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**A Survey Of Dentists' Satisfaction With Patient
Dental Covers, Provided By Insurance Companies
Based In Kenya.**



Master of Business Administration (MBA)

In Healthcare Management

June 2016

**A Survey Of Dentists' Satisfaction With Patient Dental Covers,
Provided By Insurance Companies Based In Kenya.**

Tariq Abbas Lodhi

Submitted in partial fulfilment of the requirements for the Degree of Masters in
Business Administration in Healthcare Management, at Strathmore University



June 2016

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TARIQ ABBAS LODHI

Signature.....

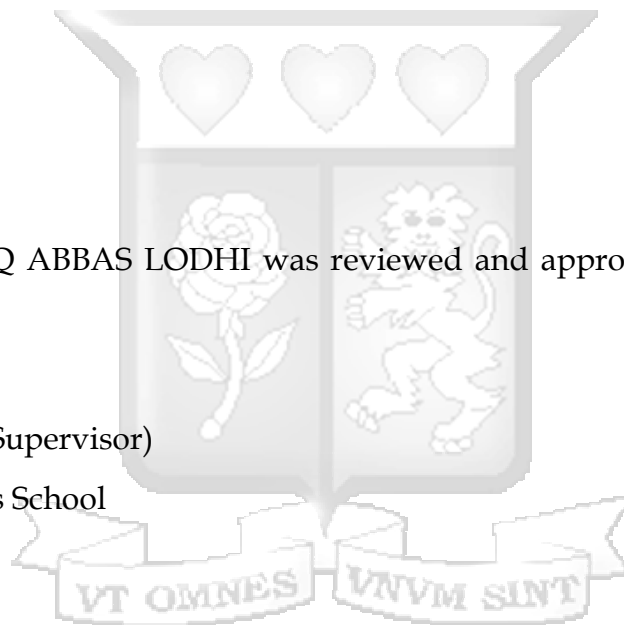
Date.....

APPROVAL

The thesis of TARIQ ABBAS LODHI was reviewed and approved for examination by the following:-

Dr. Pratap Kumar (Supervisor)

Strathmore Business School



Head of the Institute of Healthcare Management

Dean, School of Graduate Studies

ABSTRACT

The financing for public oral health care delivery in Kenya is very limited. The option for Kenyans is therefore either to pay 'out of pocket' or utilize dental insurance covers after paying a premium. The purpose of this study is to explore the satisfaction of dentists with patient dental insurance covers in Kenya, and investigate its benefits to their patients; since dentists are the actual dental services providers and not the insurance companies who sell these covers. An exploratory web based survey was sent to 840 dentists registered with the Kenya Dental Association, with 77 completing the entire survey, and 55 dentists fulfilling the selection criteria of having past insurance experience. The results showed that 72.73% dentists were not satisfied with insurance companies and 87.27% felt dental covers in Kenya did not meet the needs of their patients. A few specific issues were further probed. 92.31% of dentists were dissatisfied with the period of time taken to pay them by insurance companies for dental services rendered. This time was found to be 3 months or more. 90.39% of respondents were dissatisfied with the annual dental cover limit offered to patients. The common limits for these covers was found to be between Kshs 10-20,000/-. 86.54% of dentists were dissatisfied with the exclusions of dental procedures, not covered by insurance. 80.77% were dissatisfied with the fees for dental procedures paid to the dentist by Insurance companies. 76.93% were dissatisfied with the process of pre-authorization prior to treatment. 67.31% were dissatisfied with the time taken for approval by insurance companies to commence dental treatment. It is recommended that dental insurance providers reconsider their exclusion criteria and annual patient dental cover limits. ICT can further be adopted to improve the pre-authorization process. A different remuneration model for dentists can be adopted to promote preventive dental care.

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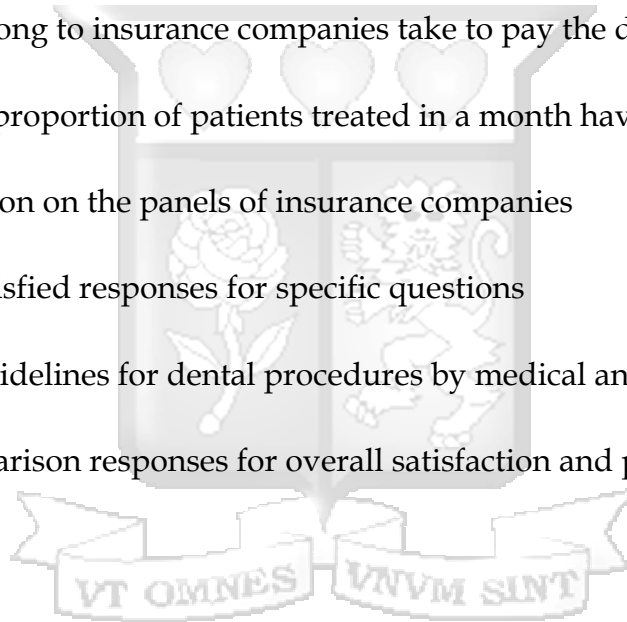
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ACKNOWLEDGMENTS

I wish to acknowledge the guidance of my supervisor for this study, Dr. Pratap Kumar. His review of this thesis and comments were helpful.

I am most grateful for the unconditional support that I have received from Dr. Cyrus Engineer and Dr. Lilly Engineer during my MBA studies, as well as for this study. Their contributions have been most valuable to me.

Staying away from work whilst pursuing my MBA, could only have been possible because of the unwavering support and encouragement from my friend and senior colleague, Dr. Mohamed Abdulrazak. I remain deeply grateful to him.

I thank the respondents who took the time to participate in this survey as well as the Kenya Dental Association for their assistance.

I take this opportunity to thank Strathmore Business School, led by the Dean Dr. George Njenga; Dr. Ben Ngoye, Dr. Kokwaro and the entire team in the Institute of Healthcare Management including Mr. Joseph Munyao and Ms. Purity Gakero.

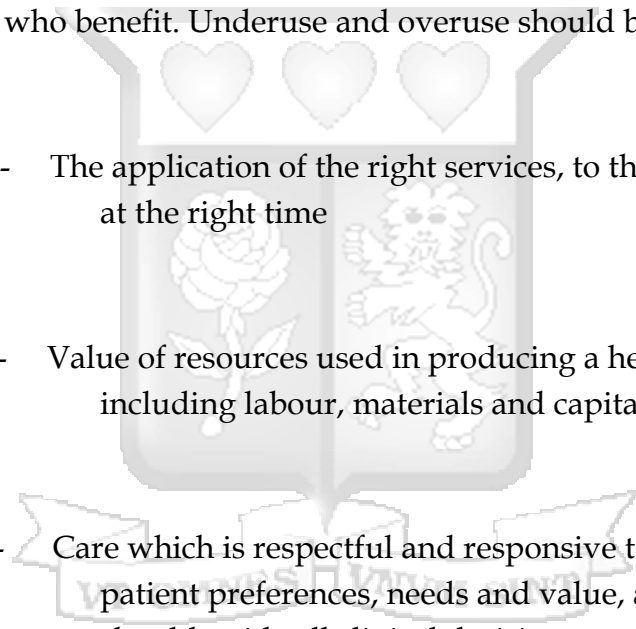
DEDICATION

I dedicate this research study to my dear wife Sabiha Hajee, who has stood by me from the moment I decided to pursue this MBA; and remained my pillar of strength and encouragement throughout the three years of my MBA studies.



DEFINITION OF KEY TERMS

(As applied in a healthcare context)

- 
- Access
- The use of healthcare, qualified by need of care
 - Describing the costs incurred in receiving care
 - The capacity of individuals to obtain healthcare
- Effectiveness
- Care based on scientific knowledge and provided to patients who benefit. Underuse and overuse should be avoided.
- Quality
- The application of the right services, to the right individuals, at the right time
- Cost
- Value of resources used in producing a healthcare service, including labour, materials and capital
- Patient centred
- Care which is respectful and responsive to an individual patient preferences, needs and value, and patient values should guide all clinical decisions.

CHAPTER 1

1.1 INTRODUCTION

In the Kenya Oral Health survey report 2015, it was reported that the burden of oral disease in the country, ranged from low to high depending on specific oral health conditions. The oral health related quality of life was reported as not being optimal for both adults and children. Both children and the adult populations had unmet dental caries and gum related treatment needs. One of the recommendations in this report was that the Ministry of Health (Kenya) would use the Kenya oral health survey report of 2015, to lead other stakeholders in oral health, to draft a comprehensive national oral health policy, to guide the delivery of oral health care services. (KNOHSR, 2015)

The oral health department of the Ministry of Health (Kenya), received an operational budget of KShs.392,400 in the 2014/2015 financial year. This was reported as a gross underestimate of the country's needs, considering that oral health care is capital and labour intensive. (KNOHSR, 2015)

Evidently, with the local public dental care facilities unable to cope with the demand for dental care, the only other option would be for Kenyan to seek private dental care. This would therefore mean either paying 'out of pocket' or utilizing private dental insurance.

Dental insurance in Kenya is an added benefit to many medical insurance covers offered in Kenya. Such covers are mostly purchased by companies directly from insurance companies, to be considered as employee benefits. The terms of these dental insurance covers are therefore mostly only known to the company representative purchasing the cover and the insurance company; and not the employee and his individual cover. These terms include the annual limit in Kenya shillings that can be utilized for dental

treatment. The terms also include 'exclusions of treatment' which refers to the treatments which the insurance will not pay for. These terms however, vary with each individual dental cover.

The same insurance companies selling dental covers then sign a contractual agreement with a dentist/dental service provider; with a different set of terms and conditions for each dentist. These agreements include fees that shall be paid for individual dental treatments, and the time within which these payments will be made. There is also a preauthorization and approval process that needs to be undertaken between the dentist and insurance company before treatment can be carried out. The dentist selected to be on the panel of insurance companies then provide dental treatment to clients of the insurance company. Every dentist is therefore a middle man, with his/her own individual terms with each insurance company. Every dentist also treats patients, each with different terms and conditions too.

The benefits of dental insurance in Kenya has not been researched before, and most research done outside Kenya on dental covers address clinical scenarios and outcomes rather than dental insurance cover terms. The data and information available on how satisfactory specific aspects of dental insurance covers are therefore limited.

In a health management perspective, dental insurance cover may be interpreted as improving access to dental care. Access can be defined in many ways that includes predisposing factors to utilization, like an individual's perception of illness; and enabling and health system factors on the other, for example resources, structures, institutions, procedures and regulations through which health services are delivered. (Levesque et al, 2013)

The Institute of Medicine (IOM) issued six aims for a redesigned 21st century health-care system. These aims are that a health system should be: - Safe, Effective, Patient-centred, Timely, Efficient, and Equitable (IOM, 2001).

Amongst others, the issues of Timeliness, Effectiveness and Patient Centeredness is explored in this study in relation to dental treatment which is provided by dentists and paid for by insurance companies in Kenya. Effectiveness in health policy terms is defined as the, 'likelihood of achieving goals and objectives or demonstrated achievement of them'. (Kraft, 2015)

The process for gaining dental treatment begins from when a patient with a dental cover presents to the dentist's office. The dentist has to complete a pre-authorization process after he has diagnosed the problem and prepared a treatment plan, but before the beginning treatment. This preauthorization process is often in hard copy format completed by the dentist, scanned and then e-mailed to the insurance company for approval. The dentist risks not getting reimbursed if they begin dental treatment without prior pre-authorization process and approval. As a consequence, the patient access to dental treatment is also delayed. Access has been conceptualized in many ways and the term is often used to describe factors or characteristics influencing the initial contact or use of services; opinions however differ regarding aspects included within access and whether the emphasis should be put more on describing characteristics of the providers or actual process of care (Levesque et al, 2013).

The insurance company providing the dental cover therefore determines whether to approve the treatment for the patient. The insurance company can also refuse to pay for the procedure at which point the patient has to pay out of pocket, or seek treatment somewhere else if he/she cannot afford the individual dentist's fees.

It is important to note here that, the approval or disapproval is conveyed by the insurance company to the dentist directly, and not involving the patient. The response from the insurance company has to now be conveyed to the patient by the dentist.

Therefore, the dentist acts as an agent for the insurance company though in most cases the dentist is not aware of the terms of the dental cover for an individual patient. On the other hand, the patient expects the dentist to act as his/her agent too, as a provider of health services. Almost always, patients seeking dental treatment are in pain and require immediate treatment.

From the perspective of the insurance companies, a general theoretical proposition is that, holding everything else constant, including the consumers risk aversion, 'optimal (and demanded) insurance coverage will be generous, with either financial or managed care limits, the greater the extent of moral hazard'. Moral hazard in simple terms is the increased utilization of medical/dental services, because of having medical/dental insurance (Pauly, 2007).

1.2 BACKGROUND TO THE STUDY

Most Kenyans use dental services when they have a dental cover from an insurance company, especially because of the cost of healthcare in the country. They have a preference for private providers who are empanelled by their respective insurers, like individual dentists in private practice or a private hospital. Public hospitals in Kenya do not accept dental insurance. Dental insurance is therefore also becomes a business transaction whereby the dentist expects to be reimbursed by the insurance company after treating clients of the insurance company.

However, from the patient's perspective, all they require is timely and effective treatment to alleviate the dental pain and suffering. Timely, in this case would mean 'when' required. Since dental treatment is often necessitated as a result of symptoms of either pain or swellings, the dental treatment is of immediate intervention. Timely care refers to reducing waiting time and potentially harmful delays, for both those who receive and those who give care. (IOM, 2001).

The dentist can therefore provide vital information on the patient centeredness and benefits to patients of dental insurance covers in Kenya; as well as the relation the dentist have insurance companies as their agents. Costs, outcomes and benefits might be seen differently from the points of view of society, the patient, the payer, or the provider (Eisenberg, 1989). This study explores the provider's perspective.

1.3 PROBLEM DEFINITION

The precise burden of oral diseases in Kenya was largely unknown until the KNOHSR report of 2015, which was just last year. There is also presently no data on the benefit of having a dental insurance cover in Kenya. An information gap therefore exists between what benefits insurance companies are providing with their dental covers, and its actual benefits to the patients who utilize these covers. The dentist also has an individual working relationship with every individual insurance company, which is kept confidential.

The dentist is therefore caught between these two parties as a result, but perhaps best placed to answer how satisfactory dental covers and their specific aspects are. This survey aims to identify and explore these differences, opinions, perceptions and experiences of dentists in relation to managing businesses as healthcare providers, satisfy insurance companies and importantly providing adequate care expected by patients.

1.4 RESEARCH OBJECTIVES

To explore dentists' satisfaction on patient dental insurance covers in Kenya on:

- a) The benefits of dental insurance packages to patients with such a cover.
- b) The terms and agreements between insurance companies and the dentist

1.5 RESEARCH HYPOTHESIS

The study aims to highlight gaps in the current dental insurance covers available to Kenyans. The study assumes that the current dental insurance cover is unsatisfactory for both dentists and patients.

It also assumes that dentists are well placed to understand the insurance needs of their patients. This is therefore a hypothesis-generating study of dental insurance in the country.

1.6 SIGNIFICANCE OF THE STUDY

Results from this study will inform policy on some aspects of the state of private dental insurance in Kenya, with regard to patient centred, efficient and timely dental care to Kenyans. Aspects and present benefits and shortcomings of dental insurance covers in Kenya like annual limits, exclusions and preauthorization processes, can then be used to inform policy. Also terms and agreements between individual dentists and insurance covers which are generally confidential, but which can affect quality patient care, are assessed simply for satisfaction. This too can be utilized to reassess insurance and dental provider agreements.

Policy and regulation can be thereafter be reassessed to make relevant changes to dental insurance covers in Kenya so that they are beneficial and improve dental health of Kenyans. This would be in line with the recommendations of the Ministry of Health of Kenya to involve other stakeholders in improving the oral health status of Kenyans. (KNOHSR, 2015) Results from this study will form a basis on which further studies can be carried out, on specific dental insurance aspects that have been highlighted in this study.

1.7 CONCEPTUAL FRAMEWORKS

Figure 1

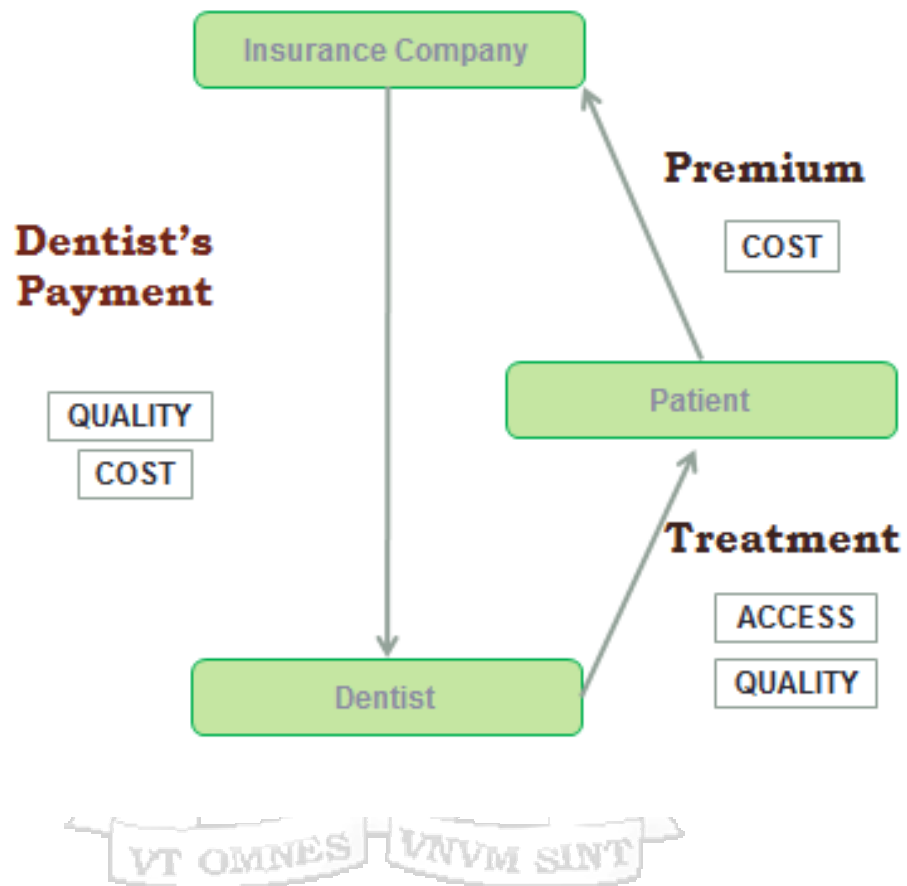


Figure 1: Stakeholders in a dental insurance cover

The relationship between the patient, the payer (insurance company) and the provider of treatment (dentist); and the issues (in boxes) that may arise in the provision of dental care.

Figure 2 : Process Mapping

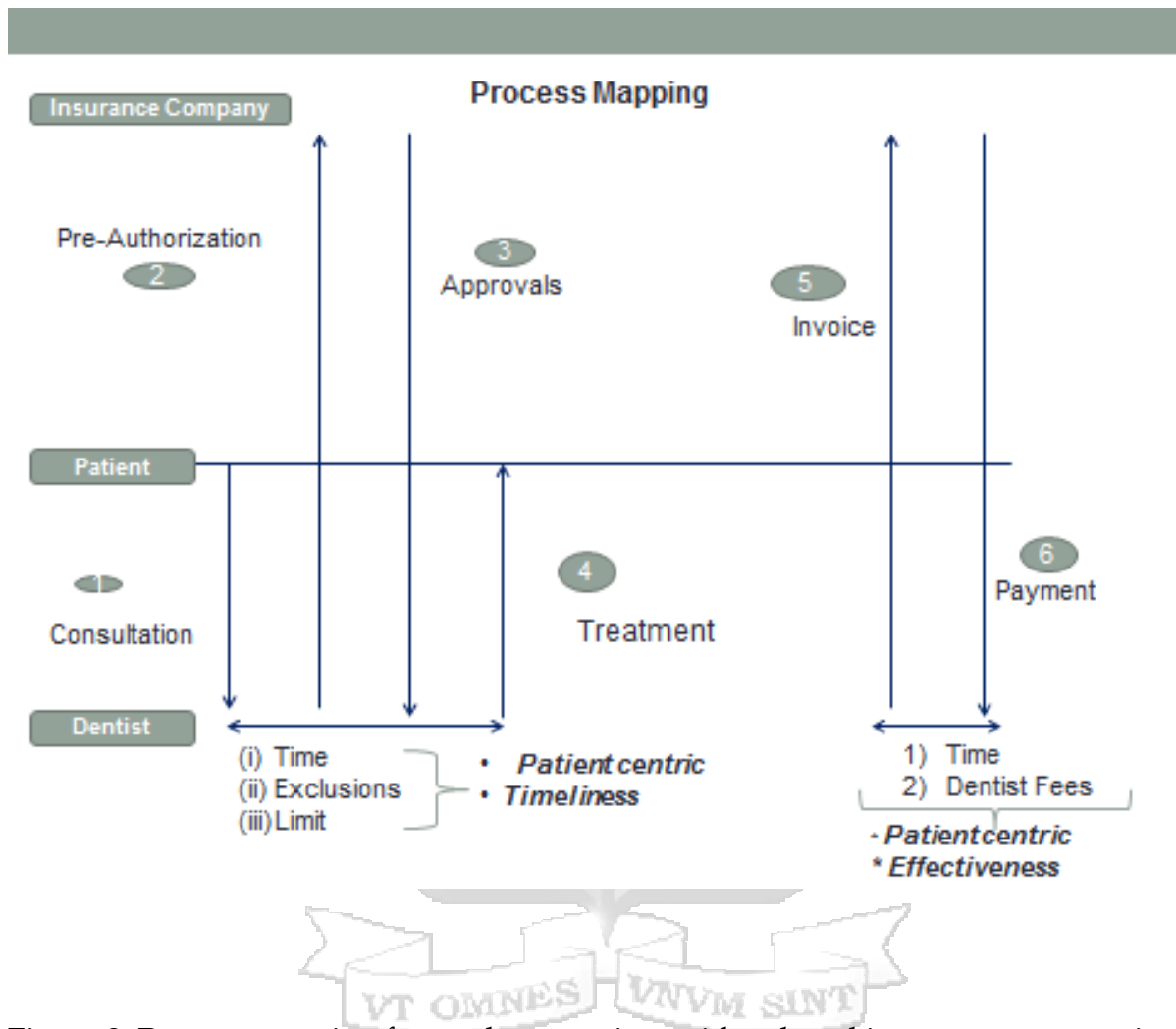


Figure 2: Process mapping from when a patient with a dental insurance cover arrives at a dentist’s practice for treatment, to when a dentist requests for payment from an insurance company after rendering the dental treatment.

This figure also shows issues specific to the patient’s dental cover and the dentist – insurance company terms, which were investigated in the survey.

CHAPTER 2

LITERATURE REVIEW

2.0 INTRODUCTION

The Institute of Medicine (IOM) identified and issued six aims for a redesigned 21st century health-care system, which should be :- Safe, Effective, Patient-centred, Timely, Efficient, and Equitable (IOM, 2001).

Patient-centred care is to provide care that is respectful of and responsive to the individual patient's preferences, needs and values. It has been reported that integrating patient-centred clinical care, improved outcomes!

According to the IOM, "Care must be based on a 'continuous healing relationship' where the patient can receive care when he needs it and in many forms, including electronic health education, communications with the health-care provider, and laboratory results." Patient-centred care also requires coordination and integration of treatment, appropriate information and communication among providers. (IOM, 2001).

Timely care refers to reducing waiting time and potentially harmful delays, for both those who receive and those who give care. (IOM, 2001). This can be further described as care which is given when it is required. It is considered as a measure of Quality of care with the application of the right services, to the right individual, at the right time.

2.1 PREVENTIVE CARE IN DENTISTRY

Dental coverage is considerably less expensive than medical cover and might help an employer reduce their expenditures on health care. Studies show a link between oral health and general health, and making it cost-effective for employees to visit the dentist, could also benefit the employer paying the premium for dental insurance. (Dolatowski, 2002.)

The more dental benefits are used, the more economical they are, because regular check-ups identify problems before they become more serious and expensive. Seeking dental care regularly prevents/reduces complications before they worsen, which consequently makes treatment more affordable. Dental treatment most often involves in particular management of teeth, affected by caries. This consequently results in damage and destruction to the tooth structure. The treatment of a partially destroyed tooth structure can include restorations, commonly referred to as 'fillings'. Therefore, the sooner a cavity on a tooth is detected, the less invasive the treatment and restoration, and consequently the lesser the cost of treatment.

2.2 THE ROLE OF INSURANCE COMPANIES IN DENTAL CARE

Some private dentists and private hospitals get on to the panel of an insurance company, in order to attract the large client base of these insurance companies. However, many of these insurance companies could be paying/reimbursing less than the market rate for dental procedures, and also less than as prescribed by the Kenya Medical Practitioners and Dentists Board. (KMPDB, 2013)

Dentists who therefore are on the panel of an insurance company would be attracted to the quantity and number of potential patients they would be referred.

In ideal circumstances, dentists who do this, offset the discount by getting more patients through the network. (Dolatowski, 2002.) However, if a dental plan offers very low premiums based on its ability to get dentists to accept steep discounts, this could pose questions on issues such as the Quality of care.

Quality of dental care in this context would refer to the application of the right treatment at the right time. However, if a dentist were to accept to give steep discounts to insurance companies, so as to get onto their panel of treatment providers, it could result in overtreatment (doing more procedures than required), causing a concern to not only the patient, but also the payer who are the dental insurance companies.

In a study by Dolatowski (2002), dentists who are underpaid might have to see more patients to make ends meet. As a result, service might be rushed; quality of control for care and costs could be compromised. However, an insurance company's expertise with medical plans or other benefits does not necessarily carry over to dental plans. These dental plans may not specialize in dental benefits and treatment. Although it is outside the purview of insurers to control the treatment practices of individual dentists, carriers of dental benefits do what they can to standardize dental care—by requesting that dentists who participate in their networks adhere to the accepted professional practices developed by supervising regulatory agencies. (Dolatowski, 2002.)

Health insurance is a mechanism by which a person protects himself from financial loss caused due to accident and or disability. Though disability is not fixed, the precise and immutable state affected as it is by numerous influences both objective and subjective; its significance to society is that condition of ill-health arising from disease or injury that prevents the individual from engaging in their normal activities. (Kumar et al, 2011)

2.3 ADVERSE SELECTION IN INSURANCE

In a study published by Kumar and colleagues in 2011, it was found that that adverse selection occurs in the market for dental insurance. Adverse selection can be described as a tendency for individuals to buy insurance when they are more likely to utilize it. (Kumar et al, 2011)

In an effort to control costs, insurers adopt various consumer cost-sharing devices (such as co-insurance and deductibles) which, as a second-best solution, sacrifice the consumers' benefit of risk-spreading to make patients assume some of the economic consequences of their use of health services. Insurance benefits will therefore be less generous, the greater the extent of moral hazard (Pauly, 2007 and Brocklehurst et al, 2013).

In Kenya, however, such cost sharing mechanisms for dental treatment do not exist.

In a study by Guiney and colleagues, it was reported that adverse selection leads to reduced insurance consumption by the low risks and a wealth transfer from low risks to high risk, and that the first best level of quality can be achieved by paying the hospital a fixed price per patient treated when the number of patients wanting treatment depends on the quality of care offered. (Guiney et al, 2013.)

2.4 UTILIZATION OF DENTAL SERVICES

The utilization of dental services appears to vary in different countries.

In a study conducted by Celest and colleagues in 2011, it was found that there is still a relevant and persistent socioeconomic gap, in dental service utilization in Brazil and in Sweden. Although different policies in dental care were implemented by each

country during the 1990s, there were no clear conclusions about their 'impact on inequalities' in use of dental services. (Celeste et al, 2011.)

In a study published by Thompson and colleagues in 2014, an analysis of data collected from the 2007/09 Canadian Health Measures Survey was undertaken to assess cost, as a barrier to the patient from seeking dental treatment. (Thompson et al, 2014.)

Two questions were asked to respondents, which were :-

“In the past 12 months, have you avoided going to a dental professional because of the cost of dental care?” and *“In the past 12 months, have you avoided having all the dental treatment that was recommended because of the cost?”*

Results from this study demonstrated that respondents with lower incomes and without dental insurance were more than four times more likely to avoid a dental professional because of cost and approximately two and a half times more likely to decline recommended dental treatment because of cost. The study also reported that dental insurance had an independent effect on utilization in Canada, and that regardless of income level, the insured utilize more dental care than the uninsured.

2.5 ACCESS TO DENTAL CARE

While access can be described as the capacity of an individual to obtain healthcare services, a number of challenges can exist which reduce this access to healthcare and medical treatment.

One of these is the financial barrier involving costs of medical care and treatment which can prevent an individual or population from accessing medical treatment. Affordability of dental care has been recognized as a substantial barrier to visiting a dentist in Australia. Findings in a study by Teusner and colleagues in 2013 indicated

that insurance may improve access and orientation of dental care for lower socioeconomic adults but have less influence on access patterns of higher socioeconomic adults. Consistent with previous research, the insured were more likely to have a favourable visiting pattern than the uninsured. (Teusner et al, 2013.) However, amongst the insured, favourable visiting did not vary by level of cover. This may be related to a lack of knowledge about the level of cover purchased; if people were unaware or misinformed about their specific cover then it theoretically could not have influenced visiting decisions. (Teusner et al, 2013.)

Another study by Brennan and colleagues in 2013, indicated that individuals with dental insurance were more likely than their uninsured counterparts to make regular and recent dentist visits and to receive preventative care. An example of preventative dental care includes a scale and polish procedure. In the same study, insured individuals were also reported to have a lower likelihood of emergency dentist visits for the purpose of pain relief and were less likely to receive extraction services or to have an unmet dental need compared to those without insurance. (Brennan et al, 2013)

2.6 DENTISTS AS BUSINESS OWNERS

Dentist ownership status, years of experience, and percentage of Medicaid patients (patients with dental insurance) were significantly positively related to practice output, in a study carried out in 2009 by Conrad and colleagues. (Conrad et al, 2010)

This would indicate that patients with dental insurance, contribute towards the output of a dental practice, and one could therefore infer a positive contribution towards income generation of a dental practice. Interestingly, this study also showed that owners of dental practices were 25% more productive than non-owners. (Conrad et al, 2010.)

In a country like Kenya, opportunities for employment for dentists are limited to government/public hospitals and few private hospitals. Since public hospitals are constantly challenged with staff, equipment and medication shortages, insurance companies seldom associate themselves with public hospitals as their treatment providers. Therefore, most newly qualified dentists opt to go into private practice, either as individuals or as practice associates, with some also as employees of other dentists. This consequently becomes a dual role of a dental care professional, as now a business owner with the responsibility of financial sustainability of the dental practice.

Methods of remuneration may be linked with the professional behaviour of primary care physicians, and in the practice of dentistry or the provision of dental services, this can be exacerbated as clinicians operate their practices as businesses and take the full financial risk of the provision of services, as reported in a Cochrane review published in 2013. (Brocklehurst et al, 2013.)

Reforms in the health care systems of developing countries frequently focus on 'getting the incentives right' and aim to use provider payments to optimize the utilization of scarce health care resources, transform clinical practice and improve the quality of care. (Gauri,2001)

The main methods for remunerating dentists include fee-for-service, fixed salary and capitation payments. In Kenya, however, the fee for service mode of payment is more common.

In the above mentioned Cochrane review, the aim was to determine the impact different remuneration mechanisms on dentists' behaviour. It found an increase in clinical activity related to fee-for-service payments, whilst dentists working under capitation arrangements restored carious teeth at a later stage in the disease process than fee-for-service controls.

Also in the capitation mode of payment, the dentists tended to see their patients less frequently, and tended to carry out fewer fillings and extractions, but tended to give more preventive advice. (Brocklehurst et al, 2013.)

2.7 HEALTH ECONOMICS

Health economics plays an important role in the provision of health insurance.

Arrow, in 1963 described the demand for medical services as being irregular and unpredictable, as compared to other needs like food and clothing. He stressed the importance of uncertainty in healthcare on both the demand and supply side. Consumers are uncertain of their health status and therefore their demand for healthcare is irregular. (Arrow, 1963)

He further stated that medical services afford satisfaction only in the event of illness.

Therefore, insurance is a benefit that protects an individual from an unpredictable event.

A dental insurance cover therefore is meant to protect against this. However, if individuals with these covers are more prone to utilize it, (adverse selection) then insurance companies also need to protect themselves from such events. This is particularly because an individual with an insurance dental cover, would not pay directly for the full cost of their dental care.

An insurance company providing dental insurance cover would have to protect themselves from this 'over' utilization by either, limiting the amounts utilized per annum for dental care (cover limit) , or by having exclusions to treatment. Exclusions are treatments that would not be catered for by the insurance company and therefore have to be paid for in full by the policy holder. In dentistry an example of exclusion could be an aesthetic dental procedure like teeth whitening.

This literature review highlights cost as being a barrier to access dental care and treatment. In Kenya, for the low income and uninsured, oral and dental care may not even be taking place at all; except for emergency and low cost alternative treatment like extraction of a painful tooth.

Therefore, for those with a dental insurance cover, accessibility to dental care is supposedly improved. However, does this improved access ensure timely and value inclusive dental treatment?

With utilization capped to an annual utilization amount; and also many exclusions including preventative care like scaling and polishing, how beneficial is dental insurance to patients in Kenya?

The reimbursement mechanisms and rates given to dentists by insurance companies need to be considered as having an impact on the quality and quantity of dental care provided to patients with a dental insurance cover. How important are payment mechanisms for health care providers in developing countries? (Gauri, 2001)

This may be particularly critical when dentists are also business owners of their practices and therefore profitability of their practice being of high concern. Costs, outcomes and benefits might be seen differently from the points of view of society, the patient, the payer, or the provider (Eisenberg, 1989).

Finally, it should be noted that insurance companies rely on dentists, to act as gate keepers on their behalf, in order to avoid unnecessary treatments and interventions.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 RESEARCH DESIGN

The research was an exploratory questionnaire, in the form of a survey, which was administered online via a web link using an Internet-based survey tool. Respondents were Dentists registered with the Kenya Dental Association. The survey consisted of 20 questions, with 19 questions giving multiple choice optional answers, over 7 pages including the consent page. (Appendix I)

Each question had to be answered mandatorily, before a respondent could proceed to the next page of the survey, before finally submitting the entire survey.

3.2 POPULATION AND SAMPLING

The survey link with an introduction e-mail from this researcher was first sent to the secretariat of the Kenya Dental Association. One e-mail with an introduction to the survey and containing the web link to the survey was sent to all dentists in Kenya who had registered with the Kenya dental association (KDA) with their e-mail addresses on their data base. The number of e-mails that were sent was to 840 dentists.

This author therefore did not have direct contact with the respondents, nor access to their e-mail addresses both before and after the survey conducted. The survey also did not collect any personal data of any respondent nor link an individual to a response.

In order to prevent a respondent from doing the survey twice, the online tool had an option of not allowing the survey to be done twice by a single computer.

3.3 DATA COLLECTION

The survey was e-mailed to dentists by the KDA on the 26th of February 2016 and the responses began to be collected.

Ten days after the first e-mail was sent, another reminder e-mail was sent to the same group, and in the same manner through the Kenya Dental Association.

The survey was closed on the 17th of March 2016.

3.4 DATA ANALYSIS

The results and data obtained from the survey were exported to Microsoft Excel and analysed. The results were grouped per question and included the number of respondents who chose from each of the multiple choice answer options given.

Microsoft excel was used to analyse specific responses to certain questions. This was done by grouping or tracing the responses.

3.5 ETHICAL ISSUES

The study proposal was approved by the Strathmore University Ethics Committee. (Appendix IV)

An informed consent was also published as the first page of the survey, which also stated that the survey was entirely voluntary. Only when the 'I agree' tab was clicked, meaning consent given, is when the survey questions were launched.

No personally-identifiable data was collected from the respondents.

CHAPTER 4

PRESENTATION OF RESEARCH FINDINGS

4.1 GENERAL INFORMATION

4.1.1 TYPES OF DENTAL PRACTICES

A total of 84 responses were recorded - a response rate of 10%. Of the responses received 77 were judged to be complete responses (completion rate of 92%). Only data from the 77 complete responses were analysed. The responses from each of the questions posed in the survey are presented in this chapter. The first few responses presented show the demographics of the respondents.

What type of practice do you provide dental services from?

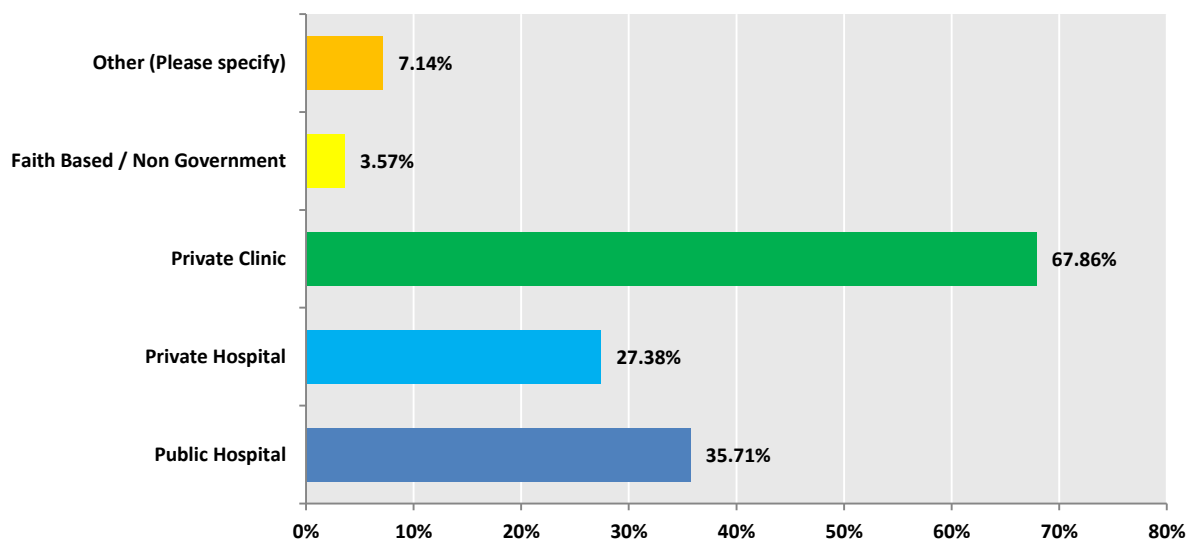


Figure 4.1

Figure 4.1 summarizes the types of practices that the respondents practiced from. A majority (67.86%) practiced from private clinics.

Answer Choices	Responses	Respondents
Public Hospital	35.71%	30
Private hospital	27.38%	23

Private Clinic	67.86%	57
Faith based/ NGO	3.57%	3
Other	7.14%	6
Practising in more than 1 facility	34.52	29
Total Respondents		84

Table 4.1

Table 4.1 shows that 57 dentists out of 84 practiced from private clinics.

Also 29 of these respondents practised from more than one facility, which was also captured in the above table.

With a large majority of respondents being those practising from private clinics, their numbers in participating in this study, can probably be attributed to the issue of patients' dental insurance covers being of concern to them. Another reason may be because generally most dental insurance covers are for treatment in private hospitals or private clinics.

4.1.2 OWNERSHIP OR EMPLOYMENT AS A DENTIST

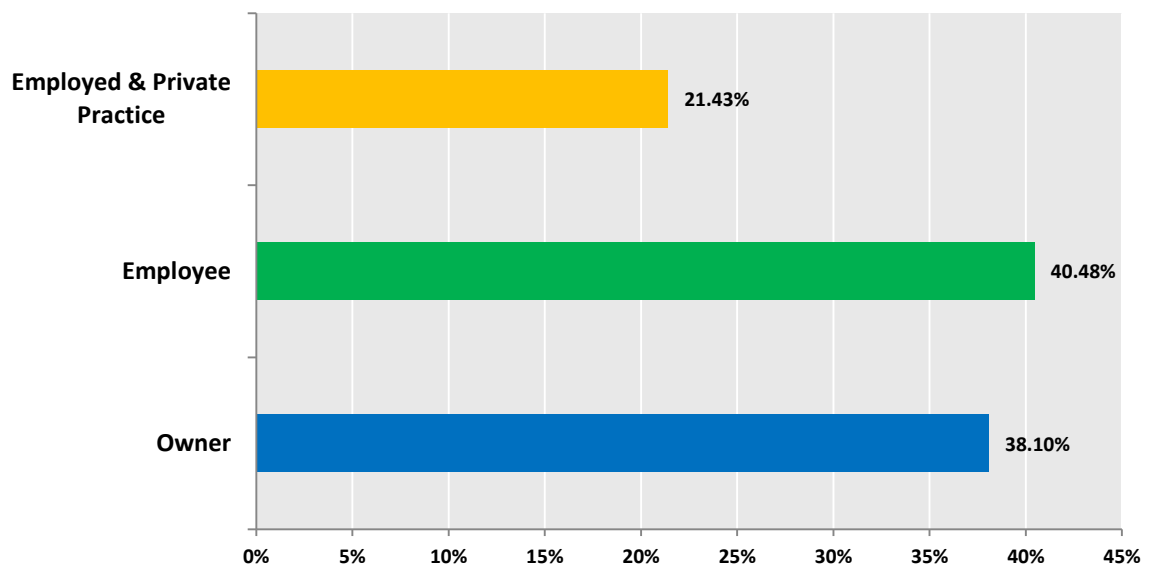


Figure 4.2

Figure 4.2 is a summary of whether the respondents were business owners or employees in their practice as dentists.

Answer choices	Responses	Respondents
Owner	38.10%	32
Employee	40.48%	34
I am employed and I also own a private dental practice	21.43%	18
Total		84

Table 4.2

Table 4.2 summarizes the total number of respondents according to whether they practiced as owners of their clinics exclusively, as employees, or both.

These results show that the respondents were balanced between owners and employees. This information is further used to trace specific responses including satisfaction, in latter survey questions to determine if there was an association.

4.1.3 DEMOGRAPHICS OF RESPONDENTS- PRACTICE, GENDER, EXPERIENCE

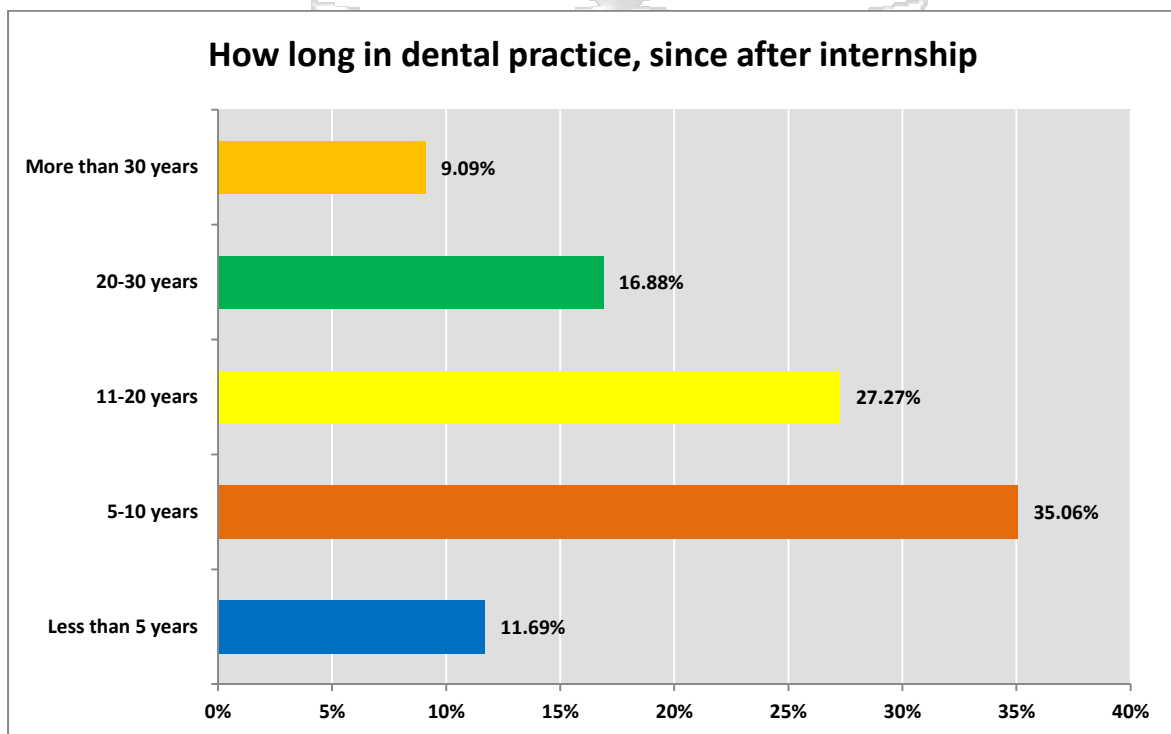


Figure 4.3

Figure 4.3 shows the respondents who took the survey and how long they had been in clinical practice. This was to understand the experience of the dentists in clinical years.

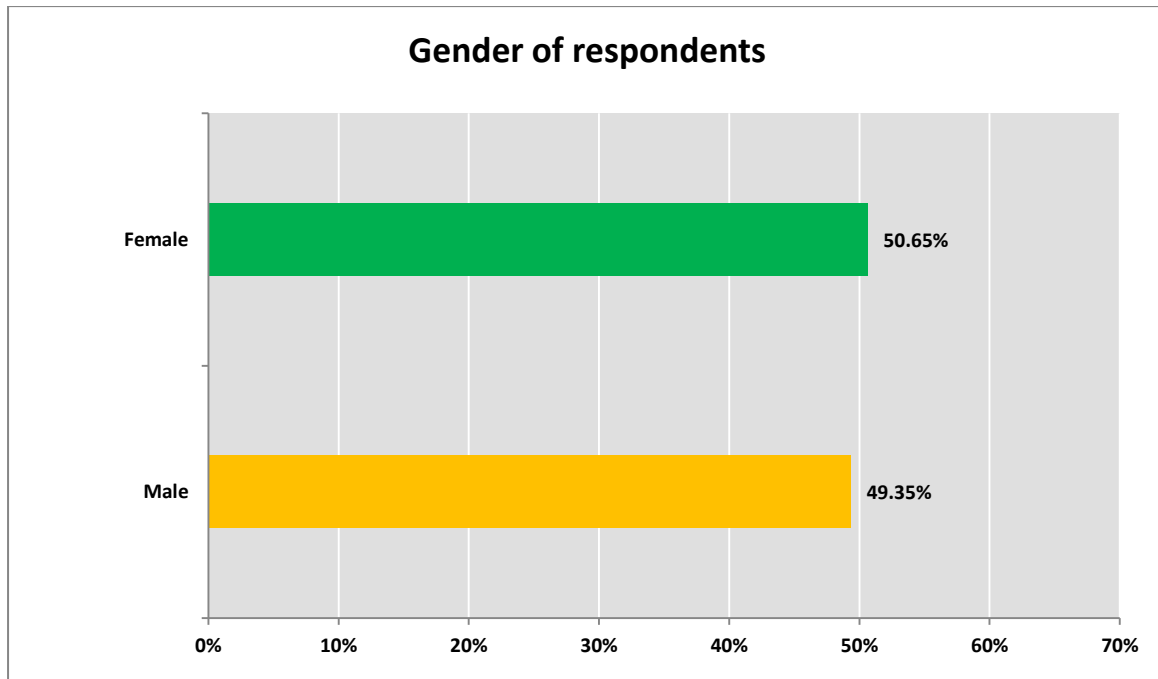


Figure 4.4

Figure 4.4 summarizes the gender of the respondents of the survey and shows that almost equal male and female respondents took the survey

Have you had the experience of being on the panel of any insurance company as a provider of dental services in Kenya?

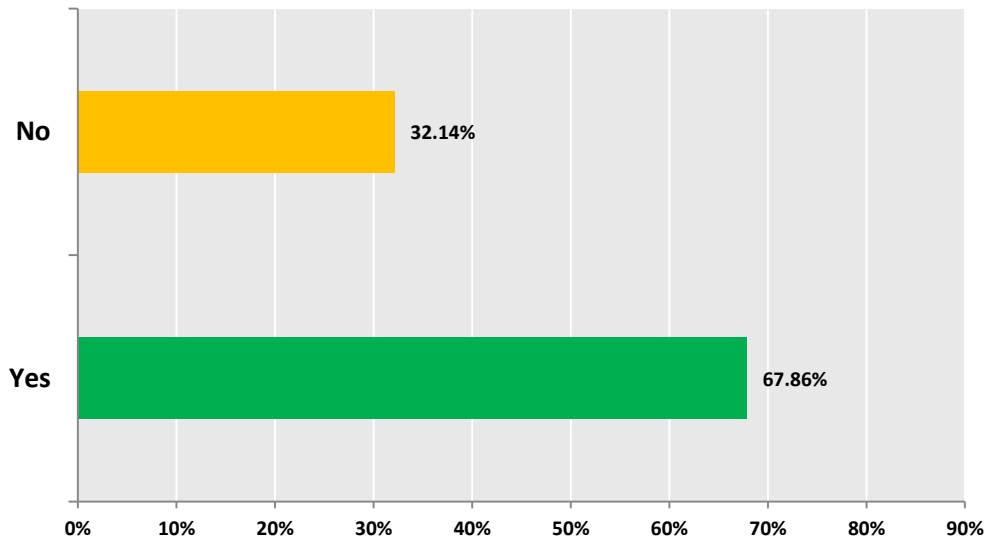


Figure 4.5

Figure 4.5 summarizes how many respondents of the survey had experience with dental insurance in Kenya.

The above question was meant to differentiate dentists who had experience with dental insurance covers, from those without experience. Subsequent questions specific to dental insurance covers could then be asked in the survey.

Answer choices	Responses	Respondents
Yes	67.86%	57
No	32.14%	27
Total		84

Table 4.3

Table 4.3 summarizes the number of respondents who had experience with dental insurance.

The selection criterion for this study was therefore enabled with this particular question, and the results above revealed the actual number of respondents whose responses were going to be of consideration.

Results from the survey for the next set of questions, are from the 57 dentists who are or have been on an insurance panel, as a dental service provider, and therefore considered to have the experience and insight to respond to this survey.

4.1.4 NUMBER OF PANELS OF INSURANCE COMPANIES

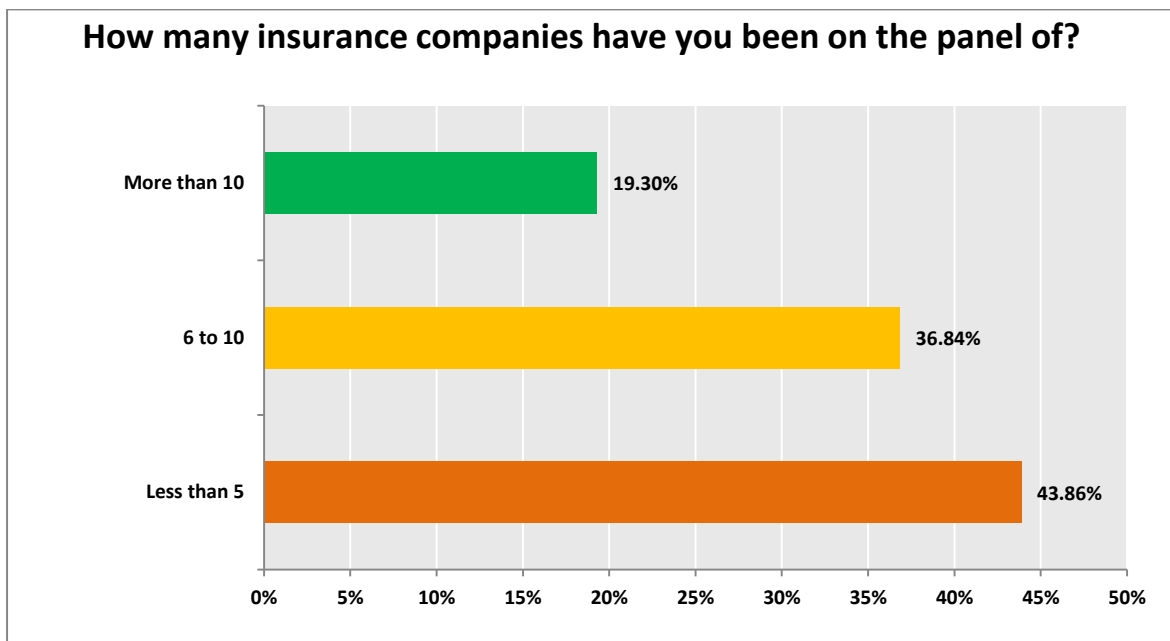


Figure 4.6

Figure 4.6 represents how many insurance companies the each respondent was on the panel of.

Answer choices	Responses	Respondents
Less than 5	43.86%	25
6-10	36.84%	21
More than 10	19.30%	11
Total		57

Table 4.4

Table 4.4 represents the actual number of respondents and the number of insurance company panels he/she was on.

This data was collected to assess collectively, how many respondents were on the panel of how many different insurance companies, in order to ascertain how they responded to specific questions later in the survey.

4.1.5 DURATION ON PANELS OF INSURANCE COMPANIES

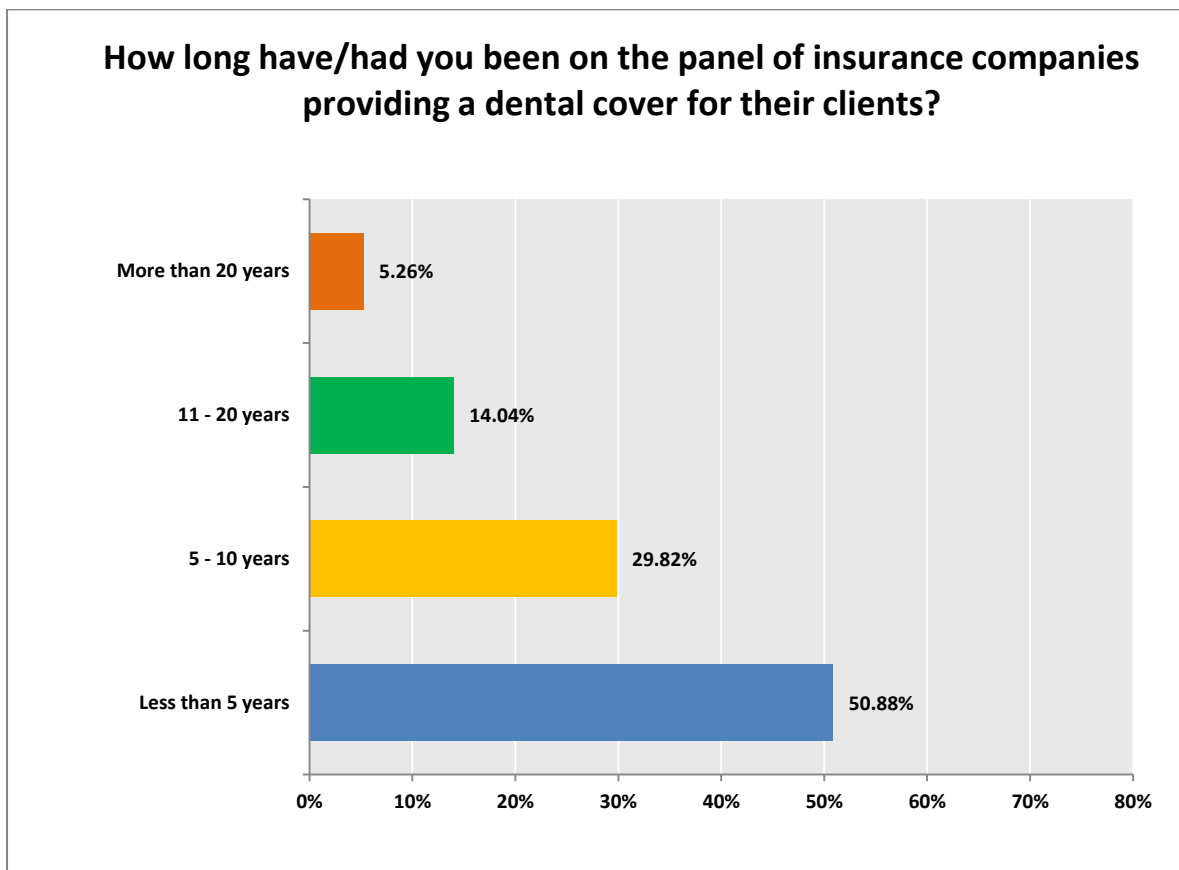


Figure 4.7

Figure 4.7 represents in percentage the respondents who had been on the panel of an insurance company as dental service provider, according to the number of years.

Answer choices	Responses	Respondents
Less than 5 years	50.88%	29
5-10 years	29.82%	17

11-20 years	14.04%	8
More than 20 years	5.26%	3
Total		57

Table 4.5

Table 4.5 represents the actual number of respondents according to the number of years as a panellist of an insurance company

The demographics of those respondents having experience with being on the panel of insurance company was investigated further.

The number of years in dental practice according to gender was investigated.

'YES' RESPONSES					
NUMBER OF YEARS IN DENTAL PRACTICE					
Less than 5 years	5-10 years	11-20 years	20-30 years	More than 30 years	GENDER
5	16	16	8	5	ALL
2	10	8	4	0	Female
3	6	8	4	5	Male
7 Incomplete responses					

Table 4.6

Table 4.6 represents the number of years in dental practice according to gender.

From the above results, it can be observed that most respondents with experience with insurance companies had been in dental practice from between **5 to 20 years**.

Interestingly, from those in dental practice of more than 30 years, and with experience with insurance companies, were all **male**.

It was also observed that 7 respondents, who had responded with yes, did not complete the survey.

FACILITY Practising From	Number Of Respondents
Private Clinic ONLY	29
More than 1 facility including a private clinic	13

Table 4.7

Table 4.7 summarizes respondents practising from private clinics, having experience being on the panel of insurance companies.

From the 57 respondents with experience with insurance companies, 42 of them were practising from private dental clinics as summarized in the table above.

NO responses					
Number of years in dental practice					
Less than 5 years	5-10 years	11-20 years	20-30 years	More than 30 years	GENDER
5	10	6	4	2	ALL
5	2	5	2	1	Female
0	8	1	2	1	Male

Table 4.8

Table 4.8 demonstrates respondents having 'no' experience with insurance companies and compared with the number of years in dental practice and gender.

The total respondents, who had selected as having no experience being on the panel of an insurance company as a provider of dental services, were 27.

Whilst it was ascertained earlier in the study that most of the respondents worked in a private clinic, it was therefore investigated where the respondents who had selected as having 'No' experience with insurance companies, practiced from?

Out of the 27 respondents responding as having no experience being on the panel of an insurance company, a total of 15 respondents practiced from a private clinic, with 10 of these respondents practicing exclusively from a private clinic only.

FACILITY Practising From	Number Of Respondents
Private Clinic ONLY	10
Public hospital ONLY	3
Private hospital ONLY	4
More than 1 facility	9
More than 1 facility including a private clinic	5

Table 4.9

Table 4.9 summarizes the facilities where those who responded as having 'no' experience being on an insurance company panel practiced from.

Depending on whether the respondent had experience being on the panel of an insurance company, the respondent progressed through the following questions of the survey. If the response was 'No', the respondent was then directed by 'skip logic' towards the end of the survey questionnaire.

4.1.5.1 SATISFACTION ACCORDING TO DURATION ON INSURANCE PANELS

	Combined Satisfied	Combined Dissatisfied
Less than 5 years	11	18
5-10 years	04	13
11-20 years	04	04
More than 20 years	03	0

Table 4.10

A Chi square test for independence was done for being on the panel for less than 5 years and 5-10 years, with being satisfied or not. The null hypothesis was proved that there was no significant association between the two. (P-Value = 0.315, level of significance 0.05).

Therefore, being on the panel for less than 5 years or 5-10 years had no association with being satisfied or dissatisfied with insurance companies.

4.2 OVERALL SATISFACTION WITH MAJORITY OF INSURANCE COVERS

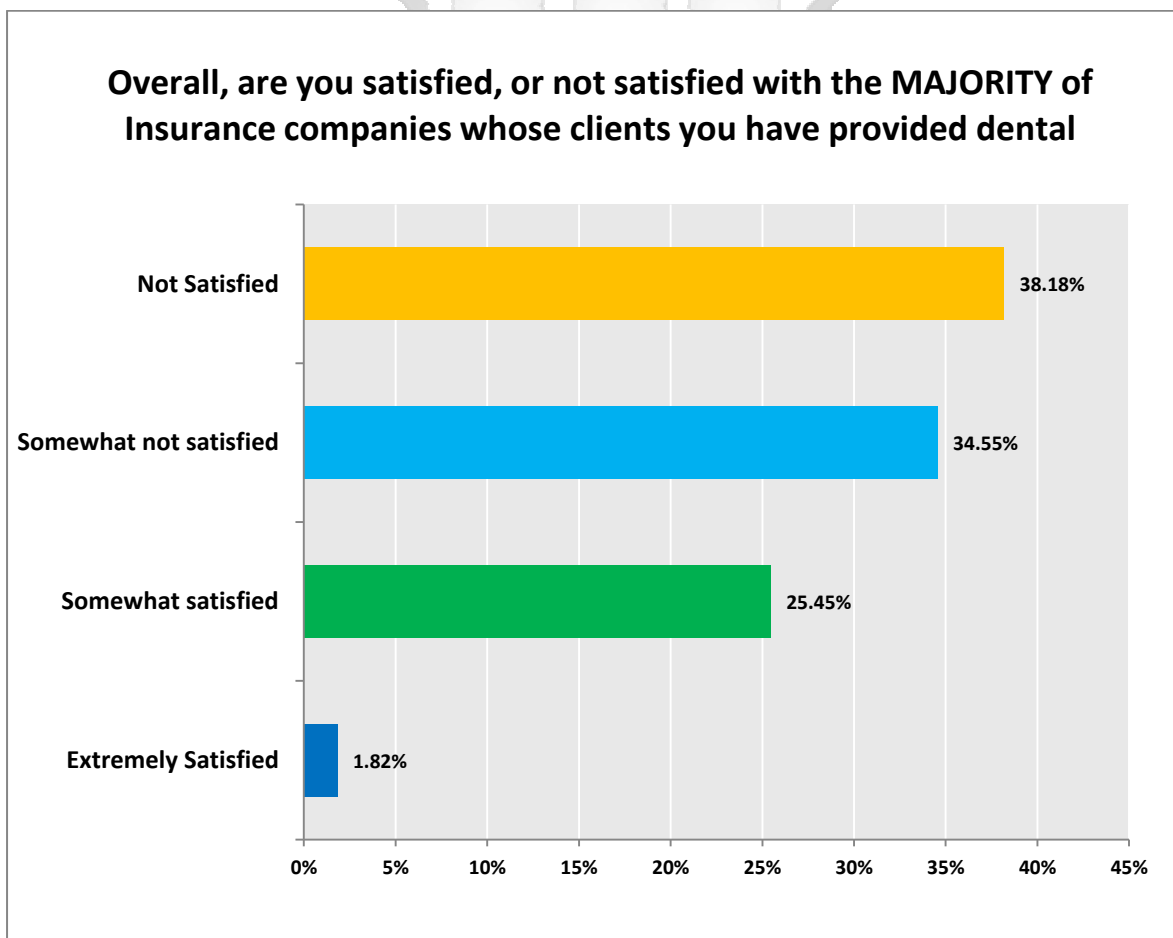


Figure 4.8

Figure 4.8 represents the satisfaction responses of dentists with the majority of insurance companies, they've provided dental services for.

Answer choices	Responses	Respondents
Extremely satisfied	1.82%	1
Somewhat satisfied	25.45%	14
Somewhat not satisfied	34.55%	19
Not satisfied	38.18%	21
Total		55

Table 4.11

Table 4.11 represents the satisfaction responses in the exact number of dentists with the majority of insurance companies they've provided dental services for.

This was the main overall question of this questionnaire and survey.

A general opinion of satisfaction regarding dental insurance companies was queried, in order to first gain a general idea regarding dental insurance companies.

The subsequent questions in the questionnaire then specifically asked about patient dental insurance covers, for example annual cover limits, exclusions; and also the issues which would affect the dentist directly when dealing with insurance companies, for example fees paid to the dentist and time taken to be paid these by the insurance companies.

Out of a total of 55 respondents, only **15 (27.27%)** were satisfied, with 1 being 'extremely satisfied' and the other 14 being 'somewhat satisfied'.

From the remaining **40 (72.73%)** who were not satisfied, 21 were 'not satisfied'; whilst 19 were 'somewhat not satisfied'.

These result findings are important as they give an indication of the general sense of dissatisfaction amongst dentists regarding dental insurance companies in Kenya.

4.3 EMPLOYMENT STATUS AND SATISFACTION

The two options each for those satisfied (extremely satisfied and somewhat satisfied) and those dissatisfied (somewhat not satisfied and not satisfied), were combined and compared to their type of employment (Table 4.12).

<u>EMPLOYMENT status</u>	<u>Satisfied</u>	<u>Dissatisfied</u>
Employed	03	17
Owner	11	17
Both employed and owner	01	05

Table 4.12

A Chi square test for independence was done, with the null hypothesis being proven true, that there was no evidence of significant association (P-Value = 0.068) between either being employed or the owner, and the satisfaction. (Level of significance of 0.05).

Therefore, statistically being an owner or employee had no association with either being satisfied or dissatisfied with insurance companies in Kenya.

4.4 EMPLOYMENT STATUS AND DISSATISFICATION

Since out of 55 respondents, a large majority of **40** respondents were dissatisfied, this was explored further with some interesting observations.

	<u>Somewhat Not satisfied</u>	<u>Not Satisfied</u>
Employed	11	06
Owner	07	11

Table 4.13

Table 4.13 shows the type of employment status according to dissatisfied respondents.

The majority of Owners of practices opted to respond with 'Not satisfied', whilst employees preferred to respond with 'somewhat not satisfied'.

However, a Chi square test for independence with a null hypothesis that there was no significant association (P-Value = 0.127) between being an owner and employee in choosing to be 'somewhat not satisfied' and 'not satisfied'; was proven to be true (with a level of significance of 0.05). Therefore, the extent of satisfaction had no association in either being an owner or employee of a dental practice.

TYPE OF PRACTICE	<u>Somewhat not satisfied</u>	<u>Not Satisfied</u>
Practicing from a Private Clinic only	08	09
Practising from a Private Clinic & Private Hospital	15	17

Table 4.14

Table 4.14 shows the type of practice that dissatisfied respondents practiced from.

It was observed again from the above that most respondents practiced from private clinics, with no overwhelming inclination towards either being not satisfied or somewhat not satisfied.

4.5 SATISFACTION AND DURATION ON THE PANEL OF INSURANCE COMPANIES

4.5.1 LESS THAN 5 YEARS

Satisfied	11
Dissatisfied	18

Table 4.15

Table 4.15 demonstrates the combined satisfaction and dissatisfaction responses with insurance companies, for those dentists on the panel for less than 5 years.

This was an interesting observation considering that a majority of respondents (18) had been on an insurance panel for less than 5 years, and were already indicating their dissatisfaction.

	<u>Somewhat not satisfied</u>	<u>Not Satisfied</u>
On the panel of 'Less than 5' insurance companies	06	12

Table 4.16

Furthermore, a majority of these dissatisfied respondents opted to respond clearly with the 'Not satisfied' option.

4.5.2 ON THE PANEL FOR 5-10 YEARS

Extremely Satisfied	0
Somewhat satisfied	04
Somewhat not satisfied	10
Not satisfied	03

Table 4.17

Table 4.17 shows the satisfaction responses from dentists who had been on the panel of an insurance company for between 5-10 years.

It can be observed from the above table that a majority of respondents numbering **13** were dissatisfied, compared to only 04 who were satisfied.

Furthermore, none of satisfied respondents was clearly 'extremely satisfied'.

4.5.3 ON THE PANEL FOR 11-20 YEARS

Interestingly when exploring the respondents being on the panel of an insurance company for 11-20 years, and their overall satisfaction with dental insurance, the following was noted:

Extremely Satisfied	01
Somewhat satisfied	03
Somewhat not satisfied	01
Not satisfied	03

Table 4.18

Table 4.18 summarizes dentists satisfaction with insurance companies tabulated according to the number of years they had been on a panel of insurance companies.

It can be observed from the above that though four respondents were generally satisfied, while four were not, a closer look at the extreme responses would reveal that only 1 respondent was extremely satisfied, while 3 were not satisfied.

4.5.4 ON THE PANEL FOR MORE THAN 20 YEARS

The 3 respondents who had been on the panel of an insurance company for more than 20 years, all responded as 'Somewhat satisfied'.

4.6 HOW WELL DO MAJORITY OF DENTAL COVERS MEET PATIENT NEEDS

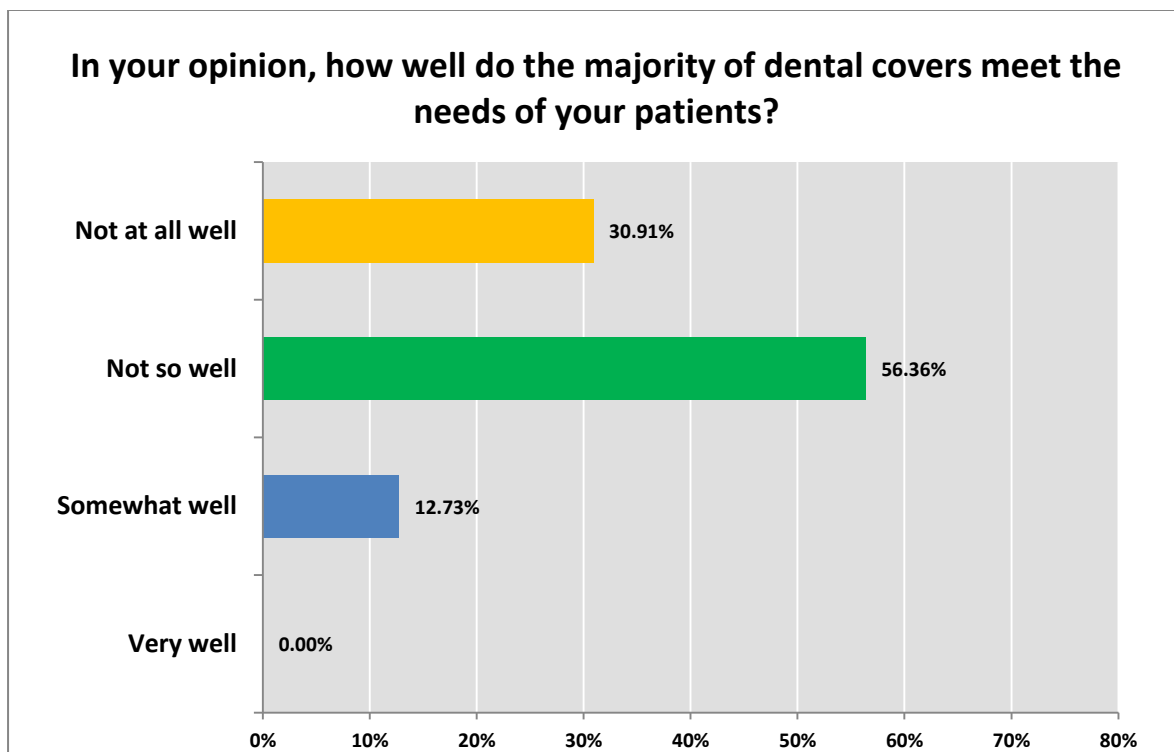


Figure 4.9

Figure 4.9 demonstrates dentists' opinions on how well dental covers met the needs of their patients.

The responses show that a majority of the dentists, who are the health providers were of the opinion that dental covers in Kenya did not meet their patients' needs.

Answer choices	Responses	Respondents
Very well	0%	0
Somewhat well	12.73%	7
Not so well	56.36%	31
Not at all well	30.91%	17
Total		55

Table 4.19

Table 4.19 shows the number of respondents and their responses to how well dental covers met the needs of their patients.

In this subsequent question, “In your opinion, how well do the majority of dental covers meet the needs of your patients?” out of 55 respondents, **48 (87.27%)** responded as Not well. Further to this observation, **31 (56.36%)** responding ‘Not so well’, while **17 (30.91%)** responding ‘Not at all well’.

This overwhelming majority certainly demonstrate that according to the providers of dental treatment (dentists), the insurance covers did not actually fulfil the needs of the insurance policy holders, i.e. the patients.

From the remaining 7 respondents (**12.73%**) all these respondents responded as ‘Somewhat well’, with none (**0**) responding ‘very well’.

When explored further and compared to how ‘Overall satisfied’ the above 7 respondents were with insurance companies, the following was observed.

Those who responded as ‘Somewhat satisfied’ were 06, while those responding as ‘Extremely satisfied’ were 01.

Therefore, those dentists who responded with the opinion that dental insurance covers did fulfil the needs of their patients, also similarly were satisfied with insurance companies.

4.7 COMPARING HOW WELL DENTAL COVERS MEET THE NEEDS OF PATIENTS AGAINST OVERALL SATISFACTION OF DENTISTS WITH INSURANCE COMPANIES

	Combined Satisfied	Combined Dissatisfied
Overall satisfaction with insurance companies	15	40
How well dental covers meet patients' needs	7	48

Table 4.20

Table 4.20 compares two questions asked in the survey, that is the overall satisfaction of the dentist with insurance companies and how well dental covers meet the needs of patients, and compares the satisfaction and dissatisfaction responses.

A Chi square test for association was done resulting in a P value of 0.057. The null hypothesis was that there was no association between overall satisfaction with dental companies and how well dental covers fulfilled patients' needs, with the respondent's satisfaction or dissatisfaction.

However, with the p value of 0.05, the above results of a p value of 0.057, indicates that the association is marginal, and the null hypothesis cannot entirely be accepted. This means that there could be an association between being dissatisfied with insurance companies and whether dental covers fulfilled the needs of patients.

As was reported earlier, a large majority responded with NOT Well (combined 'not so well' and 'not at all well'. In combination they were **48** out of a total of 55.

For the remaining 7, all responded as 'somewhat well', with none responding as 'Very well'. Further, when the above 7 minority respondents' opinions were

analysed to their 'Overall satisfaction with dental insurance covers', their responses were 06 who were Somewhat satisfied, and 01 who was Extremely satisfied.

4.8 SATISFACTION LEVELS FOR SPECIFIC ISSUES ON DENTAL COVERS

Having first asked general questions on satisfaction with dental insurance companies, and also whether dental covers fulfilled the needs of patients, additional survey questions were asked to about selected specific issues, according to the conceptual framework and process mapping of the treatment cycle for patients with dental covers.

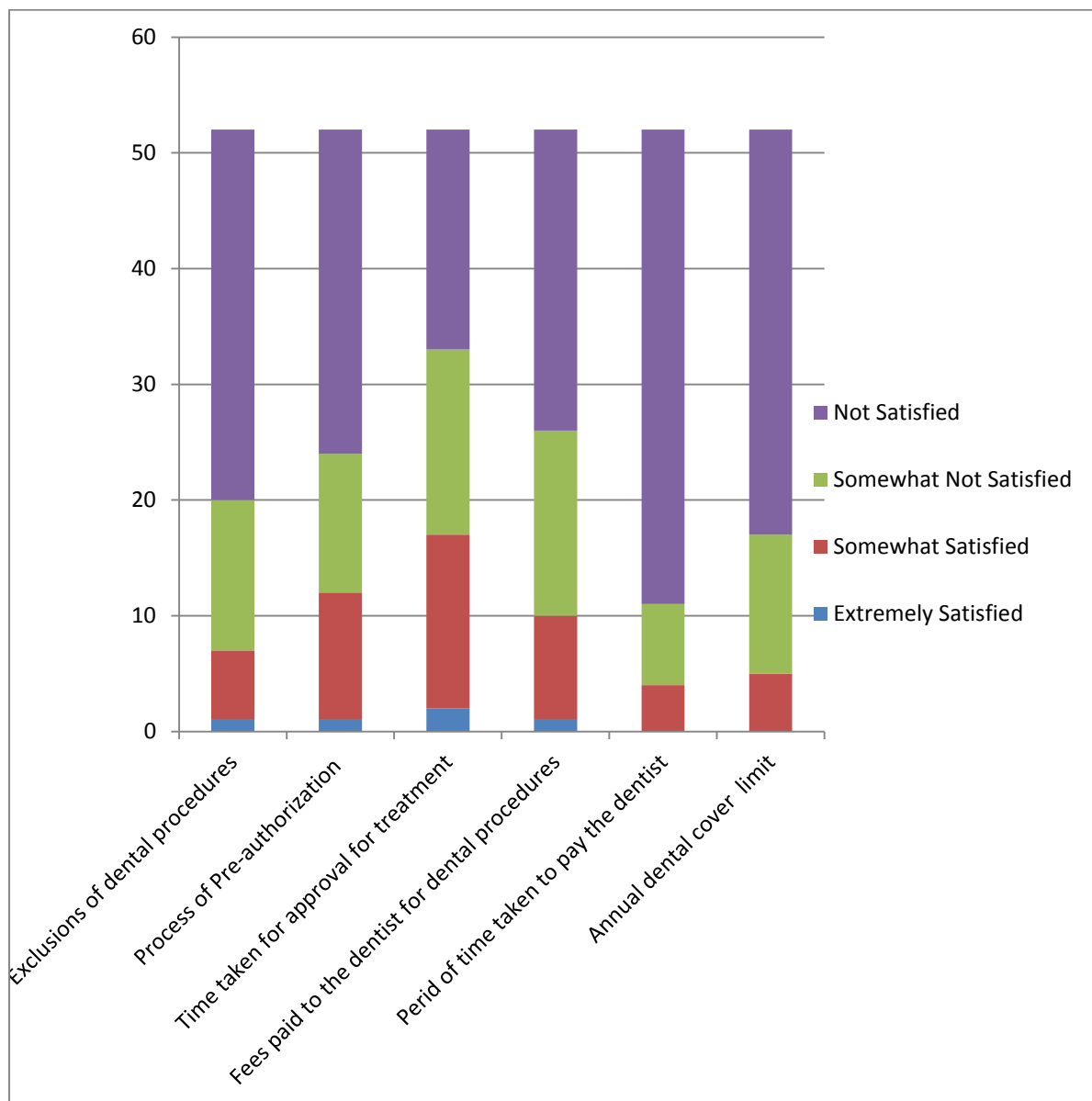


Figure 4.10

Figure 4.10 shows specific questions asked in the survey, and demonstrates how satisfied or dissatisfied dentists were with these specific issues.

The results show mostly dissatisfied responses for all these specific issues regarding dental insurance covers. This is an important finding.

To investigate further which issues the respondents were most dissatisfied about, the following was discovered and tabulated as in table 4.21

	Survey Question	Total respondents 'Somewhat Not satisfied and 'Not satisfied'
1.	Period of TIME taken by the insurance company to PAY the DENTIST	48
2.	Annual Dental Cover LIMIT offered to patients	47
3.	EXCLUSIONS of dental procedures, not covered by insurance	45
4.	FEES paid to the DENTIST by Insurance companies	42
5.	Process of PRE-AUTHORIZATION prior to treatment	40
6.	TIME taken for APPROVAL of Pre-Authorizations by Insurance companies	35

Table 4.21

From the above results, the issue with the highest dissatisfaction was the dentists concern with the time taken to be paid by the insurance companies. Second and third were regarding issues with the patients' dental covers.

4.8.1 EXCLUSIONS IN PATIENTS' DENTAL COVERS

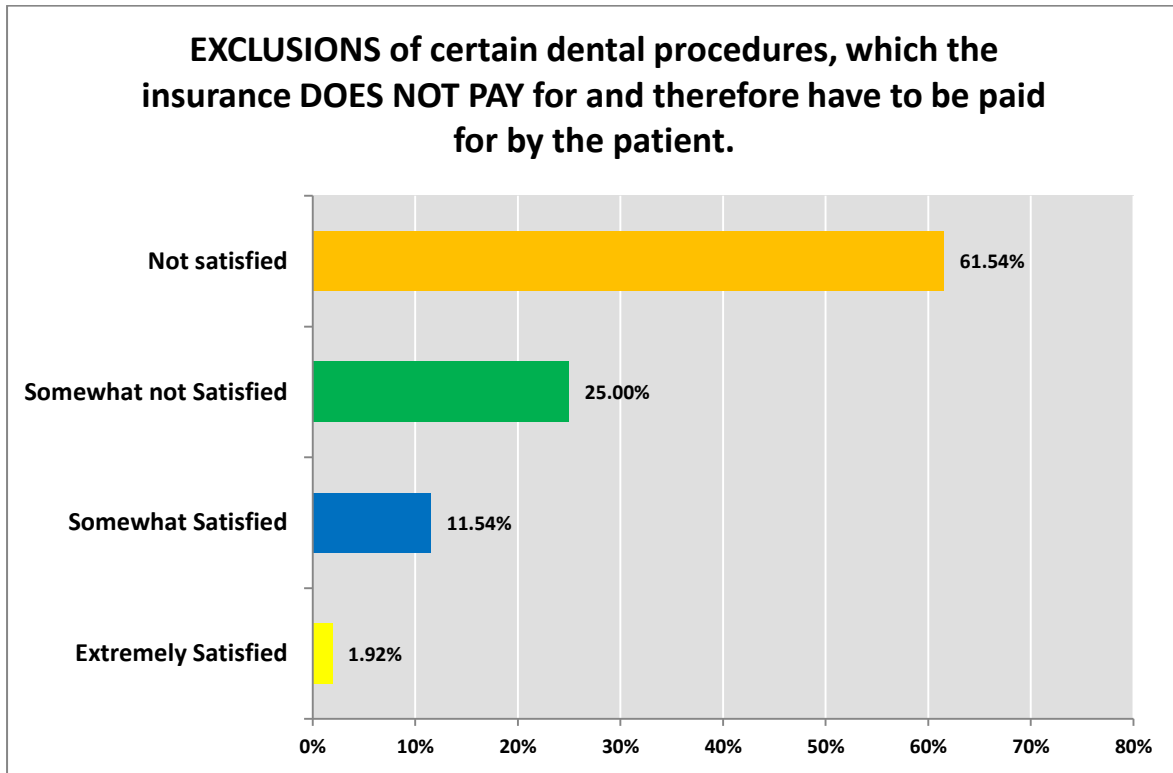


Figure 4.11

Figure 4.11 demonstrates the respondents' satisfaction regarding exclusions in dental covers.

The Exclusions referred to here, are the dental procedures which are not covered by insurance companies. Many of these exclusions are neither known to the patient, nor the dentist, and hence the process of pre-authorization which is sent to the insurance company prior to commencing treatment.

Answer choices	Responses	Respondents
Extremely satisfied	1.92%	1
Somewhat satisfied	11.54%	6
Somewhat not satisfied	25.00%	13
Not satisfied	61.54%	32
Total		52

Table 4.22

These exclusions are predetermined by the insurance company, and the results obtained from this study shows that 86.54% of the respondents who are dentists, are dissatisfied with these exclusions.

4.8.2 THE PROCESS OF PREAUTHORIZATION AND APPROVAL

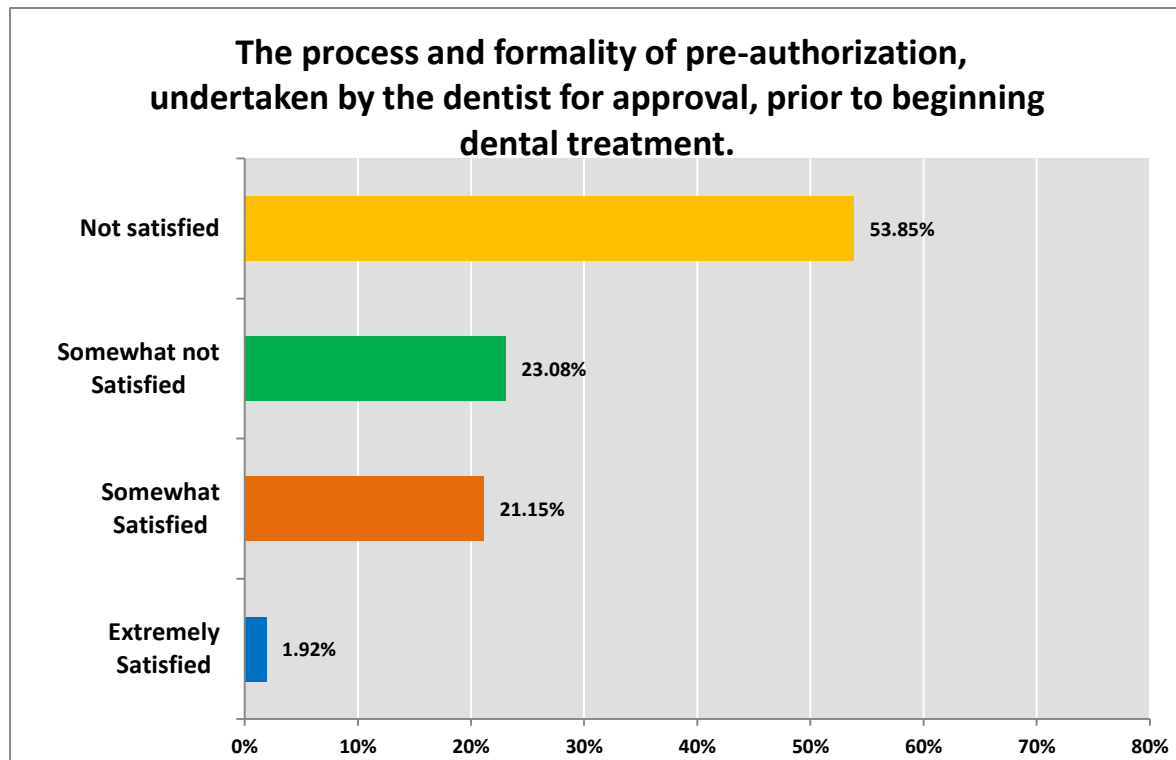


Figure 4.12

Figure 4.12 shows the satisfaction responses by dentists regarding the preauthorization process, prior to commencing dental treatment.

Answer choices	Responses	Respondents
Extremely satisfied	1.92%	1
Somewhat satisfied	21.15%	11
Somewhat not satisfied	23.08%	12
Not satisfied	53.85%	28
Total		52

Table 4.23

Table 4.23 shows the number of respondents against their satisfaction with preauthorization procedures with insurance companies prior to dental treatment.

76.93% of the respondents were dissatisfied with the preauthorization process, which the insurance companies had instituted.

4.8.3 APPROVAL TIME FOR PREAUTHORIZATION REQUESTS

After a preauthorization request is sent, the time taken for these preauthorization requests to be approved by the insurance companies was assessed for satisfaction.

Most respondents appeared dissatisfied with this time taken.

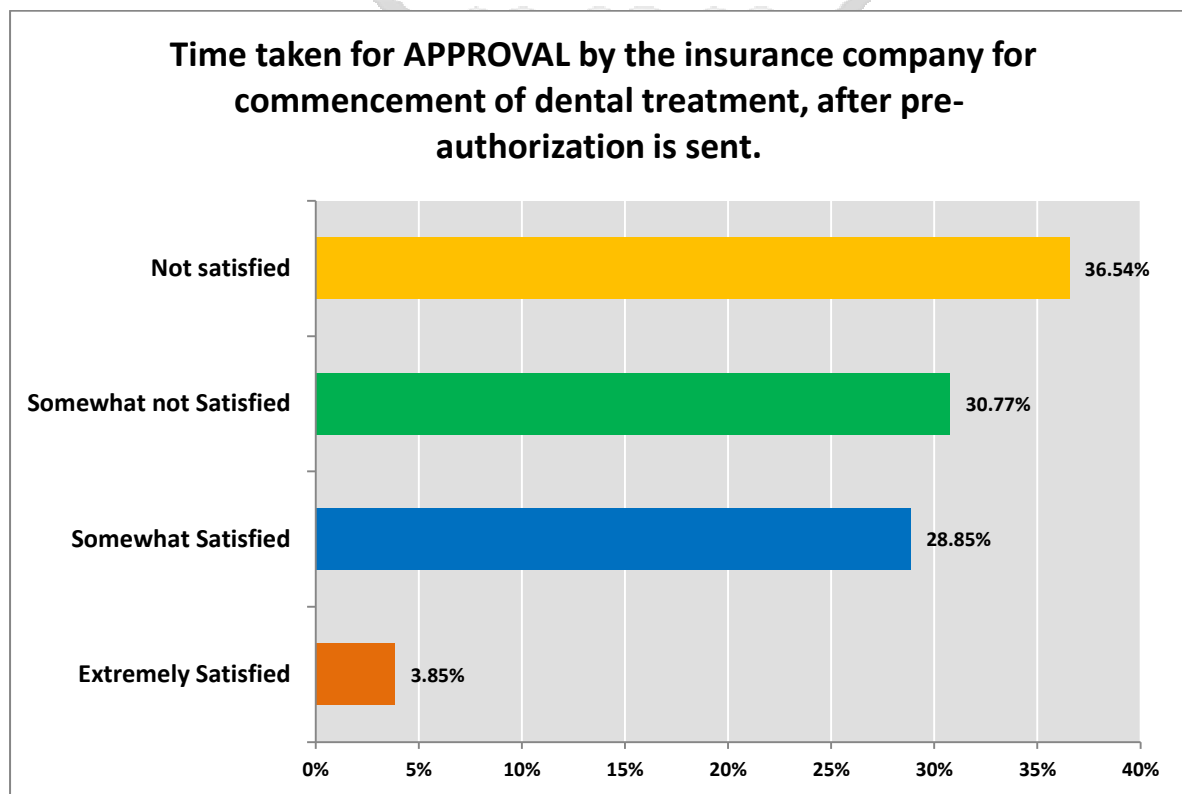


Figure 4.13

Figure 4.13 demonstrates the satisfaction levels of dentists with time taken for preauthorization requests to be approved.

Answer choices	Responses	Respondents
Extremely satisfied	3.85%	2

Somewhat satisfied	28.85%	15
Somewhat not satisfied	30.77%	16
Not satisfied	36.54%	19
Total		52

Table 4.24

Table 4.24 shows the number of respondents and their satisfaction with the time taken for approval of preauthorization requests.

4.8.3.1 THE TIME PERIOD TAKEN TO APPROVE PREAUTHORIZATION REQUESTS

In order to investigate further, a follow up question was administered in the survey regarding the time period taken for the approval process. The results showed that most responded with 'more than 1 week', followed with the 'same day' responses.

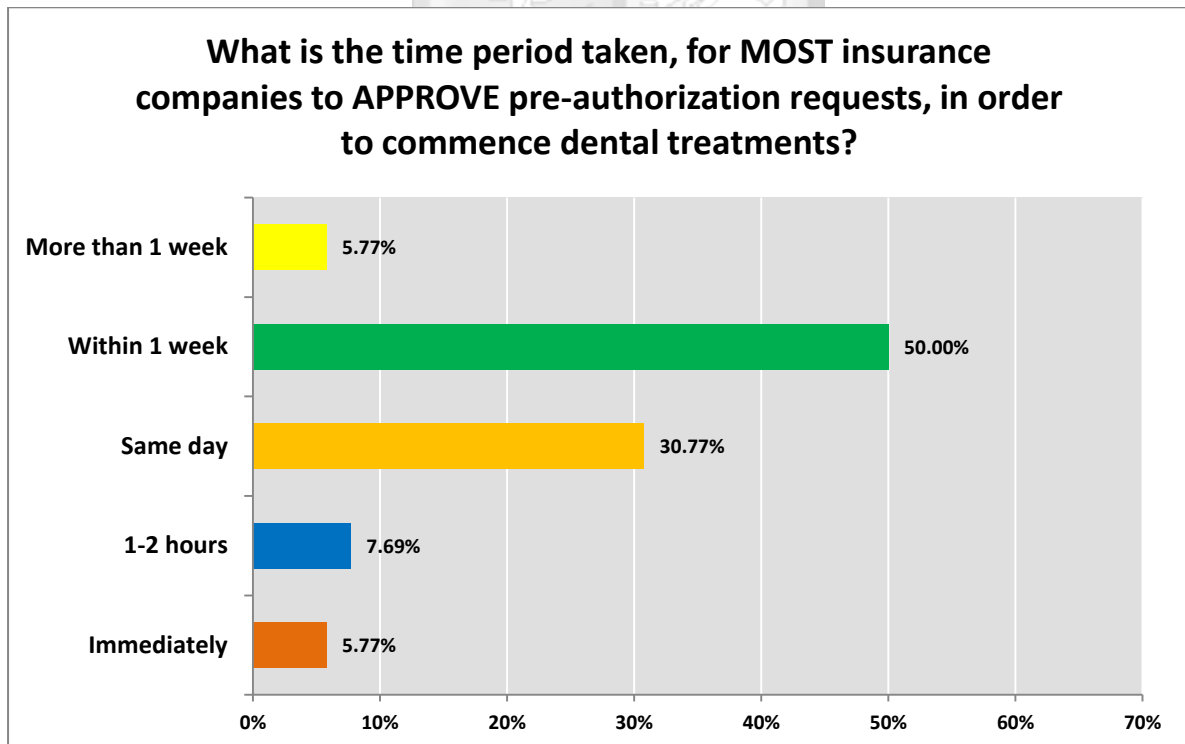


Figure 4.14

Figure 4.14 shows the time taken for pre-authorizations to get approved, prior to the commencement of dental treatment.

Answer choices	Responses	Respondents
More than 1 week	5.77%	3
Within 1 week	50.00%	26
Same day	30.77%	16
1-2 hours	7.69%	4
Immediately	5.77%	3
Total		52

Table 4.25

Table 4.25 summarizes the total individual responses for time taken for approval of pre-authorization requests.

4.8.4 THE ANNUAL DENTAL INSURANCE COVER LIMITS

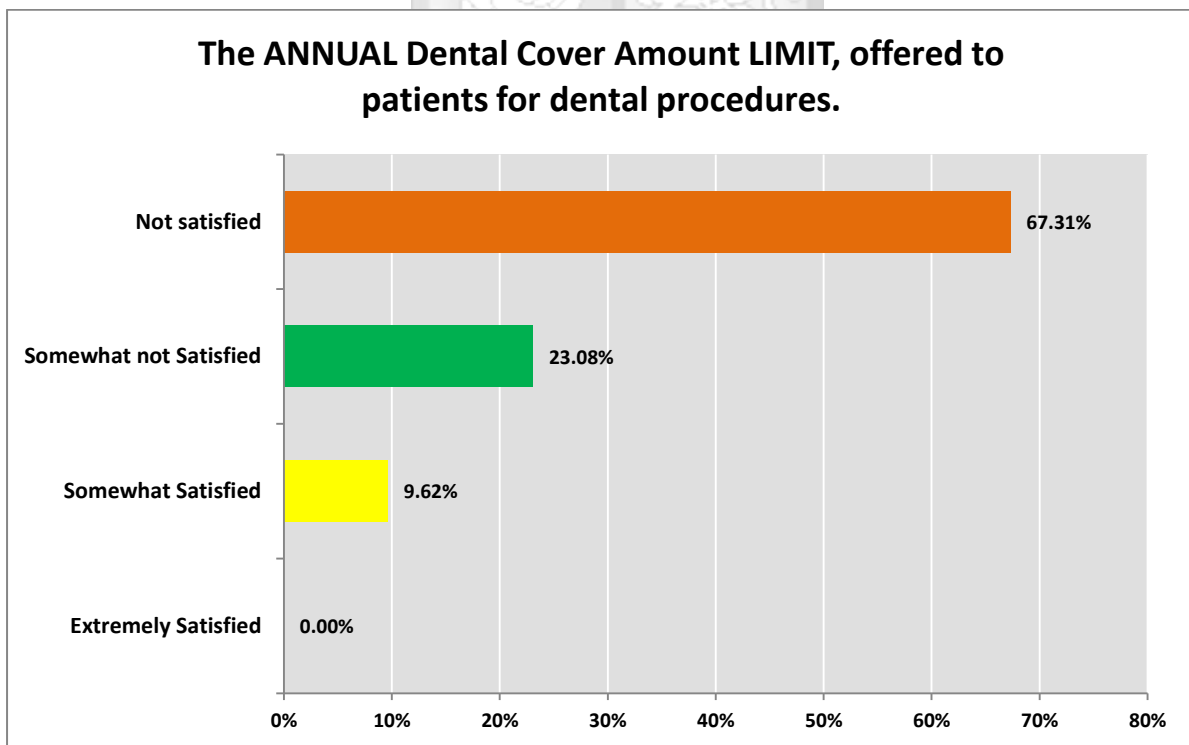


Figure 4.15

Figure 4.15 demonstrates the satisfaction of dentists, with the annual dental insurance covers that were offered to the patients with dental insurance they treated.

Answer choices	Responses	Respondents
Extremely satisfied	0.00%	0
Somewhat satisfied	9.62%	5
Somewhat not satisfied	23.08%	12
Not satisfied	67.31%	35
Total		52

Table 4.26

Table 4.26 shows the number of respondents and their satisfaction responses, to the annual dental cover limits offered by insurance companies.

The 90.39% combined dissatisfied responses tabulated above are an indication that the annual dental cover limits, presently being offered are unsatisfactory to a majority of dentists. Dental treatment within the limits is what is covered for by insurance companies. Anything beyond and above this limit is not catered for and therefore has to be borne by the patient. If the limits set by the insurance company are inadequate, then this may affect to Access to Quality dental treatment.

4.8.4.1 ANNUAL AMOUNT OF DENTAL COVER LIMITS

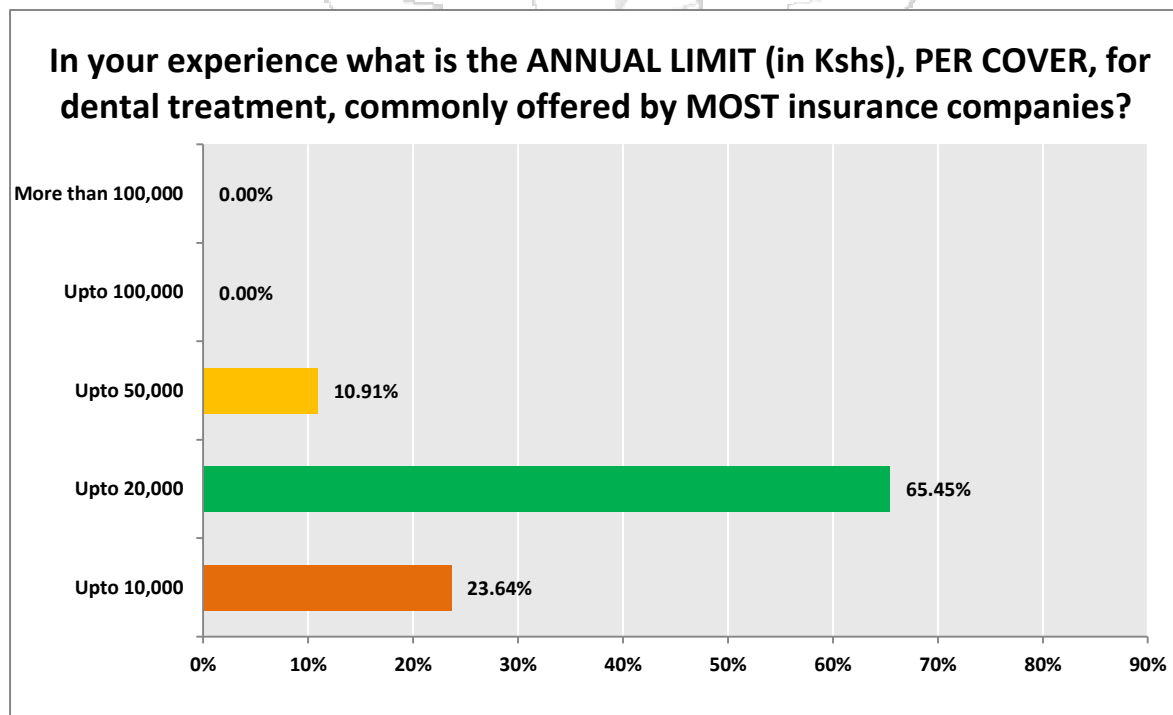


Figure 4.16

Figure 4.16 demonstrates the amounts in Kenya shillings, of dental insurance covers in Kenya, which dentist considered common.

The above results clearly show that most annual dental covers are up to Kenya shillings 20,000/- only. In the same study, dentists indicated their dissatisfaction with the annual limit amount, and therefore it can be deduced that this amount of 20,000/- is insufficient for dental treatment according to dentists.

4.9 SATISFACTION FOR SPECIFIC ISSUES CONCERNING DENTIST AND INSURANCE COMPANY BUSINESS RELATION

4.9.1 PROCEDURE FEES PAID TO THE DENTIST

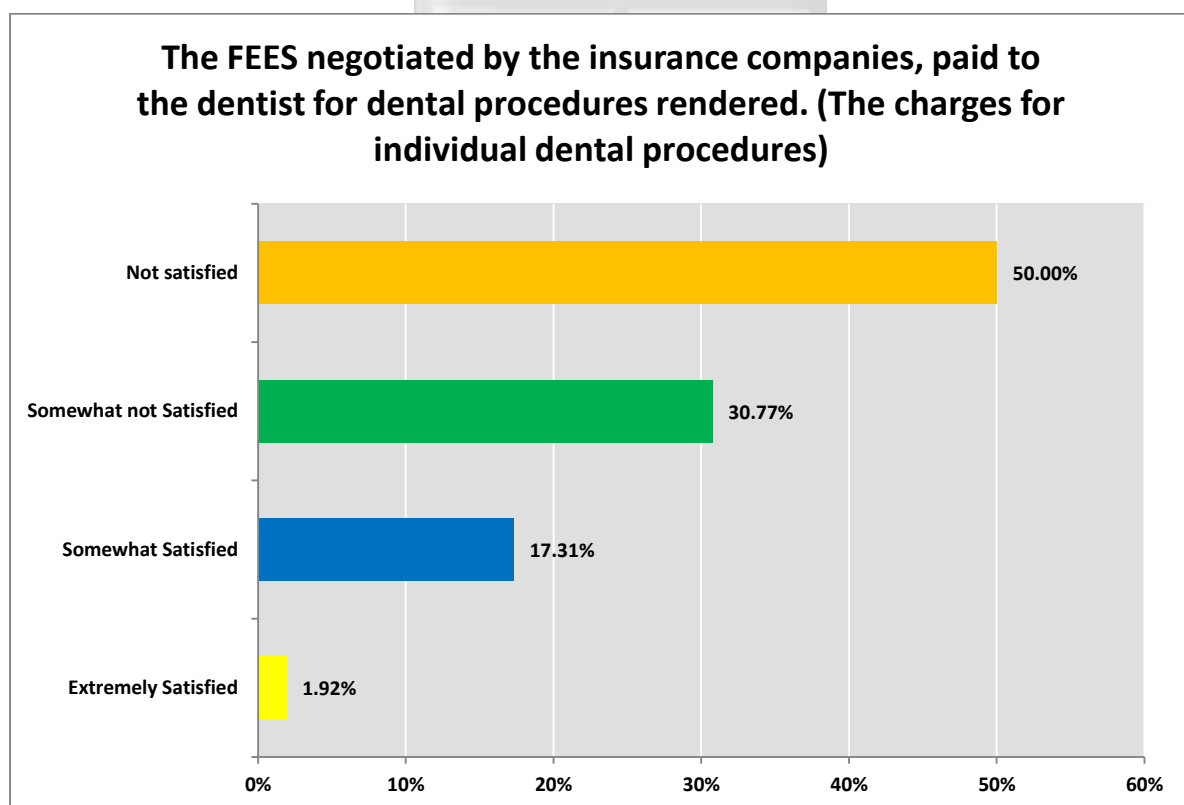


Figure 4.17

Figure 4.17 shows the satisfaction of dentists when they were asked to respond regarding the fees they were being offered for dental procedures by insurance companies, rendered to their clients.

Answer choices	Responses	Respondents
Extremely satisfied	1.92%	1
Somewhat satisfied	17.31%	9
Somewhat not satisfied	30.77%	16
Not satisfied	50.00%	26
Total		52

Table 4.27

Table 4.27 summarizes the number of dentists according to their satisfaction of the fees they were being offered for dental services, by insurance companies.

The fees above refer to each dental treatment procedure fee, which is paid to the dentist. Generally, these fees are agreed with the respective insurance company when signing the contract when appointed onto the panel. The general dissatisfaction amongst dentists is an indication that these fees, though agreed with insurance companies, are perhaps inadequate.

4.9.2 TIME TAKEN TO PAY THE DENTIST BY INSURANCE COMPANIES

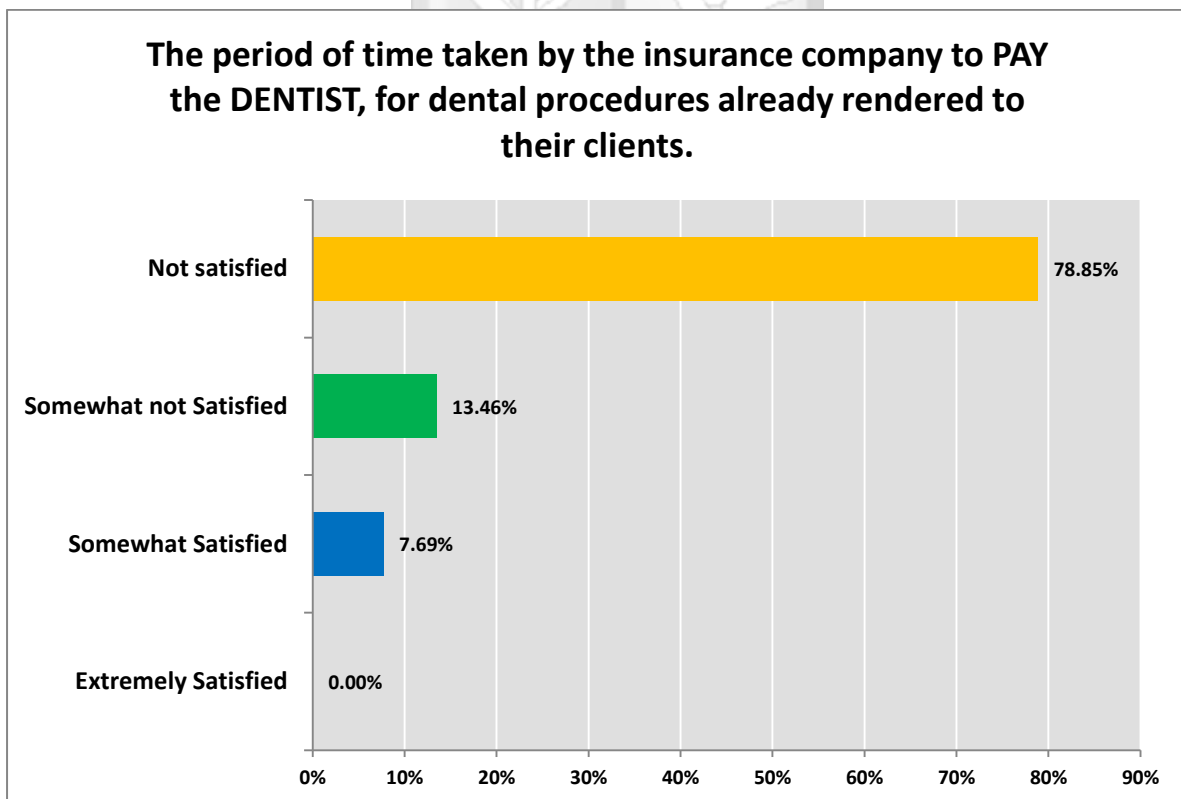


Figure 4.18

Figure 4.17 shows the satisfaction of dentists with the fees being offered by insurance companies, to treat their clients.

Answer choices	Responses	Respondents
Extremely satisfied	0.00%	0
Somewhat satisfied	7.69%	4
Somewhat not satisfied	13.46%	7
Not satisfied	78.85%	41
Total		52

Table 4.28

Table 4.28 summarizes the number of dentists and their satisfaction with the fees being offered to them for dental services rendered to clients of insurance companies.

These results show that dentists are mostly dissatisfied with the fees they are presently being offered by insurance companies in Kenya.

4.9.3 HOW LONG DO INSURANCE COMPANIES TAKE TO PAY DENTISTS

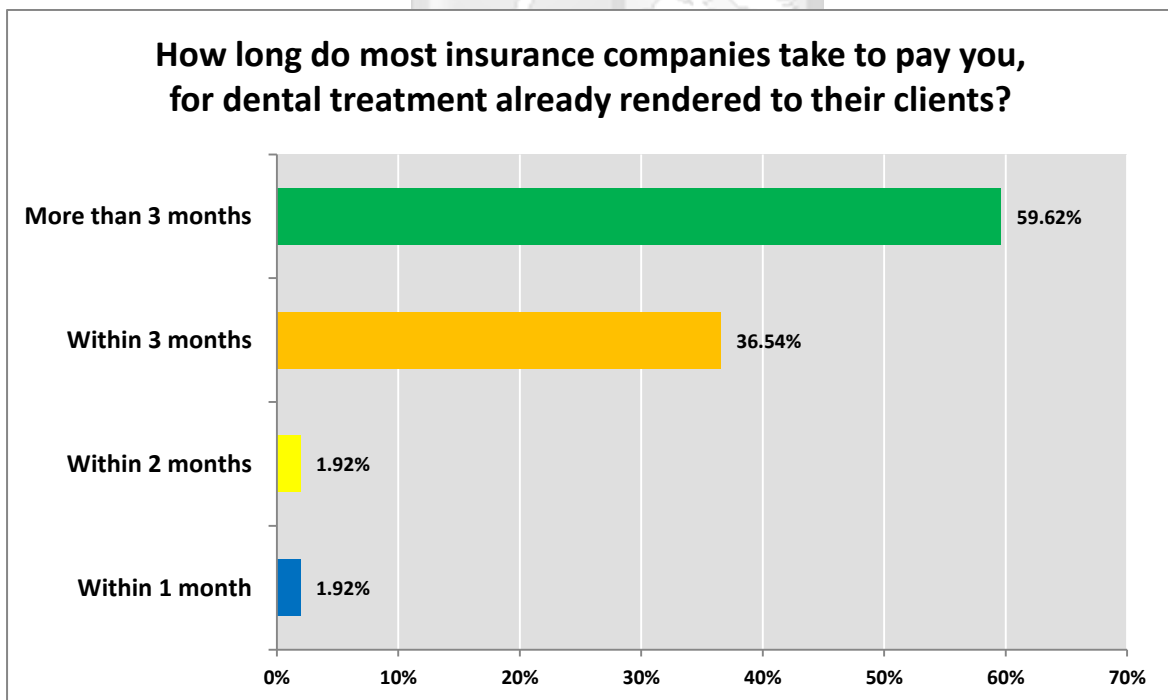


Figure 4.19

Figure 4.18 summarizes the time taken for insurance companies to pay the respondents, i.e the dentists.

Answer choices	Responses	Respondents
More than 3 months	59.62%	31
Within 3 months	36.54%	19
Within 2 months	1.92%	1
Within 1 month	1.92%	1
Total		52

Table 4.29

Table 4.29 shows the number of dentists and the time taken for them to be paid by insurance companies, for dental services already rendered to clients of insurance companies.

4.10 PROPORTION OF PATIENTS TREATED WITH DENTAL COVERS PER MONTH

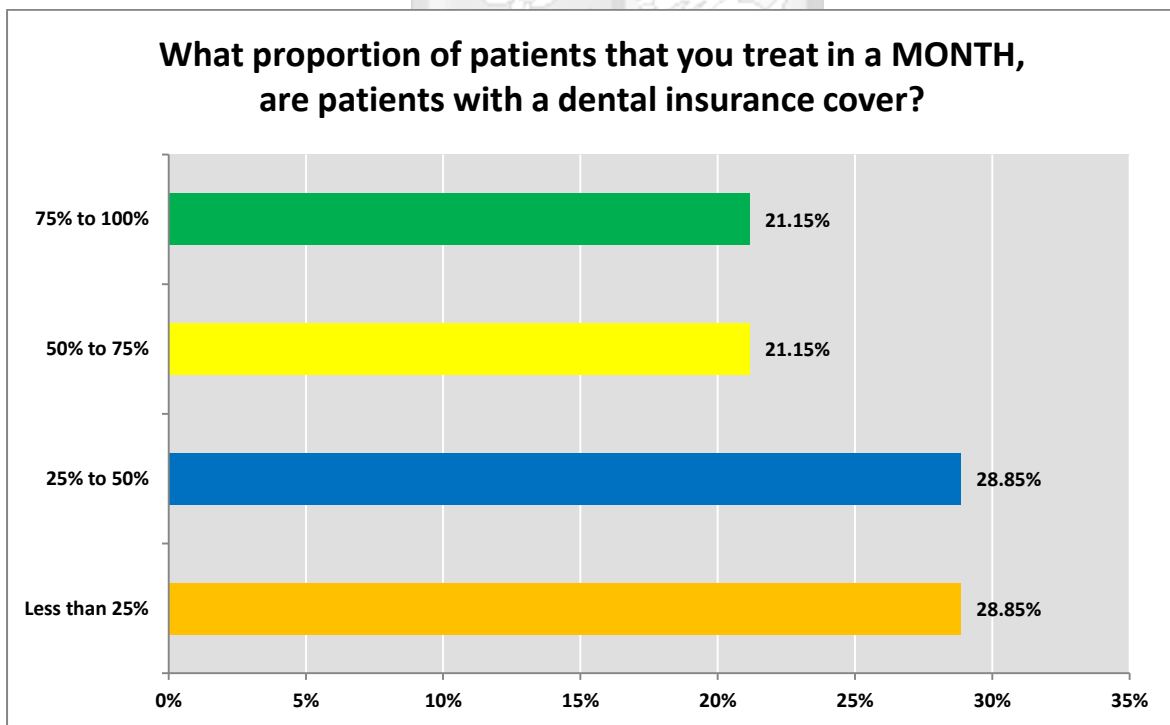


Figure 4.20

Figure 4.20 shows the proportion of patients which the respondents treated in a month, with dental insurance covers. This was for demographic purposes.

CHAPTER 5

DISCUSSION

5.1 INTRODUCTION

The results of this study show that a large majority of respondents were not satisfied with dental insurance companies and covers that were being provided to their patients.

When specific issues regarding the dental covers were explored, including exclusions, the process of pre-authorizations, the time taken for approval to go ahead with dental treatment and the annual dental cover limit; the response was similar. A large majority of dentists were not satisfied with these either.

A specific question in the survey asked these dentists, how well dental covers met the needs of their patients. A large majority again responded as not well.

On matters that touched on the dentists themselves, in relation to insurance companies whose clients they rendered dental services for, the results showed that a large majority was again not satisfied.

In fact out of a total of five questions exploring specific issues about dental covers, two questions were specific to dentists and their personal business experience with insurance companies. These were: - how long the insurance companies took to pay these dentists for treatments already rendered and another on the fees that were paid to dentists by the insurance companies for such procedures.

Both the above two issues had the highest and fourth highest total number of dissatisfied respondents, respectively.

Further analysis of respondents and responses indicated the following:-

5.2 FEATURES OF DENTAL INSURANCE COVERS AFFECTING PATIENTS

In Kenya, fees charged by medical and dental practitioners are regulated by the Kenya medical practitioners and dentists' board (KMPDB). It should be noted that the payment by insurance companies to dentists is presently on a 'fee for service' model.

Below are the latest fee guidelines for common dental procedures, as published by the KMPDB for dentists to charge for these services.

DENTAL PROCEDURE	FEE RANGE (IN KENYA SHILLINGS)
Consultation	1,500-6,000
Scale and Polish (Preventive care)	5,000-10,000
Fluoride treatment (Preventive care)	3,000-6,000
Dental x-rays	800-3,000
Tooth coloured restorations (each)	4,000-8,000
Crown (per unit)	40,000-55,000
Root canal treatment (per tooth)	15,000-30,000
Incision and drainage of a dental abscess	6,500-13,000
Surgical removal of impacted third molars	52,000-78,000

Table 5.1: Fee guidelines for common dental procedures (2013, KMPDB)

5.2.1 DENTAL INSURANCE COVER LIMIT FOR PATIENTS

The second most important issue of concern to dentists, and highlighted in this survey is regarding the dental cover limit. It appears that as providers of dental care, dentists are also overwhelmingly dissatisfied with the limits offered to their patients.

This is an important finding, as despite a patient having a dental cover, the providers of that professional service consider the limits as unsatisfactory. This is

indeed the gap that was being researched in this paper between the payers (insurance companies) and the providers (dentists).

To further elaborate on this issue of limits, a subsequent survey question was asked regarding the specific dental insurance cover limit Amounts. As earlier reported, the options ranged up to 10,000, up to 20,000, up to 50,000 and up to 100,000 Kenya shillings (Kshs).

Out of the 52 responses, an overwhelming 36 reported as up to 20,000 Kshs, whilst 13 reported as up to 10,000 Kshs.

Therefore, referring to the fee guidelines by KMPDB of 2013, it can be concluded that these limits that are presently being offered by insurance companies for dental treatment, are Not satisfactory. It must be added here that the limits offered by insurance companies are sometimes per family. Subsequently, considering one could ask whether the dental covers presently being offered in the market are actually beneficial to clients/patients?

On the other hand if the interests of the insurance companies is taken, then one can assume that the higher the limit, the higher the use and therefore the higher the cost to the insurance company. (Eisenberg, 1989)

According to a study by Srivastava et al (2015), there is the existence of *ex poste* moral hazard, which is associated with a higher probability of visiting the dentist.

'Moral hazard' in simple terms is the increased utilization of medical/dental services, because of having medical/dental insurance (Pauly, 2007).

In the same study by Srivastava in 2015, the investigators predicted that for those not having dental insurance would then have an increased probability of visiting the dentist after having insurance.

As reported earlier a majority of respondents (36), responded with the option of the amount of Kshs. 20,000/-, as being the annual limit offered to their patients for dental treatment.

This amount is probably a buffer mechanism for insurance companies, to protect themselves from over utilization of dental services.

Respondents who reported up to 10,000/- and 20,000/- were 49 collectively, and offered their services from various type of practices. Interestin 29 of these respondents practiced from private clinics.

These results could prove that there is indeed a gap in information between what the insurance companies who assume to be offering an adequate cover, and the dentists on the other hand who are actually the ones providing these services.

However, it needs to be considered that in Kenya, dentists charge 'fee for service', for dental treatment. Therefore, a dentist treating a patient with dental insurance may be tempted to 'over service'. The limits put up by insurance companies would therefore protect the insurance company.

In a study by Brocklehurst et al (2013), it was found and reported that there was an increase in clinical activity related to fee for service payments. However, those dentists working under a capitation arrangement restored teeth at a later stage in the disease process than fee for service controls. In the capitation system also, the dentists tended to see their patients less frequently and tended to carry out fewer fillings and extractions.

Since these limits cap over utilization of dental services, either by the patients or dentists, in order to protect insurance companies, it would certainly question whether having a dental insurance cover is beneficial to the needs of the patient.

A solution would be to introduce a different model of payment. A recommendation could be to introduce co-insurance or co-payment system. (Gauri, 2001 and Brocklehurst et al, 2013)

Co-insurance requires the insured person to pay a certain percentage of a medical/dental bill. Co-payment requires the insured person to pay a fixed sum for each visit or treatment.

In either of the above, a patient takes responsibility for their care too. Instead of viewing dental treatment as entirely free care because of having paid a premium, the patient would be incentivized to look after their oral and dental health. Furthermore, the patient would also be conscious of a financial undertaking on their part which would prevent over utilization.

5.2.2 EXCLUSIONS of DENTAL TREATMENT

These are dental procedures for which the insurance company does not pay for, and which subsequently has to be borne by the patient themselves.

These exclusions are predetermined by the insurance company, and the results obtained from this study shows that dentists are unhappy with these exclusions. This therefore begs the question how this exclusion criterion was developed.

The above findings are important and should question whether these exclusions affect the provision of Accessible and Quality dental care.

And if procedures that are excluded by the insurance company have to be paid for by the individual, then are dental insurance covers a Cost saving and benefit for the individual with a dental insurance cover? (Eisenberg, 1989)

Of the majority of 45 respondents (out of a total of 52) who responded as 'somewhat not satisfied', or 'not satisfied', it was analysed that **34** of these respondents practised in a Private Clinic. These dentists either practised only in a private clinic, or also in a

public or private hospital too. Perhaps one can therefore infer that Exclusions in dental treatments are a common issue amongst those in practising from private clinics.

According to Pauly (2007), ‘The value of insurance can in theory be measured by the “risk premium,” the amount in excess of the actuarially fair premium that people would be willing to pay for coverage rather than go without insurance. This amount could be much higher than the actual administrative cost, but only the increased administrative spending, not the gain to consumers (in the form of consumers’ surplus), is observed. Measures of the risk premium, even in developed countries, are not precise, but willingness to buy insurance at positive loadings suggests that the risk premium, on average, could be half or more of the expected expense’.

Taking this into consideration, an insurance company has to also consider the cost-effectiveness of the covers/policies that they insure. The premiums that are charged to their clients should be according to what the client/patient is predicated to utilize. If the utilization is higher, either due to ‘moral hazard’ or ‘adverse selection’, then the insurance stands at a loss. (Eisenberg, 1989, Pauly, 2007 and Srivastava, 2015)

5.2.3 TIME TAKEN FOR APPROVAL OF PRE-AUTHORIZATION REQUESTS

The process of pre-authorization is handled by the dental office, once the patient with the dental insurance cover has been diagnosed. The tentative treatment plan then has to be written in paper format, signed by both patient and dentist and sent via e-mail to the insurance company. The approval or rejection response is then awaited from the insurance company.

This survey showed that a majority of dentists, 35 respondents out of 52 were overall dissatisfied with the time taken by insurance companies once a preauthorization request is sent. This majority responded as ‘Same day’ and ‘within 1 week’, a small

number (3) responded as 'more than 1 week'. One can therefore infer that the time taken for these approvals which ranges between the same day and one week is not satisfactory.

This is an indication of the 'service gap' that exists in the provision of dental treatment, whereby a patient requiring dental treatment would present to a dentist's practice for treatment. However, because of the existing clause of requiring an approval for pre-authorization from the insurance company prior to treatment, dental treatment can actually not commence until this process is done.

As a provider of dental services, can the dentist refuse to treat the patient, despite the patient having a dental cover? If the dentist does provide treatment prior to approval, the insurance company can refuse to reimburse for the treatment.

It was concluded in the study by Brocklehurst and his colleagues (2013), that financial incentives have an impact on clinical activity as well as importantly on Patient outcomes.

5.2.3.1 THE PREAUTHORIZATION PROCESS

The concept of pre-authorization is one which is a requirement by most insurance companies. The reason for this could be:-

- To ensure the patient does not utilize over and above his/her cover limit
- To confirm whether the treatment proposed by the patient does not fall into the 'exclusion' criteria.

Some insurance companies have begun introducing smart cards issued to their clients, which are then presented to the dental clinics for verification and automated pre-authorization. However, most companies still require paper forms to be filled by both the dentist and patient, which are then scanned and e-mailed to the respective insurance companies, awaiting their approval.

5.2.4 HOW WELL DO DENTAL COVERS MEET THE NEEDS OF PATIENTS?

As reported in this study, the majority of dentists (87.27%) responded collectively as 'not well' and 'not so well'.

Brennan and her colleagues (2013) reported that individuals with dental insurance were more likely than their uninsured counterparts to make regular and recent visits to the dentists, and to receive preventive care. In this study an example of preventive care was given of a 'scale and polish'.

However, it should be noted that many insurance companies in Kenya have included scale and polish as an exclusion. It was further reported in the same study, that more favourable dental service patterns in the insured could be as a result of the removal of financial barriers.

It therefore can be assumed that though those individuals with a dental insurance cover in Kenya may have access to dental services, the actual terms of the dental cover, according to dentists who provide this treatment, do not meet the patients' needs.

5.3 FEATURES OF DENTAL INSURANCE COVERS AFFECTING THE DENTIST

5.3.1 TIME TAKEN TO PAY THE DENTIST

From the results of this study, the issue of period of time taken by the insurance company to pay the dentist, was of the highest concern. Out of 52 dentists who responded to six specific issues regarding dental insurance covers, 48 were dissatisfied with this particular aspect.

The other issues they were dissatisfied about in descending number of dissatisfied responses were:- The annual dental cover, exclusions of dental treatment, fees paid for dental procedures, the process of pre-authorization and finally the time taken for approval of pre-authorizations.

To distil further the question of 'how long' this time is, a question in the survey questionnaire offered the options of within one month, two months, three months or more than three months. As reported earlier, out of the 52 respondents, an overwhelming majority of 50 dentists responded as within 3 or more months!

Considering that in dental practice, besides the professional expertise of the dentist, a high volume of various dental material consumables are utilized, the delay in payment of dentists could raise the issue of Effectiveness of dental treatment, if a dentist had to consider conserving his dental materials stock until payment was made and new stock purchased.

Generally, most suppliers in any market would agree to a 30 to 60 day payment period, and delaying to pay dentists, could mean that these dentists would be forced to seek funds from other alternatives to pay their suppliers.

5.3.2 FEES PAID TO THE DENTIST BY INSURANCE COMPANIES FOR DENTAL PROCEDURES

As mentioned in previously, there exists a business contract between the dentist who will provide the treatment, and the insurance company who will collect premiums from their client/patient presenting to the dentist for treatment.

Mostly premiums are collected before a policy/cover is issued. However, payment is made to the dentist after the treatment has been rendered. The results in this survey revealed that the dentists who took this survey were dissatisfied with the fees that they were being offered by insurance companies.

In Kenya, the system for paying for dental services by insurance companies is the 'fee for service' method. This is whereby a dentist gets paid according to type and number of procedures; the fees for which have been predetermined by the insurance company and agreed to by the dentist or dental service provider.

The general dissatisfaction amongst dentists is an indication that these fees, though agreed with insurance companies, are perhaps inadequate. If these fees are

inadequate, then the question is how do the dentists then make decisions on what procedure and what materials to adopt for treating insurance patients?

Would this affect the Effectiveness and Quality of treatment rendered?

According to Arrow (1963), the ethical activities of a physician are governed by a concern for the customer's welfare, which would not be expected of a salesman.

It is therefore expected that a dentist would institute treatment forms that are foremost for the benefit of the patient. The insurance company would therefore have to rely entirely on the dentist to make the clinical decisions.

This can prove to be a dilemma for an insurance company, who are not directly involved in the diagnosis and treatment planning and rely on the dentist to make that decision. The dentists in turn would expect the insurance company to reimburse them with fees commensurate to their professional expertise and the treatment.

Furthermore, professional relationship between a physician and patient should limit the issue of 'moral hazard', with the physician acting as a controlling factor on behalf of the insurance companies (Arrow, 1963).

Once again, the need of the dentist to act as a gate keeper becomes evident in this relationship between the payer (insurance company) and the provider (dentist). A gate keeper in a healthcare context can be described as a primary care physician who directs healthcare delivery and determines whether patients are allowed access to specialty care.

Since this gate-keeping role of a medical practitioner and dentist, has the potential of being compromised in favour of the provider (the doctor/dentist), insurance companies need to protect themselves.

One of this is by having 'risk-sharing' arrangements, since the method of reimbursement is an important mechanism in controlling costs. This includes 'managed care' which utilizes various reimbursement schemes with the common

goal of shifting some of the financial risk to the providers. Managed care is a term used to describe any number of contractual arrangements that integrate the financing and delivery of medical care. Purchasers contract with a select group of providers to deliver a specific package of medical benefits at a predetermined price. The initial popularity of managed care was due to the perception that it could provide significant cost savings over the more traditional fee for service delivery mechanism. Shifting risk to the provider of healthcare discourages the overutilization of services (Henderson, 2012).

One of the ways of how this can be achieved is by capitation form of payment. This is a method providing a fixed, per capita payment to providers who are required to treat a well-defined population for a fixed sum of money, paid in advance, without regard to the number or nature of the services provided to each person.

In order to influence provider behaviour, health plans have designed regimes such as capitation, withholding and bonuses, diagnosis related groups (DRG's), clinical rules and utilizations reviews. Empirical evidence examining the financial incentives have been carried out with randomized trials, same-disease studies and same physician studies, but mainly for general medical conditions and hospital stays. One of these is the RAND health insurance experiment which concluded Health Management Organizations (HMO's) having fewer inpatient hospital stays than the traditional fee for service plan.

Whilst the above have been adopted in medical care in many of the developed countries, their adoption in Kenya has been slow; with no such regimes in existence for dental insurance in Kenya.

With a concerted effort from both the payers and providers, adopting one or few of the above mentioned payment regimes, it is possible to create a more transparent and accountable system for dental treatment and payment in Kenya.

CHAPTER 6

CONCLUSION and RECOMMENDATIONS

6.1 INTRODUCTION

A large majority of dentists felt that the dental covers presently being offered by insurance companies in Kenya did not meet the needs of their patients.

The research hypothesis for this study was therefore proven to be true.

6.2 BENEFITS OF DENTAL INSURANCE COVERS FOR PATIENTS

The study also proved that the dental covers provided by insurance companies in Kenya were unsatisfactory, in the opinion of dentists. The issues specific to this were further investigated such as exclusions of dental procedures, pre-authorization formalities, time taken for approval of treatment and annual dental cover limits. The respondents (dentists) were also dissatisfied with all these.

There were a number of gaps that were discovered during this study too, between what the dental covers were offering and their actual benefit to the patients.

6.2.1 PREAUTHORIZATION AND APPROVAL PROCEDURE

Among these was the requirement for an approval and pre-authorization procedure from the insurance company prior to the commencement of dental treatment.

As a provider of medical services, can the dentist refuse to treat the patient, despite the patient having a dental cover, whilst waiting for approval (taking between 1 day and a week) from the insurance company? Therefore, the Timeliness of dental treatment for patients with dental covers is affected, with the current pre-authorization and approval processes.

6.2.2 ANNUAL DENTAL INSURANCE COVER LIMITS

With the annual dental insurance cover limit amounts found to be between 10,000 to 20,000/- Kenya shillings, this was also reported as being inadequate to provide dental services for, by dentists. There appears to be a gap between what the insurance companies, who assume to be offering an adequate cover, and the dentists who are the ones providing the treatment. The fee guidelines for dental procedures, set by the KMPDB should be used to guide these changes.

Consequentially, these changes should aim to improve Accessibility to dental treatment when utilizing private dental insurance in Kenya, especially since there are inadequate funds allocated to public dental facilities presently and therefore cannot cope.

6.3 TERMS AND AGREEMENTS BETWEEN THE DENTIST AND INSURANCE COMPANIES

Whilst patients are not privy of the agreement between dentists and insurance companies, the dissatisfied opinions of dentists with insurance companies observed in this study could perhaps affect the Quality of care provided to patients.

6.3.1 TIME TAKEN TO PAY THE DENTIST BY THE INSURANCE COMPANY

This study has shown that the time taken to pay dentists for their services is an issue that dentists are dissatisfied about. This period of time was found to be 3 months or more. Considering some dentists are owners of their dental practices, could this delay in payment affect the Effectiveness and Patient Centeredness of dental treatments rendered?

6.3.2 AMOUNT PAID TO THE DENTIST FOR DENTAL PROCEDURES BY INSURANCE COMPANIES

Since contracts between dentists and insurance companies are private and confidential, it is difficult to elicit the exact amounts from dentists or insurance companies. Furthermore, every insurance company can choose to have individual terms and payments for every dentist, further complicating obtaining this data.

However, this study was able to show that the amounts the dentists are paid, for individual dental procedures, were an issue which a large majority were dissatisfied with. There however, exists a regulated fee guideline by the KMPDB.

6.4 RECOMMENDATIONS

It is therefore recommended that:-

1. Dialogue and engagement between insurance providers and dentists is encouraged to express the viewpoints of each of these stakeholders. Issues of transparency and accountability of each party can be expressed with solutions for each discussed, so that it is mutually agreed for the benefit of patients.
2. The issue of exclusion criteria of dental treatment procedures need to be revised. Preventive dental care needs to be encouraged and included in this context.
3. The dissatisfaction of dentists with cover limits and fees paid to them for procedures may be a reaction of insurance companies because for the 'fee for service' payment model presently being practiced, to pay dentists by insurance companies. Another model of dentist payment is recommended

that can also encourage preventive dental care, resulting in a long term benefit for patients.

4. However, before a new model of payment of dentists is adopted, the process of pre-authorization and approval needs to be streamlined for efficiency and transparency. This would be important also to protect the insurance companies providing these dental covers. The adoption of information technology is a suggested solution, especially with the affordable cost of the internet and IT devices in Kenya.



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APPENDIX I

SURVEY QUESTIONNAIRE

INSTRUCTIONS

The questions below are in relation to Dental Covers from insurance companies, which provide dental services for their clients in KENYA.

If you are, or have been a provider of dental services/treatment in Kenya, for these insurance companies, kindly complete the questionnaire below.

1. What type of practice do you provide dental services from, for patients with dental insurance covers? Tick all that apply.

- Public hospital
- Private hospital
- Private Clinic
- Faith based/ Non Governmental
- Other

2. Do you own the dental practice or are you employed?

- Owner
- Employee
- I am employed and also own a private dental clinic

3. Have you had the experience of being on the panel of any insurance company, as a provider of dental services in Kenya?

- Yes
- No

If NO was selected, 'SKIP LOGIC' applied and respondent directed to question 18

4. How many insurance companies are you on the panel of?
 - Less than 5
 - 6-10
 - More than 10

5. How long have/had you been on the panel of insurance companies providing dental treatment for their clients?
 - Less than 5 years
 - 5 to 10 years
 - 11 to 20 years
 - More than 20 years

6. Overall, are you satisfied, or not satisfied with the MAJORITY of Insurance Companies whose clients you have provided dental treatment/services for?
 - Extremely Satisfied
 - Somewhat Satisfied
 - Somewhat Not Satisfied
 - Not satisfied

7. In your experience what is the annual limit (in Kenyan Shillings) per cover for dental treatment, commonly offered by most insurance companies?
 - Upto 10,000
 - Upto 20,000
 - Upto 50,000
 - Upto 100,000
 - More than 100,000

8. In your opinion, how well do the majority of the dental covers meet the needs of your patients?
 - Very well
 - Somewhat well
 - Not so well
 - Not at all well

How satisfied are you with the following aspects of Dental Insurance covers, presently offered by insurance companies with operations in Kenya.

9. Exclusions of certain dental procedures, which the insurance DOES NOT PAY for and which therefore have to be paid for by the patients.
- Extremely Satisfied
 - Somewhat satisfied
 - Somewhat
 - Not Satisfied
10. The process and formality of pre-authorization undertaken by the dentist for approval, prior to beginning dental treatment.
- Extremely Satisfied
 - Somewhat satisfied
 - Somewhat
 - Not Satisfied
11. Time taken for APPROVAL by the insurance company for commencement of dental treatment, after pre-authorization is sent.
- Extremely Satisfied
 - Somewhat satisfied
 - Somewhat Not satisfied
 - Not Satisfied
12. The FEES negotiated by the insurance companies, paid to the dentist for dental procedures rendered. (the charges for individual dental procedures)
- Extremely Satisfied
 - Somewhat satisfied
 - Somewhat Not satisfied
 - Not Satisfied
13. Time taken by the insurance company to PAY THE DENTIST, for dental services already rendered to their clients.
- Extremely Satisfied
 - Somewhat satisfied
 - Somewhat Not satisfied
 - Not Satisfied
14. The ANNUAL Dental Cover Amount LIMIT, offered to patients for dental procedures.

- Extremely Satisfied
- Somewhat satisfied
- Somewhat Not satisfied
- Not Satisfied

15. What is the period of time taken for MOST insurance companies to APPROVE pre-authorization requests in order to commence dental treatment?

- Immediately
- 1-2 hours
- Same day
- Within 1 week
- More than 1 week

16. How long do most insurance companies take to pay you, for dental treatment already rendered to their clients?

- Within 1 month
- Within 2 months
- Within 3 months
- More than 3 months

17. What proportion of patients that you treat in a MONTH, are patients with a dental insurance cover?

- Less than 25%
- 25% to 50%
- 50% to 75%
- 75% to 100%

18. How long have you been in dental practice, since after internship?

- More than 5 years
- 5-10 years
- 11-20 years
- 20-30 years
- More than 30 years

19. Kindly indicate your gender

- Male
- Female

20. Any other comment you'd like to include regarding dental insurance covers in Kenya?



APPENDIX II

CONSENT PAGE

Appeared as the first page of the survey, once the web link was clicked and the survey site opened. Only when consent given, would the next page beginning with first question from the questionnaire appear.

CONSENT PAGE

This is to certify, that I hereby agree to participate in this research study titled, "A survey of dentists' satisfaction with dental covers provided by insurance companies based in Kenya."

This study is being carried out by Dr. Tariq A. Lodhi, who is an MBA Healthcare Management student at Strathmore Business School, Nairobi, Kenya. I have read the Letter of Introduction from Strathmore Business School regarding this survey.

Any personal information obtained about me shall be treated confidentially and the results of this study shall be used for policy development and for academic purposes.

There are no anticipated risks for participating in this study which is voluntary.

By clicking the 'NEXT' tab/button, I have understood and consented to participate in this survey.

Contact details:

Dr. Tariq A. Lodhi tariq.lodhi@sbs.ac.ke

Thank you again for agreeing to participate in this survey.

APPENDIX III

LETTER OF INTRODUCTION



Strathmore Business School

Friday, 06 November 2015

To whom it may concern

Dear Sir/Madam

INTRODUCTION – Dr. TARIQ LODHI

This is to introduce Dr. Tariq Lodhi, who is an MBA Health Care Management(MBA HCM) student at Strathmore Business School.

Dr. Lodhi is undertaking a research paper on **“A survey of Dentists satisfaction with Dental covers provided by Insurance companies based in Kenya.”** The information obtained from you shall be treated confidentially and shall be used for academic purposes only.

Our MBA seeks to establish links with industry, and one of these ways is by directing our research to areas that would be of direct usefulness to industry. We would be glad to share our findings with you after the research, and we trust that you will find them of great interest, if not of practical value to your organization.

We very much appreciate your support and we shall be willing to provide any further information if required.

Yours sincerely,

Prof. Gilbert Kokwaro

Director, Institute of Healthcare Management and
Academic Director, MBA in Healthcare Management



Strathmore
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APPENDIX IV
ETHICS APPROVAL



Strathmore
UNIVERSITY

REF: SU-IRB 0023/16

3rd February 2016

Dr. Tariq A. Lodhi
P.O Box 87289- 80100
Mombasa, Kenya.

Email: tariq.lodhi@sbs.ac.ke

Dear **Dr. Lodhi**,

REF: SU-IRB 0023/16 PROPOSAL "A SURVEY OF DENTISTS' SATISFACTION WITH DENTAL COVERS, PROVIDED BY INSURANCE COMPANIES BASED IN KENYA"

We acknowledge receipt of your application to the Strathmore University Institutional Review Board (SU-IRB) which includes the study proposal, consent form and questionnaire version dates 18th January 2016.

The committee has reviewed your application, and your study "*A Survey of Dentists' Satisfaction with Dental Covers, Provided by Insurance Companies Based in Kenya*" has been granted **approval**.

This approval is valid for one year beginning **3rd February 2016** until **2nd February 2017**.

In case the study extends beyond one year, you are required to seek an extension of the Ethics approval prior to its expiry. You are required to submit any proposed changes to this proposal to SU-IRB for review and approval prior to implementation of any change.

Thank you

Sincerely,

A handwritten signature in blue ink that reads 'Amina Salim'.

Amina Salim
Regulatory Affairs Fellow



