the delivery of health care. It has this importance because the primary health Hospital is the first point of care and a major conduit for the delivery of health care to a significant proportion of the population (Lawson *et al.*, 1999).

In the current competitive health care industry, hospital administrators would like to determine how important service attributes are to potential consumers and how those attributes influence consumer preferences decisions. According to Lawson, (2009), the ability to provide accessible and cost-effective health services to patients depends on a thorough understanding of the factors associated with the demand and use of services, especially those factors which can be manipulated to improve the provision of healthcare services. To understand why patients chose one hospital over another, it was important to know the major factors that patients consider.

Earlier studies on factors influencing patient's demand of a hospital were limited in many countries, especially the developing ones. In traditional societies of the developing world, the set of determinant variables for the utilization of health services seemed to be more complex than in the developed countries. Additional factors were involved due to: cultural differences, which include the change of illness concepts and health behaviour; the existence of a wide range of health services, both in quality and quantity; and the different socio demographic conditions (Dieleman & Harnmeijer, 2006). Therefore this forms a fundamental base for this study.

### **1.1.3 Consumer Preference**

#### **1.2 Statement of the Problem**

The aim of any private enterprise is to make a profit. Private hospitals are businesses that endeavour to offer health services at a quality reasonable profit. A number of marketing strategies (such as hospital accessibility, resources-qualified personnel), have been adopted in order to attract clients to receive health services from private hospitals. However, despite such initiatives, it remains unclear whether potential clients consider these initiatives in their demand of a health service provider. Hence it is important to establish the determinants of consumer preferences for health services among private hospitals in Kenya. According to Brelje (2015), little research has been done in an effort to pinpoint which factors, if any, hold greater weight in individuals' choice of health care institution or provider. Others studies like Sirisinsuk, Fungladda, Sighasivanon, Kaewkungwal, & Ratanawijitrasin (2003) have reported that the ability to provide accessible and cost-effective health services to patients depended on a thorough understanding of the factors influencing demand of health Hospital. Hence, the study aimed at establishing the determinants of consumer preferences for health services provided by private hospitals in Nakuru County.

### **1.3 Research Objectives**

#### **1.3.1 General Objective**

To examine influence of customer demographics (age, gender and religion) on consumer preferences for health services among private hospitals in Nakuru County, Kenya.

#### **1.3.2 Specific Objectives**

- i. To examine the influence of age on consumer preferences for health services among private hospitals in Nakuru County, Kenya.
- ii. To determine the effect of hospital gender on consumer preferences for health services among private hospitals in Nakuru County, Kenya.
- iii. To examine the influence of religion on consumer preferences for health services among private hospitals in Nakuru County, Kenya.

### **1.4 Research Hypotheses**

H<sub>01</sub>: Age does not have a significant influence on demand of health services provided by private hospitals in Nakuru County, Kenya.

H<sub>02</sub>: Gender does not have a significant influence on consumer preferences of health services provided by private hospitals in Nakuru County, Kenya.

H<sub>03</sub>: Religion does not have a significant influence on consumer preferences of health services provided by private hospitals in Nakuru County, Kenya.

### **Customer Demographics: Age, Income, Gender and Religion**

According to Solomon *et al.*, (2007), demography refers to the identifiable and measurable statistics of a population. Demographic characteristics such as gender, age, race, ethnic origin, income, family life cycle and occupation, are often used as the basic for market segmentation. Previous studies have investigated patient's socio-economic and demographic characteristics in relation with satisfaction partly because of the ease with which data can be collected. Previous studies on parental satisfaction of health care for children aged under-five regarding the services of a given health provider is virtually non-existent (Hiemenz&Amponsah, 2009). Although the kids are the patients in question, they cannot make their own satisfaction evaluation, and thus the mothers or caregivers make such judgments. Research shows that characteristics such as age, educational level, health status and amount of information conveyed by the health provider are significant predictors of health care satisfaction (Chahalet *et al.*, 2004; Cohen, 1996; Hall & Dornan, 1988).

Chahal, *et al.*, (2004) in his study acknowledges that there are control variables that were found to be significant on the patients' choice of health service providers. These variables were sex of the child, maternal age and education, marital status and previous knowledge of health issues (proxied by access to television). He further states that highly educated mothers are found to be less satisfied with their children's health care services. This might be attributable to the fact that they are more critical about health services provided in general coupled with the fact that they are more knowledgeable about social health issues and their "rights" (Agha & Do, 2009; Chahal, *et al.*, 2004; Bara, *et al.*, 2002). According to Chahalet *et al.*, 2004; Cohen, 1996; Hall and Dornan, 1988 they stated that characteristics such as age, educational level, health status and amount of information conveyed by the health provider are significant predictors of health care satisfaction.

Field *et al.*, (UK) 2001; Birch, Eyles& Newbold, (Canada) 1993) reported that with an increase in age the odds of utilizing the health care services increase for an individual. This is due to physiological changes that happen with passage of time. Such changes make an individual more vulnerable to health care problems and therefore lead to greater utilization of healthcare services. Similar results are observed for studies done in developing nations (Pourezzaet *al.* Iran) 2011; Cevallos& Chi, (Ecuador) 2010; Amin, Shah & Becker, (Bangladesh) 2010; Chen & Li, (China) 2009; Majumder, (India) 2006; Chakraborty *et al.*, (Bangladesh) 2003. Narang (2010) found out that income is a factor that affects people preferences for services of the hospitals which was significantly associated with the user perception.

Kephart (2007) have found that in Canada, the level of education of their respondents influenced their healthcare usage practices. People with higher education were more likely to opt for healthcare services as compared to their less educated counterparts. Hendryx (2002) found out that in the United States of America, people with more years of education are more likely to be sensitive towards their health and are better aware about access to healthcare options. In a study done in Greece, Lahana, Pappa&Niakas (2011) found that the level of education not only influence the healthcare usage but also the type of healthcare service provider used by an individual. They report that people with lower education are more likely to use emergency department healthcare services as opposed to people with university education who were more likely to use government funded primary healthcare services for similar needs.

The income influences affordability to spend on health care that in turn influences the type of health care service chosen by an individual. It has been found that with a rise in household income of an individual the likelihood of utilizing healthcare services (Regidor, (Spain) 2008; Asada &Kephart, 2007) and visits to the private practitioners (Lahana, Pappa&Niakas, 2011) are more likely to happen. Forbes & Janzen (2004) report that the tendency to use cheaper healthcare services is found more in individuals belonging to the lower income category as they cannot afford the higher priced services available in hospitals.

Research studies by Ghosh (2004) reported that Muslim women from rural Uttar Pradesh, India are less likely to use modern health care services for maternal health services as compared to Hindu women. Similar results were reported by Thind (2005) regarding female's use of contraceptives health care services in rural Bihar, India. He found that Muslim females were less likely to utilize modern contraceptives for reproductive healthcare services. Rani &Bonu (2003) reported that in rural areas across India, Hindu women were more likely to seek healthcare services from private providers as compared to Muslim women for gynaecological healthcare issues. Studies done in the developed nations have shown that ethnicity is an important variable in determining healthcare utilization for an individual (Lahana, Pappa&Niakas, 2011; Jatrana& Crampton, 2009; Arcury, 2005; Hendryx, 2002, Kushel, 2002).

### **Research Design**

This study adopted descriptive survey design in which opinions of determinants on consumer choices were sought. The data collected was both quantitative and qualitative in nature. Mugenda & Mugenda (1999) describes a survey design as an attempt to According to (Orodho, (2005) this research design describes the

variables as they exist. The design was appropriate for the study because data was collected at one particular point in time without manipulation of variables and this was used to determine the variables that have an effect on the consumer’s demands of health services.

**3.3 Area of Study**

Private hospitals in Nakuru County are 9 within the Central business centre which offer a wide range of health services (Local Authority Business Register, 2016).The proposed study was undertaken among these private hospitals in Nakuru County, Kenya. The main economic activity of the residents in the town and its environs is business and agriculture. The location of the study was chosen because the consideration of the consumers while choosing services offered by these health service providers. These services varied from one private hospital to another thus giving different preference to the consumers (patients) because of their demographics, accessibility, service quality and cost.

**3.4 Target Population**

Shao (1999) defines a population or universe as the aggregate of all the elements. A population must be defined in terms of elements (patients).Assuming all patients beds are occupied, the study only focused on the 9 Private hospitals in Nakuru which offer in patient services. The study was conducted amongst a population of 206 in-patients assuming all the bed capacity is occupied. The study considered the determinants of consumer preferences of health services provided by private hospitals in Nakuru County, Kenya in year 2016 between the months of August to October. Nakuru town was chosen because of the larger number of private hospitals and also a place where the county administration is based. The researcher conducted the research to give an understanding of the determinants of demand of health services provided by private hospitals in Nakuru County, Kenya. The accessible population is summarized in table 3.1

**Table 3.1: Summary of the bed capacity in private hospitals in Nakuru County**

<b>Private Hospitals</b>	<b>Population</b>
<b>Valley Hospital</b>	25
<b>Nakuru War Memorial</b>	36
<b>Nakuru Nursing &amp; maternity Home</b>	30
<b>Mediheal Hospital</b>	20
<b>The Nairobi Women</b>	15
<b>St. Elizabeth Medical Centre</b>	10
<b>Evans Sunrise Medical Centre</b>	40
<b>Baraka Maternity &amp; nursing Home</b>	15
<b>Crater Medical Centre</b>	15
<b>TOTAL</b>	<b>206</b>

**Source:** Local Authority Business Register, 2016

**3.5 Sample Size and Sampling Procedure**

Purposive sampling was used to select the desired sample from the population that was involved in the study on the private hospitals in Nakuru County offering a wide range of health services. The method was also used for sampling the respondents (in-patients with minor ailments who were able to fill the instrument) who were expected to provide information on service quality. The customers (patients) and more specifically the in-patients gave information on their customer demographics and hospital service cost in relation to their demands on the private hospitals. The rationale behind this was to ensure that only private hospitals with well-established facilities and have been in operation for a reasonable period of time to take part in the study.

The sample size (n) of the study was determined using Israel (1992) as shown in the equation 1 below:

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{206}{1 + 206(0.05)^2} = 136$$

Where;

n = optimum sample size,

N = number of bed capacity in private hospitals,

e = probability of error (i.e., the desired precision, e.g., 0.05 for 95% confidence level).

Nakuru County, the sample size was the in-patient on their demand of health care providers. Stratified sampling techniques were used to ensure that all hospitals (private) are included in the study. Convenience sampling techniques was used to determine the number of in-patients with minor ailments with assistance from the

hospital staff. The patients were selected purposely provided they were willing to give information on the determinants of their demand to the health providers. The distribution of the sample is given in table 3.2:

**Table 3.2: Sample size of the Respondents**

Private Hospitals	Population	Sampled Patients
Valley Hospital	25	17
Nakuru War Memorial	36	24
Nakuru Nursing & maternity Home	30	19
Mediheal Hospital	20	13
The Nairobi Women	15	10
St. Elizabeth Medical Centre	10	7
Evans Sunrise Medical Centre	40	26
Baraka Maternity & nursing Home	15	10
Crater Medical Centre	15	10
<b>TOTAL</b>	<b>206</b>	<b>136</b>

### 3.6 Instrumentation

Customers' questionnaire was used to generate the required data. Section A of the instrument captured the respondents' bio-data whereas section B and C elicited data on determinants of consumer preferences of health services provided by private hospitals in Nakuru County, Kenya. Data collection tool was constructed using close ended Likert type statements (items).

### 3.7 Validity and Reliability of Research Instruments

Validity is the degree to which a test measures what it purports to measure (Orodho, 2005). It is also used to check whether an instrument is biased, the language, format and the layout of the data collection tool is appropriate (Kasomo, 2006). Before the actual study the customers (in-patients) will be checked for content and construct validity. Content validity ensures that the items in the data collection tool cover the subject area adequately whereas construct validity on the other hand ensures that the instrument actually measures what it is supposed to measure (Fraenkel&Wallen, (2000). Experts from the department of Business Administration, Kabarak University through the supervisor assisted in validating the instruments. Their comments were used to improve the instruments before the actual data collection.

According to Mugenda&Mugenda (2007) reliability is the ability of an instrument to yield the same results when used repeatedly to collect data from the same group. The customers' questionnaire was piloted for reliability using a sample of 20 inpatients drawn from the private hospitals in Nakuru County which did not take part in the actual study. The Cronbach alpha method was used to estimate the reliability coefficient of the data collection tool. This method was appropriate in situations where a tool is administered once (Kothari, 2004). The instruments yielded a reliability coefficient of 0.78 which was acceptable as recommended by Frankel &Wallen (2000).

### 3.8 Data Collection Procedure

The researcher sought a research permit through Post- Graduate School, Kabarak University. Once the permit was granted the researcher formally contacted the customers through their respective private hospitals. The researcher explained to respondents the purpose of the study and sought their consent to participate in the research. The dates and venues for administering the questionnaires were set. The respondents were briefed on how to fill the questionnaires before they are administered. Each respondent were given a questionnaire which he/she was to fill where drop and pick method was employed.

### 3.9 Data Analysis and Presentation

Collected data was organised, cleaned and coded, coded data was keyed into a computer and analysed with the aid of the Statistical Package for Social Sciences (SPSS) V.20. Qualitative data were analysed and presented using frequencies and percentages. Descriptive statistics which included frequency distribution tables and inferential statistics tables were used to present data. Inferential statistics were employed using multiple regression in testing the relationship between independent variables and the dependent variable. Pearson Correlation was used to test research hypotheses at 0.05 significance level.

The study employed the following regression model

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon_i$$

Y=Consumer preferences on health service providers

a = Intercept term

$\beta_1, \beta_2, \beta_3$  and  $\beta_4$  = Slope Coefficients

$X_1$  = Age

$X_2$  = Gender

$X_3$  = Religion

$\epsilon_i$  = Error term which assumes to be normally distributed

**4.2 Profile of the Respondents**

The research focused on the determinants of consumer preferences for health services provided by private hospitals in Nakuru County, Kenya. Descriptive statistics was used to summarize quantitative data. A sample of 136 patients was used for the study out of the total population of 206. Out of the 136 sample units that were targeted, 104 patients duly completed and returned the questionnaires representing a response rate of 85%. According to Mugenda & Mugenda (2003), a response rate of 50% is acceptable for analysis publishing. The sample distribution of the respondents is as shown in table 4.1.

**Table 4.1: Response Rate**

Response Rate	Frequency	Percent
Returned	104	85
Unreturned	32	15
<b>Total</b>	<b>136</b>	<b>100</b>

**4.3 Bio-data Results**

This section presents the bio- data of the respondents of the study. The key characteristics of the respondents were factors such as gender, age and education.

**4.3.1 Gender of the respondents**

This section presents results on the gender on how they gave preferences on the health service providers on private hospitals in Nakuru. Table 4.2 represents 61.5% who were female, while 38.5% represented the male. This implies that most female prefer going and also accompanying their children to private hospitals to seek medical services. Also most of them will seek medical services for several reasons.

**Table 4.2: Sample Distribution of Respondents Gender**

	Frequency	Percent	Valid Percent	Cumulative Percent
MALE	40	38.5	38.5	38.5
FEMALE	64	61.5	61.5	100.0
Total	104	100.0	100.0	

These findings concur with Chahal, *et al.*, (2004) who found out that kids’ patients cannot make their own satisfaction evaluation, and thus the mothers or caregivers make such judgments.

**4.3.2: Age of the Respondents**

The study sought to find out the age of respondents. Age is one of the important aspects that tend to influence the choice of hospitals. In Table 4.3, the majority of the respondents were between the age of 26-34 (29.8%), followed by 35-44 (26%), 18-25 (17.3%), 45-54 (13.5%) and lastly 55 and above at 13.5%. This result implies that people below 44 years sought medical services from private hospitals.

**Table 4.3: Frequencies on Age of the respondents**

	Frequency	Percent	Valid Percent	Cumulative Percent
BTW 18-25	18	17.3	17.3	17.3
26-34	31	29.8	29.8	47.1
35-44	27	26.0	26.0	73.1
45-54	14	13.5	13.5	86.5
55 AND ABOVE	14	13.5	13.5	100.0
Total	104	100.0	100.0	

**4.3.2: Education level of the Respondents**

The respondents were asked to indicate their education level. Table 4.4 indicates that most of the respondents had Master’s degree (29.8%), followed by Bachelors (28.8%), Diploma (26.9%) and lastly any other qualifications (14.4%). The results suggest that most of the respondents who were highly educated sought medical services from private hospitals. The study findings are consistent with Lahana, Pappa&Niakas (2011) who found out that the level of education not only influence the healthcare usage but also the type of healthcare service provider used by an individual.

**Table 4.4: Frequencies on Education Level of the Respondents**

	Frequency	Percent
DIPLOMA	28	26.9
BACHELORS	30	28.8
MASTERS	31	29.8
ANY OTHER	15	14.4
<b>Total</b>	<b>104</b>	<b>100.0</b>

Also these results corroborate findings of Lleras-Muney, (2005) who found that those with more years of schooling tend to have better health and well-being and healthier behaviours. Education is an important mechanism for enhancing the health and well-being of individuals because it reduces the need for health care, the associated costs of dependence, lost earnings and human suffering. It also helps promote and sustain healthy lifestyles and positive choices, supporting and nurturing human development, human relationships and personal, family and community well-being.

**4.4 Descriptive Statistical results**

This section presents the descriptive results emerging from analysis of the specific objectives of the study. The independent variables that were investigated were; to examine the extent to which customer demographics, accessibility, service quality and health service provider’s cost influences consumers’ choice. The response is ranked from very great extent, great extent, moderate extent, little extent and no extent on the lower side. The tables show the respondent’s responses on determinants of consumer preferences for health services provided by private hospitals in Nakuru County.

**4.4.1 Consumer Demographic and Consumer preference for health services**

Consumer demographic looks at how a person's characteristics and ways of behaving are largely determined by his or her adjustment to the environment. From Table 4.5 most respondents had moderate extent (35.6%), great extent (31.7%), very great extent and little extent (11.5%) and no extent at 9.6% response inclination. This means that consumer demographics factors(age, gender, education and religion)was one of the determinant when consumers are making preference on which private hospital to attend to a moderate extent.

**Table 4.5 Cumulative Descriptive percentage Consumer Demographic**

	Frequency	Percent	Valid Percent	Cumulative Percent
<b>Very great extent</b>	12	11.5	11.5	11.5
<b>Great extent</b>	33	31.7	31.7	43.3
<b>Moderate extent</b>	37	35.6	35.6	78.8
<b>Little extent</b>	12	11.5	11.5	90.4
<b>No extent</b>	10	9.6	9.6	100.0
<b>Total</b>	<b>104</b>	<b>100</b>	<b>100</b>	

This study concurs with research conducted by Chahalet *et al.* 2004; Cohen, 1996; Hall and Dornan, 1988 who found that characteristics such as age and educational level conveyed by the health provider are significant predictors of health care satisfaction. It is also consistent with Narang 2010 who found out that income is a factor that affects people preferences for services of the hospital.

**4.5.1 Consumer Demographic and Consumer Preference for health services**

H<sub>01</sub>: Customer demographics do not have a significant influence on demand for health services provided by private hospitals in Nakuru County, Kenya.



**Table 4.9 Pearson Correlation results on Consumer Demographics and Consumer Preference for Health Services**

Variables		Consumer Demographics	Consumer preference
Consumer demographic	Pearson Correlation	1	.248**
	Sig. (2-tailed)		.039
	N	104	104
Consumer preference	Pearson Correlation	.248*	1
	Sig. (2-tailed)	.039	
	N	104	104

\*\* . Correlation is significant at the 0.05 level (2-tailed).

From Table 4.9, the results reveal that there is a relatively weak positive relationship between customer demographics and consumer preference ( $r = 0.248, p < 0.05$ ). Hypothesis states that customer demographics do not have a significant influence on demand for health services provided by private hospitals in Nakuru County, Kenya. The researcher accepts the alternative hypothesis ( $H_a$ ) and concludes that there is sufficient evidence, at 5% level of significance that there is a positive relationship between customer demographics and consumer preference of health services provided by private hospitals in Nakuru County, Kenya. There is further evidence socio-economic and demographic conditions play an important role in choosing providers (Bir and Eggleston 2002, Rous and Hotchkiss 2000).

**4.6.2 Regression Results**

Table 4.15 indicates the regression result of consumer preference and the explanatory variables.

**Table 4.15: Regression Result of Consumer Preference and the Explanatory Variables Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.345	.334		1.033	.304		
Consumer Demographics	.021	.090	.021	.238	.012	.790	1.266

a. Dependent Variable: Consumer preference

**Influence of customer demographics on consumer preferences for health services among private hospitals.**

The first study objective of the study was to examine influence of customer demographics on consumer preferences for health services among private hospitals. The results indicate that the patients considered income, current age, gender and religion when making choices on whichever private health care to attend. Customer demographic was positively related to consumer preference although weak ( $r = 0.248, p < 0.05$ ) and statistically significant.

Customer demographics play a key role in influencing consumer preferences for health service providers. The study concludes that consumer demographics influences consumer preference for health service providers; if the private hospitals articulate and understand these factors well hospitals will know what variables to concentrate on.

The study findings indicated that consumer demographics and hospital service cost can be emphasized by private hospitals management to influence the choice of patients in hospitals.

The study recommends that private hospitals in Nakuru, should ensure they evaluate the factors that patients consider when making choices on health service providers which and competitive variables that will make the attain sustainable competitive edge. Also these findings suggest hospitals that provide quality services will be competent businesses. Further research should be carried out on macroeconomic factors and how they influence consumer preference in the health sectors.

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