FACTORS ASSOCIATED WITH LATE REPORTING FOR HEALTH CARE AMONG PATIENTS HAVING ORAL MAXILLOFACIAL TUMOURS OR TUMOUR-LIKE LESIONS ATTENDING MUHIMBILI NATIONAL HOSPITAL.

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By

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A Dissertation Submitted in (partial) Fulfillment of the Requirement for the Degree of Masters of Public Health (MPH) of Muhimbili University of Health and Allied Sciences

Muhimbili University of Health and Allied Sciences
July, 2013

CERTIFICATION

The undersigned certifies that he has read and hereby recommends for acceptance by Muhimbili University of Health and Allied Sciences a dissertation entitled: **Factors associated with late reporting for health care among patients having oral maxillofacial tumours or tumour like lesions attending Muhimbili National Hospital**, in partial fulfillment of the requirements for the degree of Masters of Public Health of the Muhimbili University of Health and Allied Sciences.

_____

Dr. Elison N. M. Simon
(Supervisor)

Date: _____

DECLARATION

AND

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I, **Ruth Msolla**, declare that this **dissertation** is my own original work and that it has not been presented and will not be presented to any other University for a similar or any other degree award.

Signature: _____ Date: _____

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DEDICATION

This work is humbly dedicated to my lovely husband Ibrahim, my precious daughter Tayana, my sisters Ropafadzo and Rachel and my dear parents Prof. P. and Mrs. V. Msolla.

ABSTRACT

Introduction: Tumours of the maxillofacial region with an origin that is closely related to tooth formation are called odontogenic tumours. Both odontogenic and non odontogenic tumours can have malignant variants. In Tanzania, oral malignant tumours constitute 50.53% of neoplastic oral facial cases. At the inception most of the tumours occurring in the maxillofacial region are painless.

Aim of the study: To determine the factors associated with late reporting for health care among patients having oral maxillofacial tumours or tumour-like lesions attending Muhimbili National Hospital.

Materials and Methods: A descriptive cross sectional study was conducted, which involved 151 patients with either tumour like lesions or tumours of the oral and maxillofacial region. The study was conducted at the oral maxillofacial firm of Muhimbili National Hospital and oral maxillofacial department of the Muhimbili University of Health and Allied Sciences. Information was gathered using a structured questionnaire translated in Swahili language. Data was analysed using SPSS version 20. Ethical clearance was obtained from the Ethical committee of Muhimbili University.

Results: Study findings revealed that 55.6% of the patients lived near to health facilities which had no oral health services. Ameloblastoma was the tumour that was seen with the highest (21.9%) frequency followed by squamous cell carcinoma (14.6%) and ossifying fibroma (6.6%). Patients with ameloblastoma showed more delay in reporting to a health facility as compared to patients with squamous cell carcinoma. After referral from the primary health facility, (23) patients reported to the referral centre after one monthfrom the date of referral. Among these 8 (34.9%) reported after one year or more after referral. Lack of perception of the lesion as being a problem, costs involved for transportation and treatment, lack of pain, attending to traditional healers and the use of herbal medicines were found to be the reasons for the delay in reporting for health care among patients with oral maxillofacial tumours. Vast majority (98%) of the patients seen have never had any dental check-ups.

Conclusion: The patients with oral and maxillofacial tumours showed a delayed reporting to primary health facilities and consequently to the referral centre. The average time for reporting to the referral centre was rather long (69 weeks). The main reasons cited for the delay in reporting for health care by this group of patients is the low level of awareness (did not perceive the lesion being a problem), cost involved for transportation, treatment and purchase of drugs and absence of pain from the lesion.

Recommendations: There is need for education to the communities on the importance of early reporting whenever they suspect a lesion in the oral and maxillofacial region. Continuing education should be provided to the practicing oral and general health personnel who are working in the regions. There is a need for a more extensive study involving more regions and referral centres in the country.

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LIST OF ABBREVIATIONS

CDC	Center for Disease Control
COSTECH	Commission for Science & Technology
DDS	Doctor of Dental Surgery
MNH	Muhimbili National Hospital
MoHSW	Ministry of Health & Social Welfare
MPH	Master of Public Health
MUHAS	Muhimbili University of Health & Allied Sciences
SPSS	Statistical Package for Social Sciences

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DEFINITION OF TERMS

Late reporting for oral health care

Patients with either tumour like lesions or tumours of the maxillofacial region who reported at six (6) months and above are considered to have reported late for oral health care.

CHAPTER ONE

INTRODUCTION

1.0 BACKGROUND

Tumours occurring in the maxillofacial region are either benign or malignant *(Cawson 1996, Ide et al, 1999, Eversole 1999, Dir et al 2003)*. Tumours of the maxillofacial region with an origin that is closely related to tooth formation are called odontogenic tumours *(Wu et 1985, Tamme et al 2004, Simon et al 2005)*. Odontogenic tumours are unique in that they only occur in the maxillofacial region. Both odontogenic and non-odontogenic tumours can have malignant variants *(Eversole 1999, Ide et al 1999, Dhir et al 2004)*. Although the majority of tumours that occur in the oral and maxillofacial region are benign they have the capacity to grow to considerable size giving rise to visible disfigurement of the face, difficulties with eating and sometimes interfere with breathing. Because they grossly affect facial appearance they often result in severe psychological problems.



Figure. 1. A young girl with a huge swelling of the lower jaw of more than three years duration.

Malignant odontogenic tumours are rare but when they occur they pose more problems than the benign ones (*Eversole 1999, Ide et al 1999, Dhir et al 2004)*. Since malignant tumours have the capacity to metastasize they can be found in areas distant from their origin *(Schliaphake et al 1996)*. At the inception most of the tumours occurring in the maxillofacial region are painless *(Schmidseder 1978, Wu et al 1985, Van der Waal 1991, Simon et al 2005)*. To a large extent the benign tumours remain painless throughout the course of the disease *(Kalyanyama et al 2009)*.

1.1 PROBLEM STATEMENT

Utilization of oral health services is a major problem to most of the people in African countries. Reports indicate that, there is low utilization of oral health services and most of the people visit dental clinics due to symptomatic reasons *(Varenne et al., 2006)*. Low utilization of oral health services has resulted to late reporting to hospital for treatment of patients with oral maxillofacial tumours.

A study conducted in Tanzania showed that, over 50% of patients with oral maxillofacial tumours presented to health facilities three or more years after detecting the lesion *(Simon et al., 2002, 2005)*.

Despite efforts by the government to improve all aspects of health care to its people, Tanzania has a lack of specialized oral and maxillofacial surgical care with only 8 actively practicing oral and maxillofacial surgeons who are stationed at Dar es Salaam. It is near to impossible for most of the patients who suffer from oral-facial lesions to get specialist care in time in their regional and district hospitals.

It would therefore be expected that, rural dwellers were the only ones who would present late with rather big tumours that require a lot more inputs in management.

Nevertheless, often this fails to explain why some patients from the outskirts of the city of Dar es Salaam would report to Muhimbili National Hospital with massive tumours that not only interfere with the ordinary chores of life but in fact threaten life.

Experience has shown that, the problem of late reporting encompasses both sexes and all age groups in almost all societies in Tanzania *(Ngilisho et al. 1994, Simon et al., 2002, 2005).*

The cumbersome referral system, the distance one has to travel to reach the appropriate centre and the cost involved are believed to be among the major barriers that make patients report late.

In Tanzania, there is scarcity of information on late reporting in patients with oral health problems including tumours and tumour like lesions in the context of improvement of the level of awareness.

Therefore, it is not clearly documented what the reasons for late reporting for health care are, among Tanzanian patients with oral maxillofacial tumours and tumour like lesions. This implies that, there is a need to determine the different barriers because solutions of each require a different approach.

With such constraints, careful planning to render the required services to those who are in dire need should be based on scientifically sound estimations of the needs.

1.2 CONCEPTUAL FRAMEWORK

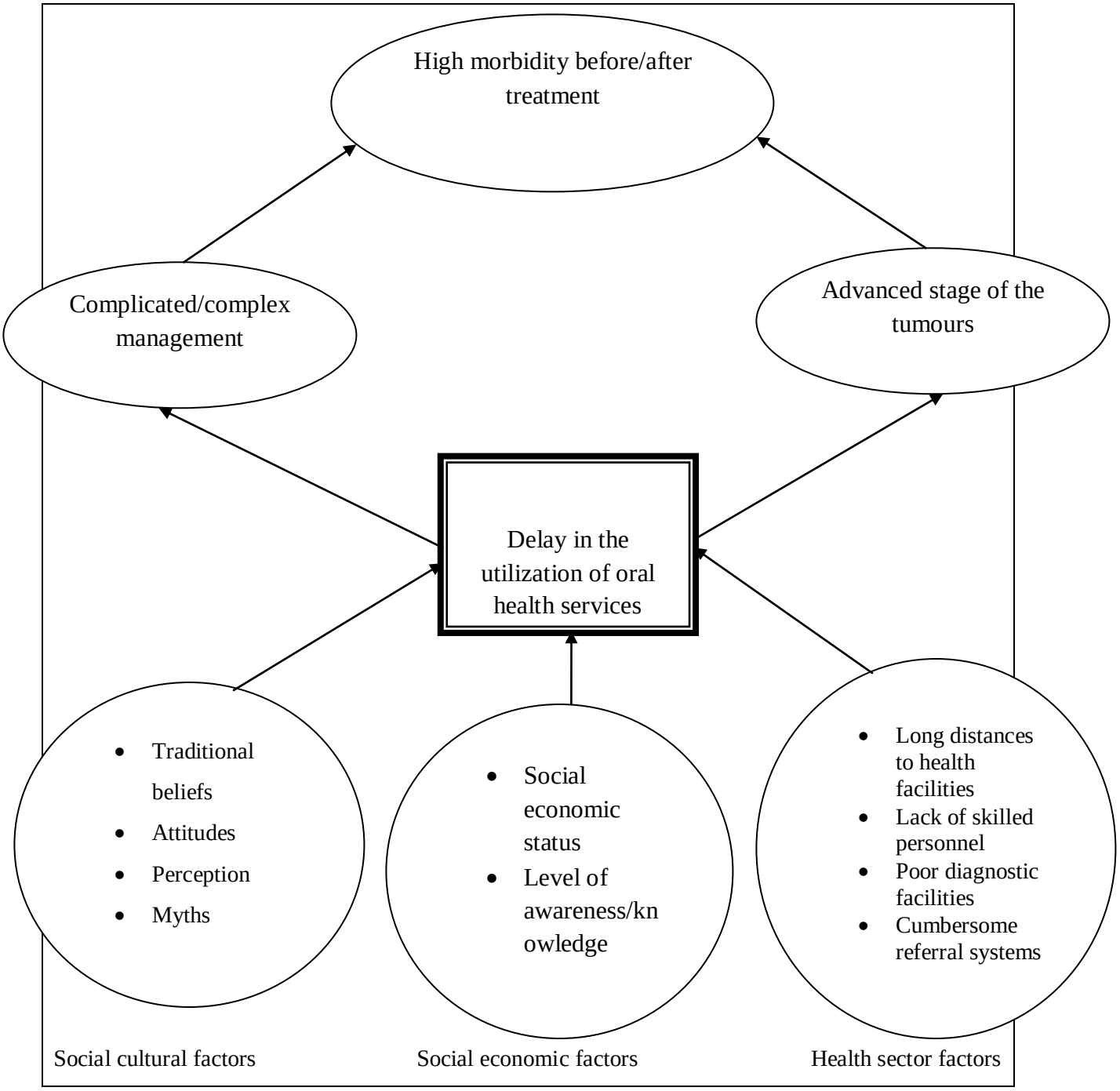


Figure 2: The conceptual framework

Delay in the utilization of oral health services is influenced by a number of factors which can be grouped into socio-cultural, socio-economic and organizational factors. The socio-cultural factors including myths, attitudes, a person's perception of the disease and traditional beliefs (traditional healers and use of herbal medicines) leads to delay in the utilization of oral health services.

Also socio-economic status and the level of knowledge/awareness are factors associated with a delay in the utilization of oral health services. It is believed that, people with low socio-economic status show more delay in the utilization of oral health services mainly due to the costs involved in form of transport to the health facility, treatment charges as well as the costs of purchasing medicines. The level of awareness/knowledge on oral health issues in majority of the patients is fairly low hence the long delays simply because they do not perceive the lesions as a problem.

In the Tanzanian health sector there are various organizational factors which could lead to delay in the utilization of oral health services. These include the cumbersome referral systems, long distances to the health facilities, lack of skilled oral health personnel at primary centres and poor diagnostic equipment leading to failure in reaching the appropriate diagnosis.

Delay in the utilization of oral health services results in huge tumours which cause gross destruction of the surrounding tissues and ultimately demand advanced and complicated management procedures which in most cases end with severe morbidity.

1.3 RATIONALE OF THE STUDY

For the Tanzanian government these data are mandatory not only for planning on the training of manpower and on the distribution of oral health services but also for instituting appropriate community based oral health educational programmes that shall reach the majority of the population. Such data shall also be useful in determining a rational distribution of human and material resources in the field of oral health in the country.

1.4 RESEARCH QUESTIONS

1.4.1 Major research question

What are the factors associated with late reporting for health care among patients having oral maxillofacial tumours and tumour-like lesions attending the oral and maxillofacial unit of Muhimbili National Hospital?

1.4.2 Specific research question

1. What are the background characteristics of patients with oral maxillofacial tumours and tumour-like lesions who delay reporting for treatment?

2. What are the types of tumours of the maxillofacial region in patients treated at Muhimbili National Hospital?

3. What is the average time of reporting for health care after detecting tumours of the oral and maxillofacial region?

4. What are the factors associated with late reporting for treatment in patients with oral maxillofacial tumours and tumour-like lesions attending Muhimbili National Hospital?

1.5 OBJECTIVES

1.5.1 Main Objective

To determine the factors associated with late reporting for health care among patients having oral maxillofacial tumours and tumour-like lesions attending the Muhimbili National Hospital.

1.5.2 Specific Objectives

1. To determine the background characteristics of patients with tumour like lesions and tumours of the maxillofacial region attending treatment at Muhimbili National Hospital

2. To determine the types of tumours and tumour like lesions of the Maxillofacial region in patients treated at Muhimbili National Hospital

3. To determine the average time of reporting for health care after detecting tumours of the oral and maxillofacial region

4. To determine the factors associated with late reporting for treatment in patients with oral and maxillofacial tumours and tumour like lesions attending Muhimbili National Hospital?

CHAPTER TWO

2.0 LITERATURE REVIEW

There are many excellent review studies on tumours of the maxillofacial region describing epidemiologic data, the clinical presentation, histology and mode of treatment for the various tumours *(Guham et al 1990, Asael 1992, Mosqueda- Taylor 1997, Simon et al 2002, Tamme et al 2004)*. Most of these studies, however, are based on research carried out in Western countries or Asia. It has been suggested in the literature that certain types of tumours tend to occur more often in Blacks as compared to Caucasians *(Onyango 1995, Mosqueda-Taylor 1997)*. Although different authors have come up with different explanations for this seemingly higher incidence in Blacks, no scientific proof has so far been made available.

The average age of patients presenting with oral and maxillofacial tumours have also been reported showing that they are affecting a much younger population in Africa as compared to European countries *(Guham et al 1990, Onyango et al 1995, Mosqueda-Taylor 1997, Adebayo et al 2002, Tamme et al 2004)*.

Whereas industrialized countries spend 5-10% of their national public resources (GNP) on oral health care each year, no budget is allocated to control oral disease in many developing countries *(National Bureau of Statistics, Tanzania 2002)*.

The situation in Africa is quite different which is mainly due to the fact that patients tend to present late with relatively large tumours therefore demanding more inputs during management. This includes major surgeries that require more expertise, longer time of surgery, expensive medication (antibiotics), longer hospital stays after treatment and in the case of tumours, leaving the patient with large defects that often lead to severe morbidity *(Mosadomi 1975, MacIntosh 1991, Marx 1998, Kalyanyama et al 2009)*. In one study, the ultimate prognostic factors were old age, female sex (especially with age > 60 years), uncontrolled diabetes mellitus, anemia, coexistent pulmonary diseases, delayed referral and late surgical intervention *(Panda et al. 2004)*.

Some studies from West Africa have described the seemingly high prevalence of odontogenic tumours seen in African as caused by the delay in reporting to health facilities immediately after observing that they had a problem *(Oji 1999, Ajitike et al 1999, Mosadomi 1975)*. The health seeking behaviours of these people are influenced by not only individual awareness but also that of their communities, availability of trained health workers, economic status and distances to health facilities.

Tanzania is a big country with an area of approximately 945,000 square kilometers and a population of 44.9 million people, most of who are living in rural areas *(National Bureau of Statistics, Tanzania 2012)*.

The health system in Tanzania is organized in such a way that patients with tumours of the maxillofacial region have to be seen at primary health care facilities (dispensaries and health centres) where, after the initial clinical diagnosis is made, they are referred to the district hospital *(MoHSW 2003)*.

Unfortunately, Tanzania like many other African countries has an acute shortage of oral health personnel. The majority of district hospitals have low cadre oral health personnel i.e. dental therapists.

This cadre is trained to offer basic dental treatment and when appropriate refer to a dental surgeon who in most cases is only found at a regional hospital. To date, over fifty districts haven't any cadre of oral health personnel at all *(Simon and Sirili 2013)*.

In these districts where there aren't any dental personnel, medical practitioners attend such patients. The oral health knowledge of general medical practitioners in Tanzania differs in different individuals but to the majority is scanty. Although the government has made efforts to take health care nearer to the people, it is also true that in many districts, either because of distance or due to economic reasons, it is not easy for the ordinary person to travel to the district hospitals which are the nearest places where basic oral health care can be offered.

Considering the complexities involved in reaching an accurate diagnosis, which almost always requires imaging (x-rays) and sophisticated laboratory investigations, misdiagnosis at the level of the district hospital is very well possible.

While in the developed world there are laid down health systems that the majority of the population follow, the majority of Tanzanians, however, do not undergo regular medical or dental checkups *(Ngilisho et al 1994)*. Usually, people go to see medical or oral health personnel only when they have severe problems that interfere with their routine life.

Several African studies on tumours of the maxillofacial region do not clearly differentiate between prevalence and incidence rate, with the majority of them concluding that patients presented late to hospital without finding out the reasons for such delays *(Asaeli 1992, Mosadomi 1995, Onyango et al 1995, Adebayo et al 2002)*. Social cultural factors, including the tendency to consult traditional healers have been speculated to be one of the deeply ingrained beliefs behind delay in reporting for health care. However, with relation to oral and maxillofacial tumours this is yet to be proven by any scientific data and still remains an enigma in minds of oral health personnel.

CHAPTER THREE

METHODOLOGY

3.1 Type of study

A descriptive cross sectional study was conducted. The patients attending Muhimbili National Hospital with oral maxillofacial tumours is only a representative sample of others in the population who in one way or another could not make it to Muhimbili National Hospital and thus the information on late reporting for oral health services cannot be gathered from them.

3.2 Study area

This study was conducted at the oral and maxillofacial surgery department at Muhimbili National Hospital in Dar es Salaam city. The oral and maxillofacial surgery department was established in the year 1979. It attends up to 120 out patients in a day with oral health problems, out of them approximately 7.5% have oral maxillofacial tumours. In Tanzania, all the patients with oral maxillofacial tumours requiring surgical treatment are referred to Muhimbili National Hospital, Oral and Maxillofacial Surgery firm. Here is where, in collaboration with other departments like histopathology department and diagnostic radiology department, the diagnosis of oral maxillofacial tumours is reached followed by surgical intervention. Hence, was the appropriate study area.

3.3 Target population

All the patients with oral health problems who presented at the oral surgical department of Muhimbili National Hospital.

3.4 Study population

All patients who presented at the oral and maxillofacial unit of Muhimbili National Hospital with tumours or tumour like lesions were included in the study. This included all outpatients with either oral maxillofacial tumours or tumour like lesions and patients admitted at the oral and maxillofacial surgery ward at the Muhimbili National Hospital.

3.5 Inclusion criteria

- All patients with tumours and tumour like lesions of the oral maxillofacial region who provided consent were included in the study.

3.6 Exclusion criteria

- All patients who were eligible for the study but did not consent.
- All patients who had either tumour like lesions or tumours of the maxillofacial region but could not provide relevant information.

3.7 Recruitment of study participants

A patient or an escorting person was given detailed information concerning the study, after having agreed to participate in the study, signed a written informed consent.

3.8 Study variables

Dependent variables

- Late reporting for oral health care

Independent variables

1. Background characteristics (age, sex, level of education, occupation)
2. Cultural characteristics (use of herbal medicines, attending to traditional healers, traditional beliefs, myths)

3.9 Sampling technique

A convenient sampling technique was used to get the required sample size. Diagnosis of tumours and tumour like lesions has to go through a process of biopsy taking and histology which can only be done in a hospital setting. For this reason all patients with tumours and tumour like lesions whose diagnosis was confirmed histologically were the only ones to be included in this study. Given the period of the study of one month every patient attended with such conditions was liable to be included in the study.

3.10 Sample size

The sample size for this study was estimated using the following formula

$$n = \frac{Z^2 P (100 - P)}{E^2}$$

Where:

n = Sample size

Z = Level of confidence (1.96 corresponding to confidence level set at 95%)

P = Proportion of patients with oral maxillofacial tumours who presented to the hospital late (25 or more weeks) is unknown; hence estimated to be 50%.

E = Margin of error, assumed to be 7%

Therefore:

$$n = \frac{Z^2 P (100 - P)}{E^2}$$

$$n = \frac{1.96^2 \times 50 (100 - 50)}{7^2}$$

$$n = 196$$

Therefore; the sample size was estimated to be 196 patients with tumours or tumour like lesions of the maxillofacial region.

3.11 Data collection

The principal investigator and one research assistant took part in interviewing the participants. An interview using a structured questionnaire translated from English to Swahili language was used to collect relevant social demographic information, social cultural information, social economic information, the chief complaint and diagnosis. The questionnaire was administered by the principal investigator and one assistant. Sensitivity to culture and selection of appropriate words was considered.

3.12 Pre-testing of the questionnaire

The questionnaire was piloted before administration. The questionnaire was piloted at Muhimbili National Hospital, in Dar es Salaam to see if it collects the right information and whether all the important aspects were covered.

The pretesting was conducted in 5% of the patients sample size with either tumour like lesions or tumours of the maxillofacial region. Therefore, the questionnaire was pretested in 10 patients who had either tumour like lesions or tumours of the maxillofacial region attending Muhimbili National Hospital.

3.13 Data processing

During the data collection process, at the end of each day, all the questionnaires were checked to ensure completeness of the questionnaires and to minimize errors in recording if any.

The answers in the questionnaire were assigned numbers so that the responses were limited in number of categories. Back ground characteristics were assessed in terms of age, gender, level of education and occupation. Level of education was coded on a scale from (1) No education to (6) college/university. For minors the education level of the parents was used.

3.14 Data analysis

The information gathered from the structured questionnaire, was entered into computer and data was processed and analyzed by using version 20 of Statistical Package for Social Science (SPSS).

Data cleaning was done to check for "forgotten" entries, consistency and outliers.

Frequency distribution was generated to describe the background characteristics of the study population. The diagnosis from the patients' forms was used to map the frequency of occurrence of the different tumours recorded during the study. To determine the influence of sex, level of education and occupation on the delay in reporting for health care was done by cross tabulation. Occupation of the patients was divided into two groups, the unemployed, peasants and retired were grouped in one group and the employed, self employed and petty traders into the second group. The level of education was as well divided into two groups which were up to primary level of education and the second group of secondary education and above. Time for reporting for health care was divided into early reporting (0 – 24 weeks) and late reporting (25 weeks and above). Chi-square was used to identify variables that show significant association. Cross tabulation was used and tested by chi-square statistics, level of significance set at p-value of 0.05.

3.15 Reliability and Validity

A data collection instrument's reliability is defined as the consistency with which it measures the target attribute and/or concerns a measure's accuracy.

In order to ensure reliability of the instrument in this study, a pilot study was conducted. This involved testing the actual tool on a small sample taken from the target population. A week before execution of the study, the actual questionnaire was administered to 10 patients who had either tumours or tumour like lesions of the maxillofacial region, in order to ensure that the tool would collect the desired data and that the questions were clear.

After analyzing data from the pilot study, questions which were not clear were rephrased to ensure appropriate responses would be obtained in the future.

Validity of the instrument concerns the extent to which the research measures what it purports to measure without bias or distortion.

To test validity of the instrument, a copy of the questionnaire was submitted to the study supervisor to examine whether the number and type of items in the questionnaire measured the concept or construct of interest (content validity).

3.16 Ethical Considerations

A written informed consent was obtained from all eligible participants. For the purpose of ensuring confidentiality no names or personal identifying information was displayed on the forms but rather numbers were used instead. Patients who refused to take part were not denied treatment.

Before commencing data collection, ethical clearance was sought and obtained from the Ethical review committee of Muhimbili University of Health and Allied Sciences (MUHAS). Research permit was sought and obtained from the Executive Director of Muhimbili National Hospital (MNH) and the Head of Oral Surgery Department.

3.17 Study Limitations

This study was limited to only patients with tumour like lesions or the oral maxillofacial tumours attending Muhimbili National Hospital, thus only a small sample was obtained which might not be the actual situation in the country.

However, MNH being the only health facility with an active oral and maxillofacial surgery centre in the country, most patients with oral-facial tumours from the whole country were referred here. Information gained from this group of patients could therefore, to a large extent, reflect the actual picture in the society.

The time allocated for data collection was limited, thus did not allow enough time to capture a 196 patients with tumours and tumour like lesions of the maxillofacial region.

Despite these limitations, this study has generated information that could be useful not only for planning on the training of manpower and on the distribution of oral health services but also for instituting appropriate community based oral health educational programmes that shall reach the majority of the population

CHAPTER FOUR

4.0 RESULTS

This study involved 151 patients aged 1 to 90 years (mean 34 years), 64 (42.4%) males and 87 (57.6%) females with a male female ratio of 1:1.4 (Table 1). Majority (64.2%) of the patients were in the age range 10-49 years. Almost all (74.2%) of the participants had formal education with the majority (44.4%) having primary education only (Figure 3). Over 76% of the patients were low income earners i.e. peasants, petty traders or unemployed (Figure. 4).

Table 1: Distribution of the study participants by age and sex

Age Group	**Male**		**Female**		**Total**	
	No	**%**	**No**	**%**	**No**	**%**
0 - 9	8	(42.1)	11	(57.9)	19	(12.6)
10 - 19	14	(60.9)	9	(39.1)	23	(15.2)
20 - 29	7	(33.3)	14	(66.7)	21	(13.9)
30 - 39	11	(39.3)	17	(60.7)	28	(18.5)
40 - 49	9	(36)	16	(64)	25	(16.6)
50 - 59	9	(60)	6	(40)	15	(9.9)
≥ 60 yrs	6	(30)	14	(70)	20	(13.2)
Total	64	(42.4)	87	(57.6)	151	(100)

Figure 3: Distribution of the study participants by level of education

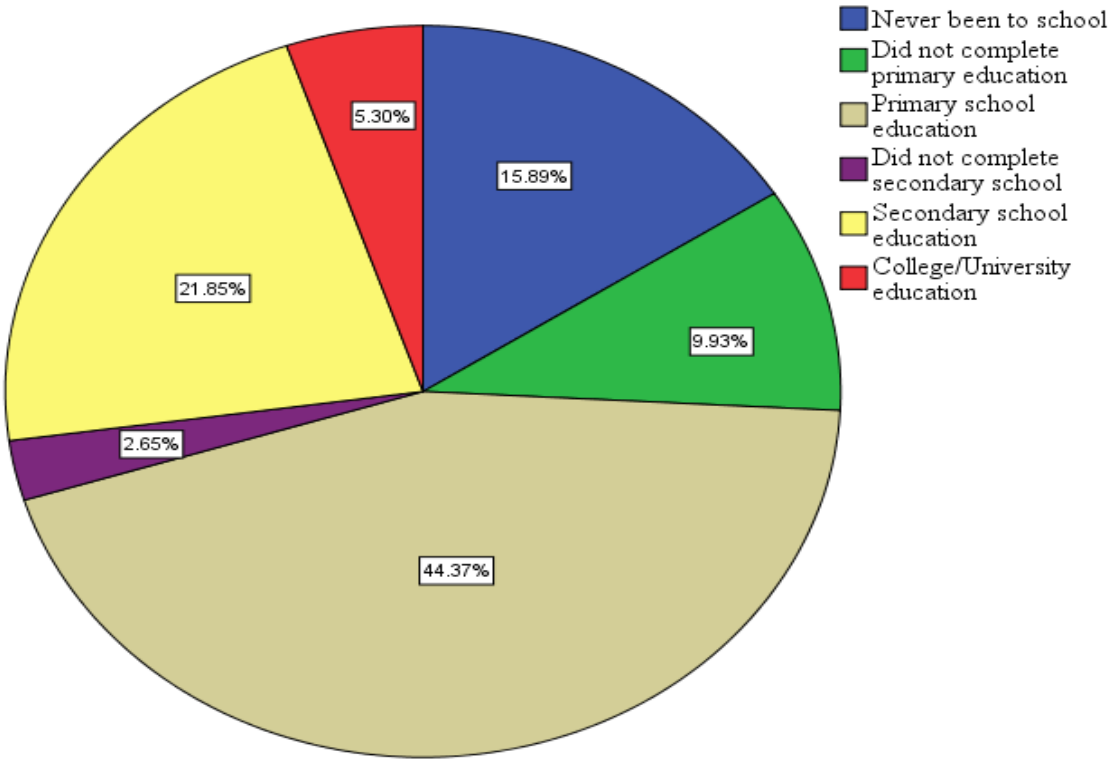


Figure 4: Occupation of the study participants

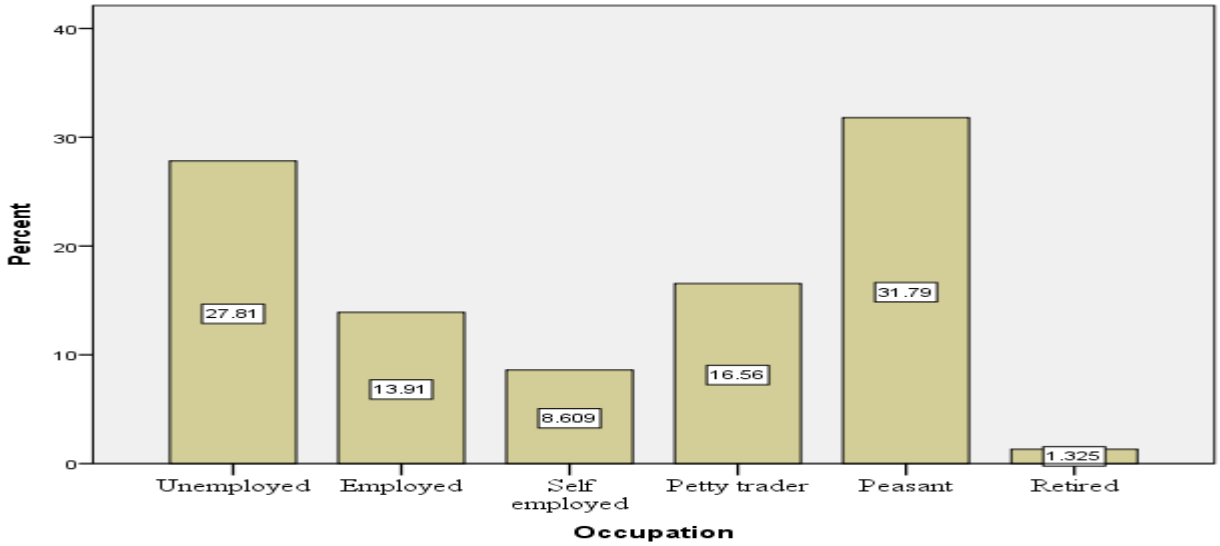


Table 2: Diagnosis of the different tumour and tumour like lesions by sex

Diagnosis	Male		Female		Total	
	No.	%	No.	%	No.	%
Ameloblastoma	10	(15.6)	23	(26.4)	33	(21.9)
Squamous cell carcinoma	11	(17.2)	11	(11.5)	22	(14.6)
Ossifying fibroma	4	(6.2)	6	(9.2)	10	(6.6)
Haemangioma	5	(7.8)	5	(5.7)	10	(6.6)
Pleomorphic adenoma	3	(4.7)	3	(3.4)	6	(4.0)
Fibrous dysplasia	3	(4.7)	2	(2.3)	5	(3.3)
Adenocystic carcinoma	2	(4.7)	1	(1.1)	3	(2.0)
Dentigerous cyst	1	(1.6)	4	(2.3)	5	(3.3)
Adenocarcinoma	2	(4.7)	0	(0)	2	(1.3)
Cystic hygroma	1	(1.6)	1	(1.1)	2	(1.3)
Kaposi's sarcoma	0	(0)	2	(2.3)	2	(1.3)
Osteosarcoma	0	(0)	2	(2.3)	2	(1.3)
Ranula	0	(0)	2	(2.3)	2	(1.3)
Others	22	(34.4)	25	(28.7)	48	(31.8)
Total	64	(42.3)	87	(57.6)	151	(100)

Table 2 above shows that, ameloblastoma was the tumour that was seen with the highest (21.9%) frequency followed by squamous cell carcinoma (14.6%) and Ossifying fibroma (6.6%).

Table 3: Time taken from discovering lesion to reporting to health facility among patients with the commonest conditions

Diagnosis	0-6 months	7-12 Months	> One year	Total
Ameloblastoma	18	4	11	33
Squamous cell carcinoma	20	0	2	22
Ossifying fibroma	3	3	4	10
Haemangioma	6	2	2	10
Pleomophic adenoma	2	0	3	5
Fibrous dysplasia	2	1	2	5
Adenocarcinoma	2	0	0	2
Dentigerous cyst	4	0	1	5
Cystic hygroma	2	0	0	2
Karposi's sarcoma	2	0	0	2
Osteosarcoma	2	0	0	2
Ranula	2	0	0	2
Total	65	10	25	100

Out of 33 patients with ameloblastoma which was the commonest tumour only 18 (54.5%) reported to a health facility up to 6 months after discovering that they had a lesion. Four patients reported within one year and the rest reported at between 1 and 20 years after discovering the lesion.

Except for two patients, all patients with squamous cell carcinoma reported to a health facility within the first six months of discovering that they have a disease condition.

After referral from the primary health facility (23) patients reported to the referral centre after 1 month. Among these 8 (34.9%) reported after one year or more after referral. Vast majority (98%) of the patients seen have never had any dental check-ups.

Table 4: Reasons for delay in reporting to the primary health facility after discovering the lesion.

Reason	**No**	**%**
Cost	29	23
Attending to traditional healers	13	10.3
Taking herbal medicine	13	10.3
Taboo/myth/belief	1	0.8
Did not think it is a problem	36	28.6
Did not have any pain	25	19.8
Lack of family support	3	2.4
Self medication	6	4.8
Total	126	100

Majority of the patients (28.6%) delayed in reporting to primary health facility after discovering the lesion as they did not perceive the lesion being a problem. Most of them thought it was a normal swelling which will slowly resolve over time while it didn't and in fact increased considerably in size. About 23% of the patients delayed due to the costs involved for transportation to the facility and the costs involved in treatment and purchase of drugs. The absence of pain in 19.8% of the patients was as well said to be a reason for the delay in reporting to a health facility initially.

Table 5: Reasons for delay to report to the referral centre

Reason for delay	**No**	**%**
Cost	63	84
Attending to a traditional healer	2	2.7
Taking herbal medicines	1	1.3
Fear of treatment	1	1.3
Did not know that it was a problem	2	2.7
Lack of family support	1	1.3
No permission from work	5	6.7
Total	75	100

Due to shortage of oral health personnel especially in the primary health facilities (dispensary, health centers and some district hospitals), most of the patients with oral maxillofacial tumours are referred to Muhimbili National Hospital for treatment. Some patients showed some delay after the referral whereby 84% of the patients claimed the reason for the delay was the costs involved (transport and treatment).

Table 6: Patients who had pain due to the lesion

Pain	**Number**	**%**
Yes	61	40.4
No	90	59.6
Total	151	100

Table 6 above summarizes the percentage of patients who had or hadn't pain as a result of the lesion. Majority of the patients (59.6%) had no pain from the lesion, and thus one of the reasons for the delay in reporting for health care among patients with oral maxillofacial tumours.

Table 7: Dental services available in the nearest health facility

Dental Services	Number	%
Available	67	44.4
Not Available	84	55.6
Total	151	100

Table 7 above indicates the availability of oral health services in the nearest health facility. The table shows that 55.6% of the patients reported unavailability of oral health services in the nearest health facility be it a dispensary, health centre or a hospital.

Table 8: Influence of sex, education and occupation on time for reporting for health care

Characteristic	Total	Late reporting (25 weeks & above)	P-value
Sex			
Male	64	23 (35.9%)	
Female	84	26 (29.9%)	0.432
Education			
Up to primary education	106	38 (35.8%)	
Secondary education and above	45	11 (24.4%)	0.171
Occupation			
Unemployed, peasants & retired	92	35 (38%)	
Employed, self employed & petty traders	59	14 (23.7%)	0.067

Dichotomized cross tabulation with delay to reporting to a health facility after discovering the condition set at six months i.e. 24 weeks showed that there was no significant difference in reporting between males and females ($p = 0.432$). Proportionately more males (35.9%) than females (29.9%) were likely to report late.

For education level dichotomized between primary school levels and below and secondary school level and above, proportionately patients who had primary education and below (35.8%) were likely to report late than their counter parts with secondary education and above (24.4%). However the difference between the two education level groups was not significant ($p= 0.171$).

The unemployed, peasants and retired (38%) were more likely to report late than employed, self employed and petty traders. ($p = 0.067$).

CHAPTER FIVE

5.0 DISCUSSION

Background characteristics

This descriptive cross sectional study was conducted among patients with tumours and tumour-like lesions who were attended at the oral and maxillofacial section of the Muhimbili National Hospital.

The oral and maxillofacial unit of the Muhimbili National Hospital was chosen because it is the only referral centre in the country for all oral and maxillofacial conditions. This would therefore allow seeing a variety of patients from all over the country.

In total, there was a relatively higher number of females compared to males. Females usually care about their health more than males *(Kutesa et al 2005)* and so most of them do seek treatment unlike males. A vast majority (70.2%) had low level of education (maximum of primary school education) and without stable means of earning life i.e. unemployed, peasants and petty traders.

Types of tumours observed in patients with oral maxillofacial tumours

Among the different conditions that these patients suffered from, ameloblastoma was the commonest occurring tumour followed by squamous cell carcinoma. This concurs with what was reported by Simon et al. 2002 in a study on tumours and tumour like conditions in Tanzania. Similar findings were also been reported in Kenya *(Onyango et al. 1995)*. In the present study, although there were some malignant lesions that were encountered, the majority were benign in nature.

This might explain why the majority of the patients responded that they did not experience any pain. There were more females than males who reported pain experience; however, the difference was not statistically significant.

Although majorities were painless, most of the tumours and tumour like lesions that were encountered in this study have the capacity to cause gross destruction to the surrounding structures resulting in severe morbidity. Given time they can become incurable or incapacitate the patient during the course of the disease or after treatment.

The set up of the health system in Tanzania is such that a patient with an oral and maxillofacial tumour had to be seen at a primary health care centre (dispensaries, health centres or district hospital) where, after the clinical diagnosis is made, he or she is referred to the district or regional hospital. Unfortunately, in Tanzania dispensaries, most health centres and some of the district hospitals do not have any cadre of oral heath personnel. Therefore, in this study although more than 77.5 % of the patients lived near a heath care facility, 55.6% lived near a health facility that had no oral health care services. This might be among the reasons that led to a majority of the patients never having had any dental check ups.

Factors associated with treatment delay

Lack of pain from the lesions was cited by a considerable number (19.8%) of the patients as the main reason behind not reporting for initial attention. The fact that the majority of the lesions found in these patients were ultimately diagnosed as benign in nature meant that in most instances they did not cause any appreciable pain neither affect the daily cores of the patient hence the reason not to report timely. This coupled with the fact that (28.6%) of the patients reported that they did not consider their condition as a problem could explain why it did not strike them that it was necessary to report to any health facility. There was a difference in the duration of time taken to report to a health facility between the normally painful and aggressive lesions compared to the benign lesions. It is apparent that while 98.2% of patients with squamous cell carcinoma reported to a health facility below 6 months, for ameloblastoma only 54.5% reported below this period.

A similar number of patients were delayed because of attending to traditional healers or using herbal medicine. The majority of Tanzanians live in communities both urban and rural where traditional medicine is still widely practiced *(Ngilisho et al.1994)*.
The strong belief in traditional medicine leads people to "try" first this avenue until they despair before they turn to modern medicine.

Average time of reporting for oral health care

In this study, the average delay to report to a health facility after discovering that there was a problem was 69 weeks with a range of 1 - 1040 weeks. There was more delay to report to the primary health facility after discovering the problem than report to the referral centre after being referred from the primary health facility. This might be explained by the different reasons that patient gave ranging from cost involved, fear of treatment, taboo and attending to traditional healers. There was a difference in the reasons for delay to reporting to a primary health facility and in reporting to a referral centre after initial attention and referral from the primary health facility. There was no statistically difference result in the different groups in the time taken in reporting to the health facility after discovering the lesion between the different groups.

Cost involved in reporting to a health care facility was mentioned as one of the main problems of not reporting to a health facility after discovering the lesion or after referral. Such costs include fare to the health facility for the patient and the escorting person and purchasing of medicines. Like in many other developing countries, in Tanzania and probably elsewhere in Africa, socio-economic factors determine for a large part the level of health care.
Since Tanzania usually has a fairly low gross domestic product (GDP) per capita, the level of health care is relatively low as well. This fact alone is responsible for a tremendous claim on the health care budget and implies that patients with tumours and tumour-like lesions do not receive the attention they should deserve.

Although the government has established several health insurance schemes including the famous National Health Insurance Fund (NHIF), as seen in this study, many Tanzanians still depend on their own earnings to support their health and that of their families. Generally people have very low income and are usually not insured, which causes them to postpone treatment as long as possible, whereas absence of work for those living in urban areas also implies loss of income. Nevertheless, the fact that there was no statistically significant difference in delay of reporting to health facilities between the dichotomized groups according to education and socio-economic levels might be taken to indicate that in general Tanzanian patients with oro-facial tumours have a tendency of reporting for health care after considerable delay

The patient who delayed to report for treatment for 1040 weeks (twenty years) was diagnosed to have ameloblastoma and attributed this abnormally long delay due to inability to cover the costs of travel and treatment. She not only delayed initially to report to the primary health facility but also after she was referred delayed to report at the referral centre.

Availability of oral health services

Most of the patients reported that they were living near a health facility (dispensary, health centre or hospital) but most of these facilities didn't offer any oral health services. As reported in an earlier study the majority of Tanzanians, do not undergo a regular medical or dental check up *(Simon et al. 2002)*. People go to see medical or dental personnel only when they have severe problems that interfere with their routine life. This precludes the possibility of the otherwise non-suspicious looking lesions to be incidentally discovered by the oral health personnel during routine examination of the patient. This might be the reason why in this study almost all (98%) patients did not undergo dental check-ups.

CHAPTER SIX

CONCLUSSIONS AND RECOMMENDATIONS

6.1 CONCLUSIONS

The majority of patients with oral and maxillofacial tumours and tumour-like lesions had low education and were either unemployed, peasants or petty traders. These patients showed a delayed reporting to health facilities and consequently to the referral centre. The average time for reporting to the referral centre was rather long (69 weeks). The main reason cited for the delay in reporting for health care by this group of patients is the cost involved and attending to traditional healer or taking herbal medicines. Patients with life threatening lesions reported relatively early compared to those who were diagnosed with benign lesions.

6.2 RECOMMENDATIONS

1. There is need for education to the communities on the importance of early reporting whenever they suspect a lesion in the oral and maxillofacial region.
2. A need for a more extensive study involving more regions and referral centres in the country is necessary.
3. Continuing education to the practicing oral health personnel who are working in the regions is necessary.
4. Health insurance coverage should be improved to include the unemployed and peasants

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8.0 APPENDICES

8.1 Appendix 1a: Informed consent form – English version

MUHIMBILI UNIVERSITY OF HEALTH AND ALLIED SCIENCES

DIRECTORATE OF RESEARCH AND PUBLICATIONS, MUHAS

INFORMED CONSENT FORM

ID-NO. ☐☐☐

Consent to Participate in a Study

Greetings! My name is Dr. Ruth Msolla. I am conducting a study on the barriers of oral health utilization among patients with oral maxillofacial tumours attending Muhimbili National Hospital.

Purpose of the study

The study is conducted in partial fulfillment of the requirements for the degree of Master of Public health (MPH) of MUHAS. This study is aiming to collect information on the barriers to utilization of oral health services among patients with oral maxillofacial tumours attending Muhimbili National Hospital. You are being asked to participate in this study because you may have particular knowledge and experiences that may be important to the study. Kindly please be honest and true for betterment of the results that could lead to better intervention and recommendations for future.

What Participation Involves

If you agree to participate in this study, you will be interviewed in order to answer a series of questions in the questionnaire prepared for the study. You will be asked questions on the social economic characteristics; social cultural characteristics, average time of reporting for health and the alternatives which a patient considers before reporting for health care.

Confidentiality

I assure you that all the information collected from you will be kept confidential. Your name will not be written on any questionnaire or in any report/documents that might let someone identify you. Your name will not be linked with the research information in any way. All information collected on forms will be entered into computers with only the study identification number. Confidentiality will be observed and unauthorized persons will have no access to the data collected.

Risks

We do not expect that any harm will happen to you because of participating in this study. Some questions could potentially make you feel uncomfortable. You may refuse to answer any particular question and may stop the interview at anytime.

Right to Withdraw and Alternatives

Taking part in this study is completely voluntary. You can stop participating in this study at any time, even if you have already given your consent. Refusal to participate or withdrawal from the study will not involve penalty or loss of any benefits to which you are otherwise entitled.

Benefits

The information gathered from you will help to provide an understanding the barriers to utilization of oral health services especially among patients with oral maxillofacial tumours and thus assist the government in planning for the training of manpower and rational distribution of oral health services in the country.

Who to Contact

If you ever have questions about this study, you should contact the Principal Investigator, Dr. Ruth Msolla, Muhimbili University of Health and Allied Sciences, P. O. Box 65001, Dar es Salaam.

If you ever have questions about your rights as a participant, you may call Prof. Mainen Moshi, Chairperson of the Senate Research and Publications Committee, P. O. Box 65001, MUHAS, Dar es Salaam. Telephone: 255 22 2150302-6 and Dr. Elison N. M. Simon who is the supervisor of this study, Tel: 0784-718235.

Signature

Do you agree?

Participant agrees ☐

I …….... have read the contents of this form. I agree to participate in this study.

Signature of participant ……

Signature of Investigator ……

Date of signed consent …….

8.2 Appendix Ib: Informed consent form – Swahili version

CHUO KIKUU CHA SAYANSI ZA AFYA MUHIMBILI

KURUGENZI YA TAFITI NA UCHAPISHAJI

FOMU YA RIDHAA

Namba ya utambulisho ☐☐☐

Ridhaa ya kushiriki kwenye utafiti

Hujambo! Ninaitwa Dr. Ruth Msolla, nashughulika kwenye utafiti huu wenye lengo la kutathmini sababu/vitu mbalimbali vinavyosababisha wagonjwa wenye saratani katika kinywa na uso kuchelewa kufika kituo cha afya kwa .

Malengo ya utafiti

Utafiiti huu unafanyika katika kutimiza sehemu ya matakwa ya shahada ya uzamili ya afya ya jamii ya Chuo Kikuu cha Afya na Sayansi ya Tiba Muhimbili. Unaombwa kushiriki katika utafiti huu kutokana na upeo na ufahamu ulio nao ambavyo ni muhimu kwa utafiti huu. Tafadhali kuwa mkweli na muwazi kwa vile matokeo ya utafiti huu yanaweza yakatoa maamuzi na mapendekezo ya baadaye

Jinsi ya kushiriki

Ukikubali kushiriki katika utafiti huu, utasailiwa ili kuweza kujibu maswali toka kwenye dodoso lililoandaliwa kwa ajili ya utafiti huu. Utaulizwa maswali kuhusiana na sababu zipi zilikupelekea kuchelewa kufika hospitali kwa matibabu baada ya kugundua una uvimbe kwenye kinywa na uso, ili kupendekeza nini kifanyike kuboresha huduma za matibabu ya saratani za kinywa na uso.

Usiri

Taarifa zote zitakazokusanywa zitaingizwa kwenye ngamizi kwa kutumia namba za utambulisho.Kutakuwa na usiri na hakuna mtu yeyote asiyehusika atakayepata taarifa zilizokusanywa.

Hatari

Hatutegemei madhara yoyote kukutokea kwa kushiriki kwako kwenye utafiti huu.

Faida

Kama utakubali kushiriki kwenye utafiti huu taarifa utakazotoa zitatuwezesha kujua kiwango au ukubwa wa tatizo ambao ni muhimu katika uamuzi wa kuzuia au kupunguza tatizo.

Athari na kukitokea madhara

Hutegemewi kupata madhara yoyote kutokana na ushiriki wako katika utafiti huu. Baadhi ya maswali yanaweza yasikupendeze, unaweza kukataa kujibu swali lolote la aina hiyo na unaweza kuamua kusimamisha udahili wakati wowote.

Uhuru wa kushiriki na haki ya kujitoa

Kushiriki kwenye utafiti huu ni hiari. Unaweza kujitoa kwenye utafiti huu wakati wowote hata kama umeshajaza fomu ya ridhaa ya kushiriki utafiti huu. Kukataa kushiriki au kujitoa kwenye utafiti huu hakutaambatana na masharti yoyote.

Nani wa kuwasiliana naye

Kama una maswali kuhusiana na utafiti huu, wasiliana na Mtafiti mkuu wa utafiti huu, Dr. Ruth Msolla wa Chuo Kikuu cha Afya na Sayansi ya Tiba Muhimbili, S. L. P. 65001, Dar es Salaam. Kama una swali kuhusu stahili zako kama mshiriki unaweza kumpigia simu Prof. Mainen Moshi, Mwenyekiti wa kamati ya Utafiti na Uchapishaji, S.L.P 65001, Simu: 255 22 2150302-6, Dar es Salaam au msimamizi wa utafiti huu Dr Elison N. M. Simon, Simu 0784-718235.

Sahihi

Je umekubali?

Mshiriki amekubali ☐

Mimi ..... nimesoma maelezo ya fomu hii. Nakubali kushiriki katika utafiti huu.

Sahihi ya mshiriki…….

Sahihi ya mtafiti ……

Tarehe ya kutia sahihi ya idhini ya kushiriki……

8.3 Appendix IIa: Questionnaire – English version

Date: _____/_____/2013

Diagnosis (Confirmed/Impression)……..

1. Patient study code ☐☐☐
2. Hospital Registration Number ☐☐☐☐☐☐
3. Age _____ (Years)
4. Sex: (a)Male ☐ (b)Female ☐
5. Place of residence: _____ District: _____

   Region: _____
6. Level of Education
   a) Never been to school
   b) Did not complete primary school
   c) Primary school education
   d) Did not complete secondary school
   e) Secondary school education
   f) College University education

7. Occupation
    a) Unemployed
    b) Employed
    c) Self employed
    d) Petty trader
    e) Retired
    f) Peasant

8. Marital status
    a) Single
    b) Married
    c) Widow
    d) Widower
    e) Divorced
    f) Co habiting

9. Distance from the place of residence to the nearest health facility;

    a) 1. 0 to 5 Km
    b) 2. 5 to 10 Km
    c) 3. 10 to 20 Km
    d) 4. More than 20 km

10. Nearest health facility
    a) Dispensary
    b) Health Centre
    c) District Hospital
    d) Regional Hospital
    e) Referral Hospital

11. Are there oral health services in that nearest health facility?

a) Available
b) Not available

12. When did you discover that you have the current problem?

_____/_____/_____

dd mm year

13. Who told you that you have a problem?

a) I discovered it myself
b) A close relative/friend told me
c) It was incidentally discovered y the doctor while examining me for another condition

14. What did you perceive the problem to be?

a) Cancer
b) Abscess
c) Bewitched
d) I didn't know
e) Normal swelling/mouth ulcers
f) Painful tooth

15. Do you know what kind of swellings can occur on the facial region?

a) Yes ☐ b) No ☐

16. What kind of swellings can occur on the facial region?

a) Cancer
b) Abscess
c) If you are bewitched

17. Did you have pain?

a) Yes ☐ b) No ☐

18. If you had pain, how severe was it?

a) Minor
b) Medium
c) Severe
d) Very severe

19. How long did it take you to report to the hospital? _____ (weeks)

20. What were the reasons for the delay in reporting to the hospital after realizing the problem?

a) Costs involved
b) Attending to a traditional healer
c) Taking herbal medicine
d) Taboo/myth/beliefs
e) Fear of treatment
f) Did not have pain
g) Did not think of it being a problem
h) Self medication

21. Were you informed of the diagnosis?

    a) Yes
    b) No

22. What was the diagnosis? _____

23. What was done at the health facility?

    a) Nothing
    b) Medication
    c) Surgical treatment
    d) Referral

24. Were you cured after the treatment?

    a) Yes
    b) No

25. Why did you come to Muhimbili?

    a) Self referral
    b) Referral from the doctor
    c) Advice from relatives/friends

26. If you were referred, how long did it take you to come to MNH after the referral? _____ (Weeks)

27. What was the reason for this delay?

    a) Costs involved
    b) Attending to a traditional healer
    c) Taking herbal medicine
    d) Taboo/myth/beliefs
    e) Fear of treatment
    f) Did not have pain

28. Do you go for regular dental check ups

a) Yes

b) No

8.4 Appendix IIb: Questionnaire – Swahili version

Tarehe: _____/_____/2013

Diagnosis (Confirmed/Impression)……

1. Namba ya utambulisho ya mshiriki | | | |

2. Namba ya Hospitali | | | | | | |

3. Umri: _____ (Miaka)

4. Jinsia (a) Mme | | (b) Mke | |

5. Makazi: _____ Wilaya: _____
   Mkoa: _____

6. Kiwango cha elimu
   a) Sijapata elimu kabisa
   b) Sikumaliza shule ya msingi
   c) Shule ya msingi
   d) Sikumaliza shule ya sekondari
   e) Shule ya sekondari
   f) Chuo kikuu/college

7. Kazi

    a) Sina kazi
    b) Muajiriwa
    c) Nimejiajiri
    d) Mfanyabiashara ndogo ndogo
    e) Mstaafu
    f) Mkulima

8. Hali ya ndoa

    a) Hujaoa/hujaolewa
    b) Nimeoa/nimeolewa
    c) Mjane
    d) Mkane
    e) Mtaliki/Mtalika
    f) Huna ndoa ila unaishi na mwenza

9. Umbali toka mahali unapoishi mpaka kituo cha afya cha karibu yako;
    a) 1. 0 to 5 Km
    b) 2. 5 to 10 Km
    c) 3. 10 to 20 Km
    d) 4. More than 20 km
10. Kituo cha afya cha karibu
    a) Dispensary
    b) Kituo cha afya
    c) Hospitali ya wilaya
    d) Hospitali ya mkoa
    e) Hospitali ya rufaa

11. Je, kuna huduma ya afya ya kinywa na meno kwenye hicho kituo cha afya cha karibu

    a) Zipo
    b) Hazipo

12. Lini uligundua kuwa una hili tatizo? _____/_____/_____
    dd mm year

13. Nani alikuambia kuwa una tatizo?

    a) Niligundua tatizo mwenyewe
    b) Ndugu yangu wa karibu/rafiki aliniambia
    c) Liligundulika wakati daktari ananifanyia uchunguzi wa matatizo mengine ya kinywa

14. Ulifikiria nini kuhusu hili tatizo?
    a) Saratani
    b) Jipu
    c) Nimelogwa
    d) Sijui
    e) Uvimbe wa kawaida/vidonda vya mdomoni
    f) Jino linauma

15. Je, unafahamu ni uvimbe wa aina gani unaweza kutokea kwenye sehemu za uso?

    a) Ndio ☐ b) Hapana ☐

16. Ni uvimbe wa aina gani unaweza kutokea sehemu za uso?

a) Saratani
b) Jipu
c) Kulogwa

17. Je, ulikuwa na maumivu?

a) Ndio ☐ b) Hapana ☐

18. Kama ulikuwa na maumivu yalikuwa makali kiasi gani?

a) Kidogo
b) Ya kati
c) Makali
d) Makali sana

19. Ilikuchukua muda gani kwenda hospitali baada ya kugundua tatizo?

_____ (wiki)

20. Ni sababu zipi zilizopelekea kuchelewa kwenda hospitali kwa matibabu baada ya kugundua tatizo?

a) Gharama
b) Nilienda kwa mganga wa kienyeji
c) Nilitumia tiba asilia
d) Miiko/imani/mila
e) Nilikuwa naogopa matibabu
f) Hapakuwa na maumivu
g) Sikudhania kama ni tatizo
h) Nilinnunua dawa mwenyewe na kunywa

21. Uliambiwa tatizo/ugonjwa wako?

a) Ndio
b) Hapana

22. Tatizo/ugonjwa uliambiwa ni nini? _____

_____

23. Nini kilifanyika hapo kituo cha afya/hospitali?

a) Hakuna
b) Nilipewa dawa
c) Upasuaji
d) Nilipewa rufaa

24. Je ulipona baada ya matibabu?

a) Ndio
b) Hapana

25. Kwanini ulikuja Muhimbili?

a) Niliamua
b) Nilipewa rufaa na daktari
c) Ushauri kutoka kwa ndugu wa karibu/rafiki

26. Iwapo ulipewa rufaa, ilikuchukua muda gani kuja MNH baada ya rufaa? _____ (Wiki)

27. Nini kilisababisha uchelewe kuja?

    a) Gharama
    b) Nilienda kwa mganga wa kienyeji
    c) Nilitumia tiba asilia
    d) Miiko/imani/mila
    e) Nilikuwa naogopa matibabu
    f) Hapakuwa na maumivu

28. Je, una kawaida ya kwenda kufanyiwa uchunguzi wa kinywa na meno hata kama huumwi?

    a) Ndio
    b) Hapana