



**KIBOGORA POLYTECHNIC**  
**FACULTY OF HEALTH SCIENCES**  
**DEPARTMENT OF GENERAL NURSING**



**ASSESSMENT OF KNOWLEDGE ON ORAL HYGIENE AMONG  
ELDERLY PEOPLE IN KIBOGORA DISTRICT HOSPITAL.**

**Case study: Kibogora District Hospital .period (2020-2022)**

Undergraduate Research presented in partial fulfillment of the award of Bachelor degree with honor in General Nursing with Health Sciences

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**DECLARATION**

**Declaration by the Candidate**

We UWONKUNDA MUGENI Honorine and Uwimana Joyeuse hereby declare that this are our own original work and not a duplication of any similar academic work. It has therefore not been previously or concurrently submitted for any other degree, diploma or other qualification to Kibogora Polytechnic or any other institution. All materials cited in this paper which are not my own have been duly acknowledged.

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**Declaration by the Supervisor**

I declare that this research was submitted for examination with my approval as KP Supervisor

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Signed.....

Date.....

## **DEDICATION**

We dedicate this work first and foremost to Almighty God our creator, our strong pillar, our source of inspiration, Our family, our sisters, Our brothers and Our classmate.

## ABSTRACT

**Background:** the essential to the health of own mouth, which can assist us in avoiding oral Infections like dental caries. Too many cavities can be hazardous, and those cavities transform into boil can lead to even worse troubles such as root canal or teeth extraction. Secondly, good Oral hygiene is essential cosmetically too. (Rushworth and Kanatas, 2020). Oral diseases are among major public health problems and poor oral health has an important effect on general health and quality of life. Worldwide, more than 90% of the world's population develops oral disease during their life time. (Listl et al., 2015).

**Aims:** The aims of this study was to assess the knowledge on Oral hygiene among elderly people in kibogora district hospital.

**Research Methodology:** quantitative approaches was used as research approaches and descriptive research design was used in this study.

**Result:** The findings of this study were the following: the oral hygiene is importance Because high number was responding yes for 80(100%) the importance of oral hygiene, To Maintain good breath 7(9%), To prevent oral diseases 23(29%), It is essential for the well being of an individual 19(24%), To look good and improve smile 6 (7%) and All above 25(31%), the types of materials used by oral hygiene that are Chewing stick 12(15%), tooth paste 60(75%), charcoal 8(10%) and none 0(0%) and the material needed for oral hygiene are available. Yes 77 (96) and No 3(4%) and the reason for not brushing regularly by the Lazy 29(36%) , Getting up late 31(39%).

**conclusion :** According to our findings we saw the largest respondents knew the importance of oral Hygiene even if they did not do it regularly and larger respondents did not know how to floss and to clean the tongue.

**Recommendation:** all peoples should brush their teeth regularly by using tooth brush and tooth paste because it is important that oral hygiene carried out on regular basis enable people to prevent oral diseases and bad breath

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## **LIST OF ABBREVIATIONS/ACRONOMYS**

**ADA:** American Dental Association

**ARRU:** Africa Region Remain Untreated

**DDS:** Doctor of Dental Surgery

**DMD:** Doctor of Medicine in Dentistry or Doctor of Dental Medicine

**Dr:** Doctor

**HIV/AIDS:** Human Immunodeficiency Virus Acquired Immuno Deficiency Syndrome

**JDH:** Journal of Dental Hygiene

**KP:** Kibogora Polytechnic

**NCD:** Non Communicable Diseases

**NY:** New York

**PAHO:** Pan America Health Organization

**US:** United States

**WHO:** World Health Organization

## **CHAPTER ONE. GENERAL INTRODUCTION**

### **1.0. INTRODUCTION**

This chapter was covered the background of the study, the problem statement, the objectives of the study as well as the research questions, the significance of the study, Limitations of the study and Scope of the study.

### **BACKGRAUND OF THE STUDY**

Oral hygiene refers to the practice of keeping the mouth, teeth and gums clean and healthy to prevent diseases, as by regular brushing and flossing and visits to a dentist. It refers to the state of one's oral health, resulting from this practice or its neglect Oral hygiene is the most vital part of Oral care, and it is essential for numerous levels. (James and Ellis, 2013)

Oral caries are the most common non-communicable disease around the World; children and people with low socio-economic status are at risk of the disease. (WHO, 2017) In the African Region, where 80% of the population has low socioeconomic status, dental diseases influence the health and well-being of millions of people and have an adverse economic impact on the population (WHO, 2016).

Primary, it is essential to the health of own mouth, which can assist us in avoiding oral Infections like dental caries. Too many cavities can be hazardous, and those cavities transform into boil can lead to even worse troubles such as root canal or teeth extraction. Secondly, good Oral hygiene is essential cosmetically too. (Rushworth and Kanatas, 2020).

Oral diseases are among major public health problems and poor oral health has an important effect on general health and quality of life. Worldwide, more than 90% of the world's population develops oral disease during their life time. (Listl et al., 2015).

Disease resulting from poor oral hygiene such as Dental caries is still a major oral health problem in most 60- 90% of schoolchildren and the many of adults as mainly in industrialized countries, Where smoking have been reported as the major causing factor for adults., 5-15% of most populations was found to have Severe periodontitis, which may result in tooth loss. (WHO, 2016).

Adequate oral hygiene may become a challenge for all users and especially for elderly people and young children because of their limited motor skills. The same holds true for patients undergoing/recovering from chemo-/radiotherapy with accompanying sensitive mucosal conditions. Poor oral hygiene can result in tooth decay, gingivitis, periodontitis, tooth loss, bad breath (halitosis), fungal infection and gum diseases. The use of a toothbrush is the most important measure for oral hygiene (WHO, 2015).

Toothbrushes with soft bristles operated carefully by hand or via an electric device help to remove plaque and to avoid mucosal trauma. A handlebar with a grip cover can be helpful for manually disabled patients or for those with reduced motor skills. In case of oral hygiene at the bedside or of patients during/after chemo-/radiotherapy a gauze pad can be helpful for gently cleaning the teeth, gums and tongue. The use of fluoride toothpaste is imperative for the daily oral hygiene. Detergents such as sodium lauryl sulphate improve the cleaning action but may also dehydrate and irritate the mucous membrane. (Kato et al., 2017).

The use of products containing detergents and flavouring agents (peppermint, menthol, cinnamon) should therefore be avoided by bedridden patients or those with dry mouth and sensitive mucosa. Aids for suitable interdental cleaning, such as dental floss, interdental brushes or dental sticks, are often complicated to operate. Their correct use should be instructed by healthcare professionals. To support oral care, additional fluoridation with a fluoride gel or rinse can be useful. (Hitz et al 2014)

Health disparities in the United States (US) are widespread, especially among racial and ethnic minorities' populations. The study has been done to assess whether oral health care knowledge and acculturation were associated with utilization of oral health services among the Latino and Hispanic population in Massachusetts. Improving access to affordable dental coverage, promoting the establishment of oral home, encouraging cultural sensitivity among the oral team, and providing resources to those with limited English proficiency could improve utilization of oral health services among Latino and Hispanic population. (Gharlipour et al., 2016)

Oral diseases are increasingly being recognized as a major public health problem in light of the rising NCD burden as well as its common modifiable risk factors. It is reported that approximately 400 million people suffered from some form of oral disease in the WHO African Region in 2017. Due to a lack /unequal distribution of oral health professionals, a lack of appropriate facilities, and - in many countries in Africa - no dedicated oral health budget, people incur significant out-of-pocket expenses to access oral health services, while most oral diseases in the African Region remain untreated(WHO,2017).

Even though we found the statistical percentage about the matter of oral hygiene worldwide and in Africa but we also found many gaps in this area it seems that many researchers have failed or have not been interested in this area before, because we have lost the findings on comparison about statistical findings between developed and developing countries and also there is no data findings regarding our area of interest in our country (RWANDA). That's why we are going to conduct our research well to fill especially in our country so that it was help to solve some problems related oral hygiene in our society especially elderly patients attending Kibogora district hospital.

## **1.2. PROBLEM STATEMENT**

despite the efforts of government of Rwanda to achieve the 3<sup>rd</sup> sustainable development goal which is the promotion of health and well-being of the Rwandan population, tooth and gum diseases were number one cause of morbidity in hospitals accounting for 18.6% of all out patient consultations and 27.7% of all non-communicable diseases in Rwanda (Rwanda ministry of health, 2016).

Based on the findings dental caries are among top tens diseases affecting patient in kibogora District Hospital that's why we had tackled this topics about the assessment of knowledge on oral hygiene among elderly people in kibogora district hospital.

## **1.3. OBJECTIVES OF THE STUDY**

This Research thesis was used two categories that are General objectives and Specific objectives.

### **1.3.0. General Objectives**

The aims of this study is to assess the knowledge on Oral hygiene in rural areas among elderly people attending kibogora district hospital.



### **1.3.1. Specific Objectives**

The contemporary research thesis was covered by the following three objectives

To assess the level of knowledge about Oral hygiene among elderly in kibogora hospital.

To find out the availability of Tools used in Oral hygiene among elderly people in kibogora district hospital.

To identify practical manner about oral hygiene among elderly people in kibogora district hospital.

### **1.4. RESEARCH QUESTIONS**

This research thesis was conducted by the following three questions

What are the level of knowledge on Oral hygiene among elderly people in kibogora hospital?

What is the availability of Tools used in Oral hygiene among elderly people in kibogora district hospital?

How do population practice oral hygiene among elderly people in kibogora district hospital?

### **1.5. SIGNIFICANCE OF THE STUDY**

This Current research was benefited to the large number of people in community of health: to Kibogora District Hospital, to Nursing Education, the community and Scientific.

#### **1.5.1. To KIBOGORA DISTRICT HOSPITAL**

This research was been done on the comparison study with existence of other community health data related oral hygiene and dental care in Kibogora District Hospital, in order to know how to identify the infections, complications and how to enhance measures for preventions of those complications. The research findings was been used by other researchers in this community who was conducted the research on the same topic and this research was decrease the number of ill patients attending kibogora district hospital due to oral diseases caused by poor hygiene.

#### **1.5.2. To Nursing Education**

The study findings was provided readers with the knowledge about risk factors influencing oral and dental infection of the affected people in order to avoid those infections, complications, and

also in order to reduce or to think about strategies/measures to be implemented for reducing oral and dental infection. The study findings was been used in nursing education as Evidence based practice.

### **1.5.3. To Community**

This research was been done in order to know the knowledge regarding oral health and dental care in this community of Nyamasheke district and at the end of each interaction with community, we will share with them the updated process of brushing and flossing their teeth.

Using the result of this study, the administration of KIBOGORA DISTRICT HOSPITAL was been informed about the situation of how oral and dental infection control can be taken as seriously as well as possible and the implementation of the appropriates measures to prevent those infections in order to improve oral health and dental care in the community health in general.

### **1.5.4. Scientific interest**

This research was helped scientifically to the useful to future researchers from Kiborora polytechnic as well as from other different high Learning institutions as References and It was upgraded the Kiborora Polytechnics in the KP Library.

## **1.6. LIMITATIONS OF THE STUDY**

The research findings are less amenable to generalization because the sample is selected from one geographical area in Rwanda. As we are mixing this research with internship, there is no enough time of conducting it as better as possible.

## **1.7. SCOPE OF THE STUDY**

### **1.7.0. Time Scope**

This Research thesis was been conducted and prepared within 2021-2022

### **1.7.1. Geographical Scope**

This Research thesis was limited to Kibogora District Hospital in western province, Nyamasheke district, Kanjongo Cell.

### **1.7.2. Contents Scope**

This Research thesis was been focused on the assessment of knowledge on Oral hygiene in rural areas among elderly people attending kibogora district hospital.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.0. INTRODUCTION**

This chapter consists in definition of key concepts/ terms, related literature review research gaps and also comprises conceptual framework.

### **2.1. DEFINITION OF KEY CONCEPTS/ TERMS**

#### **Oral hygiene**

Oral hygiene: The condition or practice of maintaining the tissues and structures of the mouth in healthy state. (Naseem et al. Cureus, 2017)

#### **Assessment**

Assessment: can be considered the systematic collection, review, and use of information about educational programs and services undertaken for the purpose of quality improvement, planning, and decision-making (Caluyua y, 2020)

#### **Knowledge**

Knowledge: refer to a theoretical or practical understanding of a subject. It can be implicit (as with practical skill or expertise) or explicit (as with the theoretical understanding of a subject); formal or informal; systematic or particular (R.Stephen, 2014)

#### **People**

People: are men, women, and children. People is normally used as the plural of person, instead of 'persons'. people is sometimes used to refer to ordinary men and women, in contrast to the government or the upper classes(Peter L,2019).

#### **Oral Hygiene**

Oral hygiene is the practice of keeping one's mouth clean and free of disease and other problems (e.g. bad breath) by regular brushing of the teeth (dental hygiene) and cleaning between the teeth. It is important that oral hygiene be carried out on a regular basis to enable prevention of dental disease and bad breath(Glick M,2020).

#### **2.1.9. Hospital**

Hospital: is a health care institution providing patient treatment with specialized health science and auxiliary healthcare staff and medical equipment(Jones L,2015)

## **2.2. LITURATURE RELATED TO THE LEVEL OF KNOWLEDGE ON ORAL HYGIENE AMONG ELDERLY PEOPLE**

### **2.2.1. Introduction**

Oral hygiene is the practice of keeping one's mouth clean and free of disease and other problems by regular brushing of the teeth and cleaning between the teeth.

The mouth consists of teeth, gums, mucous membranes, salivary glands, and bone. The mouth is the entrance to the body for nutrients, bacteria, viruses, and fungi. It is a part of the body's immune system and plays an important role in primary health. Taking care of the mouth and maintaining good oral hygiene is a part of being healthy. Poor oral health affects your ability to eat, speak, and be happy. There is a link between oral health and general health. When general health is impaired, oral health will also be affected. For example, signs of diabetes, HIV/AIDS, hepatitis, and arthritis can be seen in the mouth. (Pan American Health Organization, 2013)

And when oral health suffers, there is an increased risk for poor general health, including cardiovascular disease. The risk factors contributing to poor general and oral health are very similar, as illustrated in the diagram below. Tobacco use, excessive alcohol use, and poor diet/nutrition are common risk factors for different systemic and oral diseases. Tobacco use and poor diet/nutrition, especially, are both risk factors for diabetes, cardiovascular disease, respiratory disease, dental decay (caries), cancer including oral cancer, and periodontal disease (gum disease). Eliminating these common risk factors will improve general and oral health. (PAHO, 2015)

## **2.3. TOOLS USED IN ORAL HYGIENE AMONG ELDERLY PEOPLE**

### **2.3.0. Introduction**

As you browse the dental care aisle at your local pharmacy, the wide variety of products can have your head spinning. Just look at the choices of dental floss: Do you need waxed or unwaxed? Traditional or tape? And then there's the assortment of mouthwashes, From toothbrushes to tongue scrapers, here's how to make good teeth-cleaning choices to keep your smile bright and your mouth healthy (H. scherk 2021).

### **2.3.1. Toothbrushes**

When buying a toothbrush, you'll see hard, medium, and soft bristles. "Always use a soft-bristled toothbrush," says Timothy Chase, DMD, of Smiles NY, a cosmetic dentistry practice in New York City. "Hard-bristled and even medium-bristled toothbrushes are too abrasive on your gums." You can also consider an electric toothbrush. "Some people tend to brush too hard or in a harsh sawing motion as opposed to a gentle circular motion, but an electric toothbrush can help prevent harsh 'scrubbing' to give better results," Dr. Chase says. An electric toothbrush can also make brushing easier for people who have arthritis or another health condition that affects the hands. Whether manual or powered, your toothbrush should be a size and shape that fit in your mouth well so that teeth cleaning is comfortable and easy (C. mumark 2018).

### **2.3.2. Toothpaste**

Choose a toothpaste that contains fluoride to strengthen tooth enamel and prevent tooth decay. Many toothpastes also have ingredients that fight tooth sensitivity, gingivitis (early-stage gum disease), bad breath, or hardened plaque called tartar. "Toothpastes that have additives, such as whitening agents, can break down tooth enamel," cautions Chase. Ask your dentist for recommendations on the best toothpaste for your specific oral health needs.(S. lindberg, 2021)

### **2.3.3. Dental floss**

Flossing is a must for healthy teeth," says Chase. For healthy teeth, you should floss at least once a day, and Chase recommends using floss at least twice a day. Flossing removes food particles trapped between teeth that your toothbrush misses, helping to reduce plaque and the likelihood of tooth decay and gum disease. Dental floss comes waxed and unwaxed. If your teeth are tightly spaced, waxed floss or flossing tape may glide between them more easily. Floss also comes in flavors to make flossing feel like less of a chore. If you have a preferred brand, stick with it because you're more likely to use it, Cooper says ( scherk, 2021).

#### **2.3.4. Dental picks and sticks**

If you have trouble using dental floss, interdental (between the teeth) cleaning aids can help remove plaque. These products include picks, sticks, and mini-brushes to get between and around teeth. Make sure you can gently get between your teeth and under your gum line with the product you choose. (N. Ram, 2020)

#### **2.3.5. Oral irrigators**

This oral hygiene appliance shoots a steady stream of water in your mouth to remove food from hard-to-reach places between and around your teeth. Cooper says this can be especially helpful for teens who have trouble cleaning around braces and for people with fixed partial dentures. Note that an oral irrigator is an add-on oral product rather than a substitute for routine brushing and flossing. Be sure to look for one that you can regulate so the water pressure isn't too high (N. gluichmann, 2021).

#### **2.3.6. Teeth whiteners**

The best way to whiten your teeth is to visit your dentist, where you can get a product with a custom fit tray, Chase says. Teeth whiteners use peroxide solutions to actually bleach teeth. You can also try an over-the-counter product, such as whitening strips. Chase says these whitening products are good, but won't give the same results as an office treatment because the peroxide solution isn't as strong and the strips aren't customized to fit your mouth.(RB. Wheeler, 2012).

#### **2.3.7. Mouthwash.**

Different mouthwashes tackle different oral problems. Some help reduce plaque and prevent gingivitis; others contain fluoride to help fight cavities. Some can control or mask bad breath. "If you have difficulty brushing and flossing, a mouthwash may provide additional protection against cavities and gum disease," Cooper says. Talk to your dentist about which mouthwash is best for you. (E. silvestrini, 2021).

### **2.3.8. Tongue scrapers.**

Tongue scrapers can help lessen bad breath by reducing the amount of bacteria that cause it,” Chase says. But your toothbrush can do the job just as well. Cooper says that some studies have shown that simply brushing the tongue reduced bad breath by 70 percent.(C. mumark, 2018).

## **2.4. PRACTICAL MANNER OF ORAL HYGIENE AMONG ELDERLY PEOPLE**

### **2.4.0. Introduction**

Globally, important mechanisms for better oral health would relate to strengthening oral health policy development; national capacity building within oral health care for the underserved; education and training for service and care for the elderly, and research for oral health. However, the challenges vary from country to country and region to region; the differences are particularly notable between developed and developing countries.(T. Yamamoto, 2015)

### **2.4.1. ORAL HEALTH POLICY**

Oral health policy As emphasized in the World Oral Health Report 2003, WHO sees oral health as integral to general health and as a determinant for quality of life. The interrelationship between oral health and general health is particularly pronounced among older people primarily because several oral diseases have risk factors in common with chronic diseases (PE. Petersen, 2015).

Today, few countries have clearly stated policies and goals specifically for oral health promotion and oral health care for older people. Generally speaking, oral health policies and programmes should be an integral part of national and community health programmes. Thus, in many countries – developing and developed – strengthened analysis for policy and analysis of policy are urgently needed for advocacy, legislation, goal setting, and design of public oral health programmes for old-age persons (R. Stephen,2014).

Oral diseases can be prevented through shared public health approaches. Oral health planners and administrators are encouraged to use the common risk factors approach to integrate interventions for oral health among older adults into general health programmes. A benefit of this approach is the focus on improving health conditions for the whole population as well as high risk groups such as older adults, thereby alleviating inequities (PE. Petersen, 2015).



#### **2.4.2. ORAL HEALTH CARE**

Oral health care the industrialized countries' oral health services were established, and most oral health care providers were educated, before geriatric dentistry developed as a speciality and academic discipline. It is now necessary to reorient these services towards prevention and to deliver the appropriate care to meet the diversified needs of the large and growing heterogeneous older population. The needs and demands for oral health care among the elderly vary across age groups, i.e. the old versus the very old (DJ. Swigart, 2015).

Oral health systems should effectively address factors that prevent or hinder the older population's access to and use of appropriate services. Some people, for example, experience financial hardship following retirement, and the cost or perceived cost of oral treatment may deter them from visiting a dentist. Such barriers to oral health care should be reduced. Age-friendly and prevention-oriented third-party payment systems may contribute to effective use of oral health services amongst old age people (Grimm, 2014)

#### **2.4.3. TRAINING FOR SERVICE AND CARE**

Training for service and care Training in geriatric dentistry has been included in curricula for dental students and practitioners for decades; such courses are for the most part apparently oriented towards the biomedical and clinical aspects of care rather than the sociological and behavioural factors of aging and care. Understanding the economic and psychosocial dimensions of poor oral health also in terms of function impairment and the negative impact on quality of life is fundamental to provision of adequate oral health care, communication and health education, and the organization of public health programmes for improved oral health of older people.

#### **2.4.4. RESEARCH FOR ORAL HEALTH OF OLDER PEOPLE**

Research for oral health of older people there is no doubt that oral health professionals and researchers in recent years have become more aware of and pay more attention to older people as a group. Dental associations, scientific societies, and educational and political organizations have published many documents on aging and oral health (ML.Darby, 2015).

However, systematic efforts must be made to translate existing knowledge into practice and operational research on outcomes of oral health intervention programmes are urgently needed for policy development, Epidemiological research of the oral health status among older people has

been carried out in several industrialized countries, but is badly needed in most developing countries (Matthias, 2020).

Traditionally, epidemiological research relies on clinical oral health indicators. There is a growing awareness that such information should be complemented by socio-behavioural data on feelings of well-being, oral functioning and quality of life. Research into socio-dental indicators and measurements may assist analysis of the impacts of oral diseases and disorders on individuals as well as at society level (Walsh MM, 2015)

## **2.6. RESEARCH GAP**

A gap is something that remains to be done or learned in an area of research; it's a gap in the knowledge of the researcher in the field of research, unexplored aspect in one's area of study; it is important for researchers to identify research gaps prior to venturing into research. There has been ongoing debates on this issue of research gaps by many researchers over the years, and of recent writers like (Frisch& Huppenbauer, 2014)

Previous studies have been conducted on assess the level of knowledge about dental hygiene among elderly, Other studies have undertaken Assessment of the availability of materials used in oral hygiene among elderly people as well as difference between the practical manner about oral hygiene among elderly people but few studies have been Assessment the knowledge on dental hygiene in rural areas among elderly people which really inspired present researchers to conduct research entitled "Assessment the knowledge on dental hygiene in rural areas among elderly people "

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.0. Introduction**

This chapter was included, the research approaches and research design, target population, sample size , sampling procedure, data collection methods and procedures, data analysis, ethical consideration. Reliability and Validity.

### **3.1. Research approaches/Research Design**

#### **3.1.0. Research Approaches**

Research approaches: are plans and the procedures for research. That span the steps from broad assumptions to detailed methods of data collection, analysis, and interpretation. In this research was used quantitative approach.

Quantitative Approaches: Refers to emphasize objective measurements and the statistical, mathematical, or numerical analysis of data collected through polls, questionnaires, and surveys, or by manipulating pre-existing statistical data using computational techniques. Quantitative research focuses on gathering numerical data and generalizing it across groups of people or to explain a particular phenomenon (Babbie, 2018)

### **3.2. Research design**

Research design refers is the 'procedures for collecting, analyzing, interpreting and reporting data in research studies' (Creswell & Plano Clark 2019). the purpose of a descriptive design is to provide a picture of a situation, person or event or show how things are related to each other and as it naturally occurs (Blumberg, Cooper and Schindler, 2020).In this research will used Descriptive design as cross section study.

### **3.3. Target Population**

The study population refers as the group of people to whom you want your research results to apply (Jennifer, 2017).The study population comprises total patients who will attend the hospital as outpatient's department during the period of data collection and meets the inclusion criteria reference. According to Kibogora District Hospital in the outpatient Department, they receive at least 410 Patients in Kibogora District Hospital About outpatients age above 45years Hence this study was the total population of 410people

### 3.4. Sampling strategy

#### 3.4.1. Stratified sampling technique

A stratified is a randomly selected subset of a population in this sampling method, each member of the population has an exactly equal chance of being selected. It enables a researcher to select the sample at strata from the sampling frame using random number, in this study 80 Patients.

### 3.5. Sample Size

Sample size is an important concept in statistics, and refers to the number of individual pieces of data collected in a survey (Sciencing, 2017). In this study, researcher will work with 80 of outpatients at Kibogora District Hospital. Using Granular Formula of sample size calculation in this study reads as follows: Sample size  $= \frac{N}{1+N(e)^2}$

Where n =Sample population

N=Total population

e=the standard margin of error at 90% confidence interval which is equal to 10% or 0.1

$$\begin{aligned}\text{Sample size} &= \frac{N}{1+N(e)^2} \\ &= \frac{410}{1+410(0.1)^2} \\ &= \frac{410}{1+410 \times 0.01} \\ &= \frac{410}{1+4.1} \\ &= \frac{410}{5.1} \\ &= 80.392 \approx 80 \text{ people}\end{aligned}$$

The total sample size was 80 patients

### **Inclusion criteria**

Hospitalized and outpatients age above 65years at KIBOGORA DISTRICT HOSPITAL and Collaborative patients

### **Exclusion criteria**

Patients age less than 65 years and critically ill patients (not able to talk)

### **3.6. DATA COLLECTIONS PROCEDURE**

Data collection instruments is the process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes.

In this study, a self-administer questionnaire was been used for participant to collect data. Administer of questionnaire was been used for illiterate participants where every participant will be helped by researchers to write the answer of the questions on the space provided on questionnaire. Our questionnaire was comprise related to knowledge materials and practice regarding oral hygiene(Joseph &Guy Hutton,2019).

### **Observation**

It is a method wherein an observer analyzes the activities and behaviors of individuals in a natural setting. In this process, you do not need to ask any questions or prompt the respondents to act in a certain way:A setting or situation that you can observe,You need to form a system or set of standards to make observations and The observations that you make need to be recorded simultaneously.

### **3.7. Pilot study**

A pilot study asks whether something can be done, should the researchers proceed with it, and if so, how. However, a pilot study also has a specific design feature; it is conducted on a smaller scale than the main or full-scale study. In other words, the pilot study is important for improvement of the quality and efficiency of the main study ( Korean, 2017)

### **3.8. Ethical Considerations**

In order to be sure that the safety and privacy of participants is adequate and to prevent human rights abuse, before conducting this research the researcher was requested the permission to KIBOGORA POLYTECHNIC. Participant was been given clear explanation about the study (aim, objectives, duration and importance of participation), but there is no any motivation in terms of money or any kind of motivation for participant, who agreed to participate sign a consent form where participation is voluntary. Informed consent was signed by everyone before participating in the research and there are no names of participants on questionnaires and not sharing information to any other person known by participants without the participant permission to assure participant's confidentiality for all information that they have provided (Ismail., 2019), the participant right (privacy, confidentiality, respect, dignity, patient safety and information) have to be respected. Participants are allowed to refuse or withdraw at any stage of the study.

### **3.9. Data analysis**

Data was analyzed by using Microsoft Excel, the analyzed data was been focused on descriptive statistics whereby percentages, frequencies, mean was been used. Socio-demographic and objectives characteristics have to be displayed in the frequencies and percentages whereas health behavior information has to be displayed in frequencies.

## **CHAPTER FOUR: DATA INTERPRENTATION, ANALYSIS, INTERPRENTATION AND SUMMARY**

### **4.0. INTRODUCTION**

This chapter presents all findings from the research on Kibogora District Hospital. The data collected in this research was collected through the in the form of questionnaires with the points views of respondents in tables and Figures in data presentation.

### **4.1. DATA PRESENTATION**

Data presentation was consist of the social demographic of the respondents, knowledge about Oral hygiene among elderly ,Materials used in oral hygiene among elderly and practice of oral hygiene among elderly

#### **4.1.0. SOCIAL DEMOGRAPHIC OF THE RESPONDENTS**

The following was discussed by the following table and figure to explain this information.

**Table 1:the date of day attending Kibogora District Hospital (n=80)**

Date	Frequency	Percentages
08/02/2022	16	20%
09/02/2022	20	25%
10/02/2022	10	13%
11/02/2022	18	22%
12/02/2022	16	20%
TOTAL	80	100%

Table 4.1.1. the date of day attending kibogora District hospital (n=80)

The table above shows the numbers of date used by collecting data Kibogora District Hospital 08/02/2022:16(20%) Patients attending Kibogora District Hospital, 09/02/2022:20(25%) Patients attending Kibogora District, 10/02/2022: 10(13%), Patients attending Kibogora District 11/02/2022:18(22%) Patients attending Kibogora District and 12/02/2022:16(20%)

Figure 1: Distribution of respondents by age (N=80)

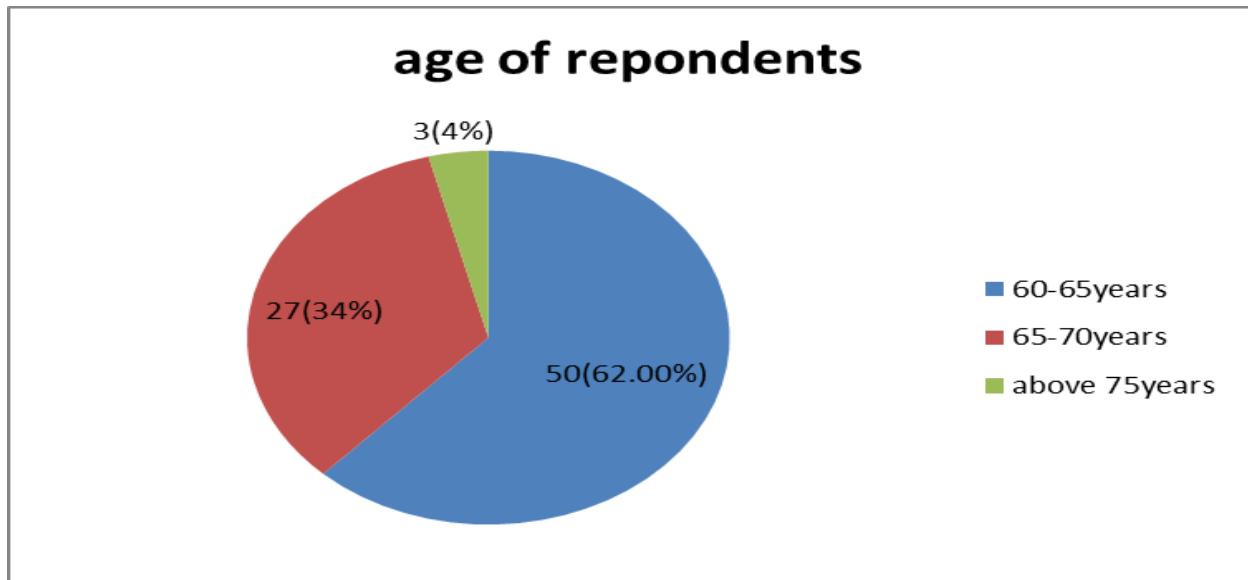


Figure 4.1.1. Distribution of respondents by age (N=80)

The figure above explain the age of respondents like 60-65 years: 50(62%), 65-70 years: 27(34%), 70 above 70 years 3(4%).

Figure 2: Distribution of respondents by sex (n=80)

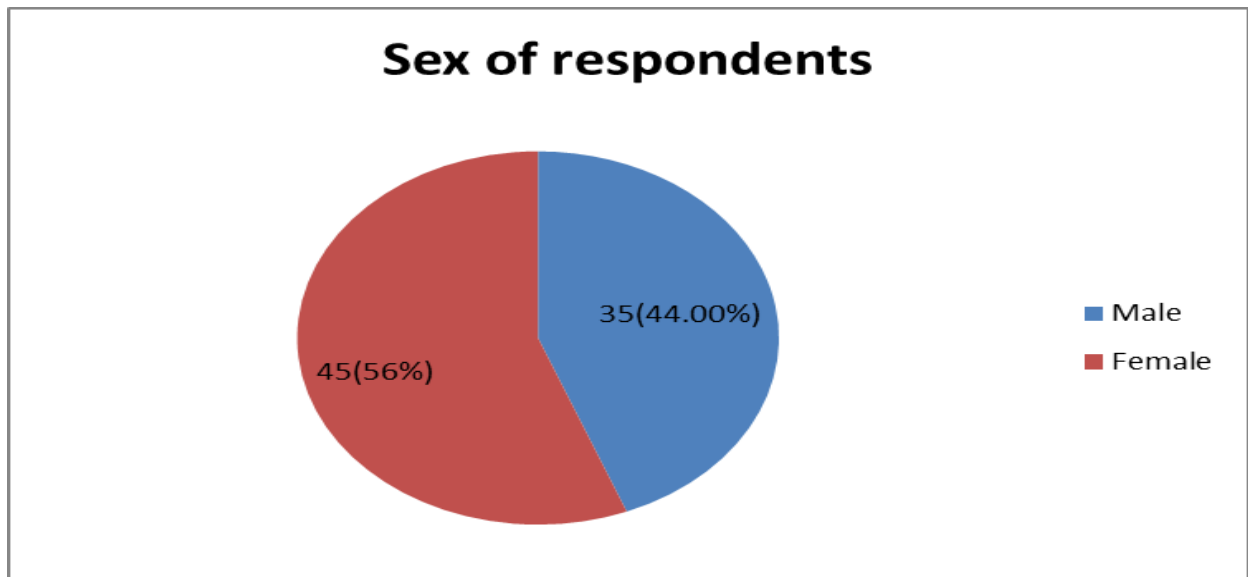


Figure 4.1.2. Distribution of respondents by sex (n=80)



The Figure above shows the number of males and boys on sex of respondents in male 35(44%) and Female 45 (56%)

Table 2:distribution of respondents related to the job occupation(n=80)

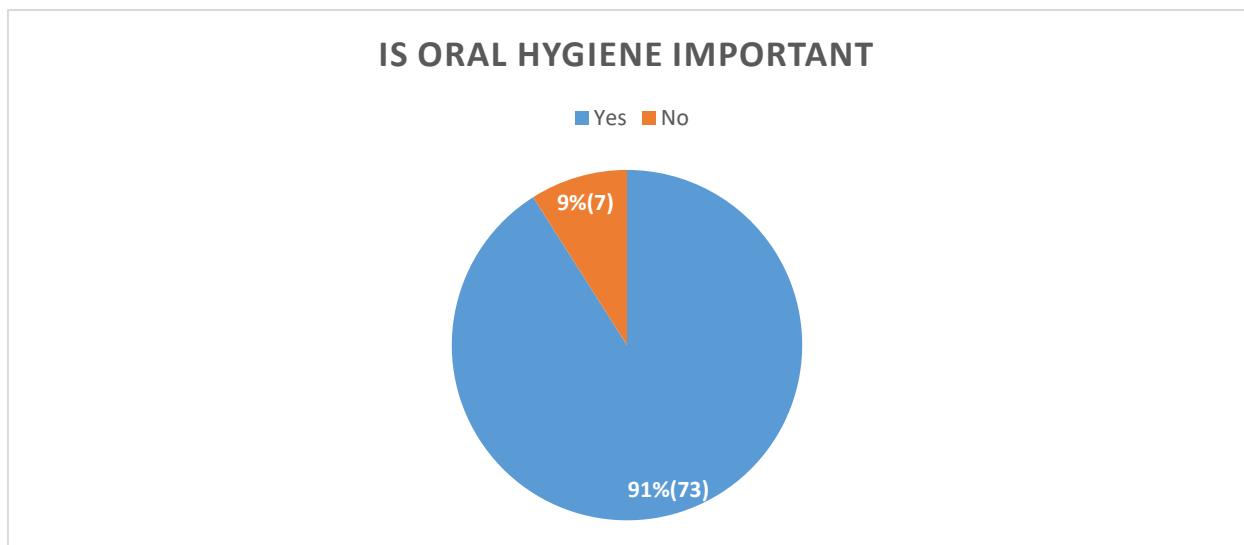
<b>Job occupation</b>	<b>Frequency</b>	<b>Percentages</b>
Public worker	10	13%
Farmers	47	59%
Worker of others	9	11%
Individual workers	14	17%
<b>TOTAL</b>	<b>80</b>	<b>100%</b>

**Table 4.1.2: distribution of respondents related to the Job Activities (n=80)**

The table above show the job occupation worked by the respondents was been public worker 10(13%), Farmers 47(59%), Worker of others 9(11%), Individual 14(17%).

#### 4.2. KNOWLDGE OF ORAL HYGIENE AMONG ELDERLY

Figure 3:Distribution of respondents according to oral hygiene importance (n=80)



**Figure 4.2.3.Distribution of respondents according to oral hygiene importance (n=80)**

The figure above shows respondents according to oral hygiene importance because high number was responding saying yes was 73 (91%) and respondent saying was No 7(9%)

Figure 4: Distribution of respondents according to the importance of oral hygiene (n=80)

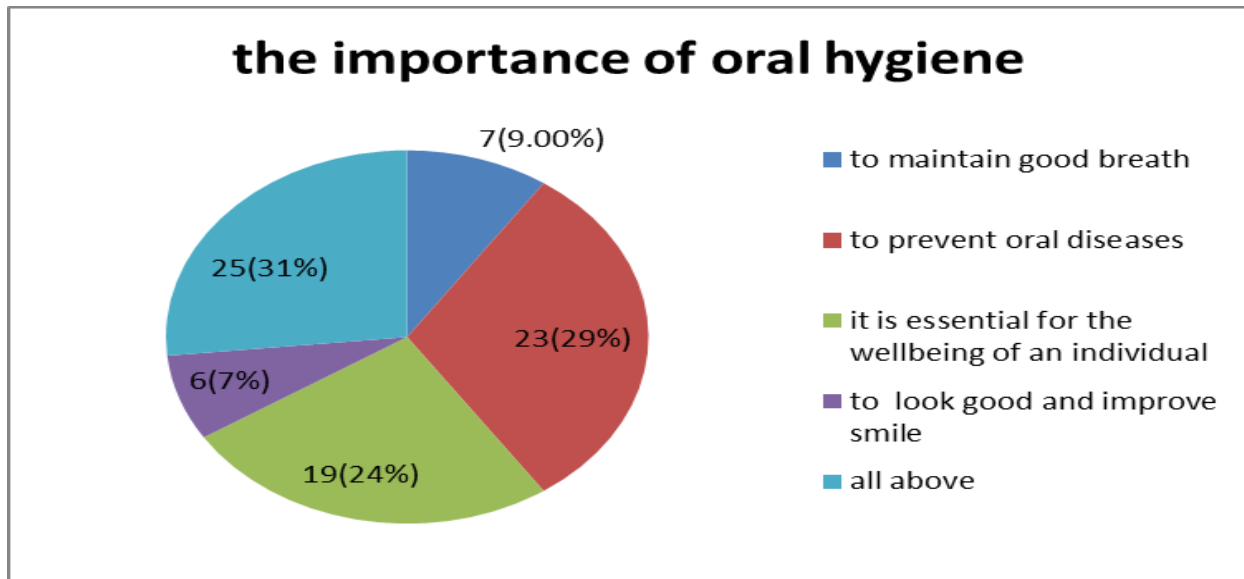


Figure 4.2.4. Distribution of respondents according to the importance of oral hygiene (n=80)

The Figure above show the importance of oral hygiene , To Maintain good breath 7(9%), To prevent oral diseases 23 ( 29%), It is essential for the wellbeing of an individual 19(24%), To look good and improve smile 6 (7%) and All above 25 ( 31%).

Table 3: Distribution of respondents according to meaning of oral hygiene (n=80)

Meaning	Frequency	Percentages
Action of brushing teeth and mouth	20	25%
Practice of brushing teeth, tongue twice a day and flossing gums once a day	50	63%
I don't know	10	12%
<b>TOTAL</b>	<b>80</b>	<b>100%</b>

Table 4: Distribution of respondents according to meaning of oral hygiene (n=80)

The table above show views of respondents related to the meaning of Oral hygiene that are

Action of brushing teeth and mouth 20(25%), practice of brushing teeth, tongue twice a day and flossing gums once a day 50 (63%) and I don't know 10 (12%)

Table 5: Distribution of respondents on Timeline of teeth brush (n=80)

<b>Time</b>	<b>Frequency</b>	<b>Percentages</b>
Morning	15	19%
Evening	17	21%
Morning and evening	10	12%
After eating and Drink	20	25%
Before slipping	18	23%
<b>Total</b>	<b>80</b>	<b>100%</b>

**Table 4.2.5: Distribution of respondents on Timeline of teeth brush (n=80)**

Table above show the response of Timeline of teeth brush on Morning 15 (19%), Evening 17(21%), Morning and evening 10(12%), After eating and drink 20(25%), and Before slipping 18(23%)

Table 6: Distribution of respondents related why don't you brush regularly (n=80)

<b>Why don't you brush regularly</b>	<b>Frequency</b>	<b>Percentages</b>
I Didn't have money	20	25%
Forgetfulness	35	44%
I don't know its importance	15	19%
No need	10	12%
<b>Total</b>	<b>80</b>	<b>100%</b>

**Table 4.2.6: Distribution of respondents related why don't you brush regularly (n=80)**

The table above show the response of respondents according to reasons why don't you brush regularly which explain the I don't have money 20(25%), no need 10(12%), Forgetfulness 35(44%) and I don't know its importance 15(19%).

Table 7: Distribution of respondents related to mouth brushing after have meals, sweets drinks prevents oral problems (n=80)

<b>Prevents</b>	<b>Frequency</b>	<b>Percentages</b>
Yes	67	84%
No	3	4%
I don't Know	10	12%
<b>Total</b>	<b>80</b>	<b>100%</b>

**Table 4.2.7: Distribution of respondents related to Mouth brushing after having meals, sweets drinks prevents oral problems(N=80)**

The table above show response of respondents related to Mouth brushing after having meals, sweets drinks prevents oral problems hence Yes 67( 84%), No 3(4%), and I don't know 10(12%).

### **4.3. THE AVAILABILITY OF TOOLS USED ORAL HYGIENE AMONG ELDERLY**

Table 8: People awareness on material of Months Hygiene (n=80)

<b>Do you know the materials used in oral hygiene</b>	<b>Frequency</b>	<b>Percentage</b>
Yes I Know	80	100%
No I don't know	0	0%
<b>TOTAL</b>	<b>80</b>	<b>100%</b>

**Table 4.3.8: People awareness on material of Months Hygiene (n=80)**

The table above show the People awareness on material of Months Hygiene shows Yes I know which have the frequency of 80 and percentages of 100% and No I don't know which have the frequency of 0 and percentages of 0%.

Figure 5:Distribution of respondents on Material used to clean teeth (n=80)

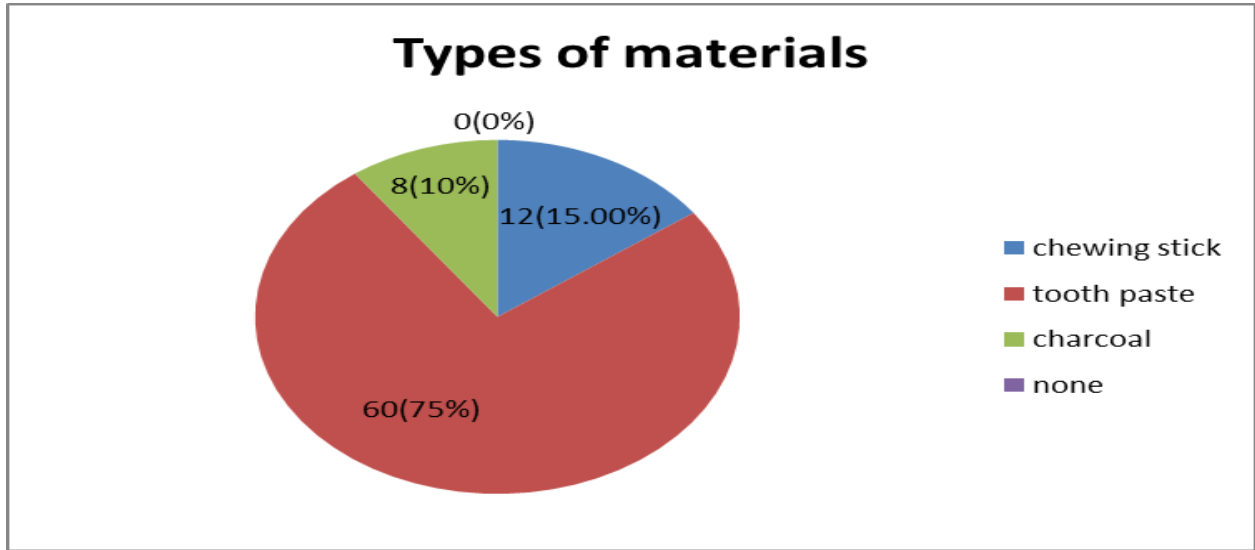


Figure 4.3.5. Distribution of respondents on Material used to clean teeth (n=80)

The figure above show the different views of respondents according to the Material used to clean teeth,12(15%)people use chewing stick to clean their teeth, 60(75%) use tooth paste and 8(10%) use charcoal to clean their teeth.

Table 9:Distribution of respondents according to the materials needed for oral hygiene available (n=80)

The materials needed for oral hygiene available.	Frequency	Percentages
YES	77	96%
No	3	4%
<b>Total</b>	<b>80</b>	<b>100%</b>

Table 4.3.9: Distribution of respondents according to the materials needed for oral hygiene available. (n=80)

Table above show the material needed for oral hygiene are available. Yes 77(96%) and No 3(4%)

#### 4.4. RELATED TO THE PRACTICAL MANNER OF ORAL HYGIENE AMONG ELDERLY

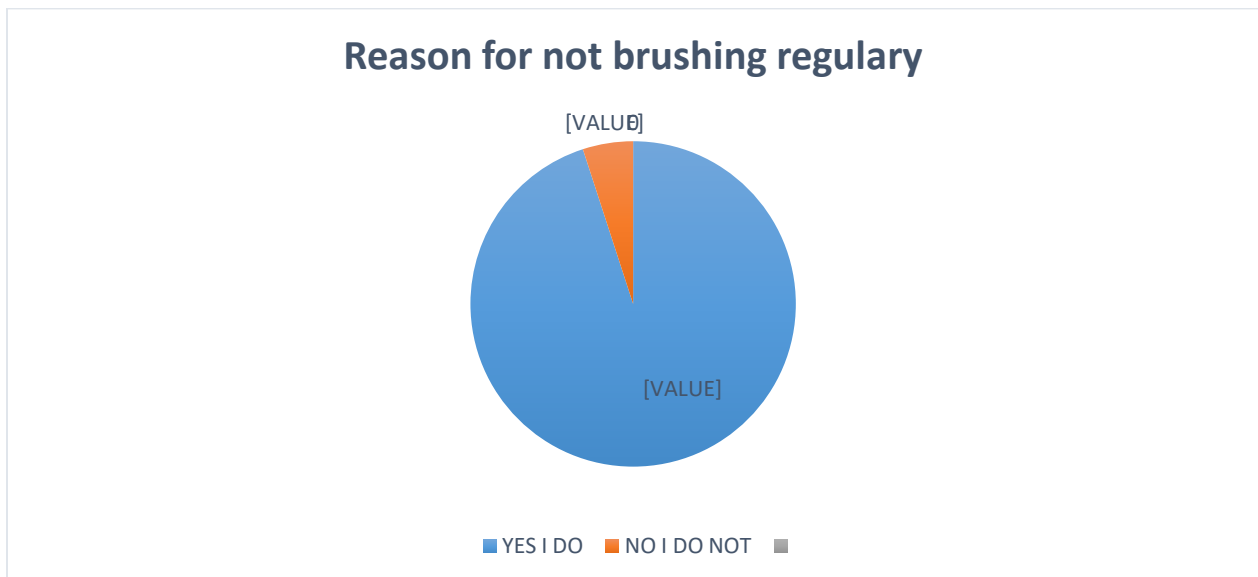
Table 10:Distribution of respondents related to practice of oral hygiene among elderly (n=80)

Do you brush your teeth	Frequency	Percentages
Every day		
YES	60	75%
NO	20	25%
<b>TOTAL</b>	<b>80</b>	<b>100%</b>

**Table 4.4.10: Distribution of respondents related to Practice of oral Hygiene among Elderly (n=80)**

Table above show the respondents on you brush your teeth regularly if YES 60(75%) and NO 20 (25 %.)

Figure 6:Distribution of respondent related to the reason for not brushing regularly(n=80)



**Figure 4.4.6. Distribution of respondent related to the reason for not brushing regularly (n=80)**

The Figure above shows the reason for people do not brushing regularly by the 95% was people brushing regularly and 5% was people do not brushing regularly.

Table 11: Distribution of respondents related to the how often do you brush your teeth (n=80)

<b>Time you brush your teeth</b>	<b>Frequency</b>	<b>Percentages</b>
Once a day	10	12%
Twice a day	20	25%
Once a week	0	0%
After meal and sweet drinks	50	63%
I have never	0	0%
<b>Total</b>	<b>80</b>	<b>100%</b>

**Table 4.4.11: Distribution of respondents related to the How often do you brush your teeth. (n=80)**

The table above shows the time you brush your teeth: once a day 10(12%), twice a day 20 (25%), once a week 0(0%), after meal and sweet drinks 50(63% and I have never 0(0%).

Table 12: Distribution of respondents on Frequency of teeth brush change (n=80)

<b>Month you change your brush</b>	<b>Frequency</b>	<b>Percentages</b>
Every month	25	31%
Every 2 month	40	50%
Every3 month	10	13%
Every 6 mouth	5	6%
Never	0	0%
<b>Total</b>	<b>80</b>	<b>100%</b>

**Table 4.4.12: Distribution of respondents on Frequency of teeth brush change (n=80)**

The table above shows Frequency of teeth brush change, every month 25(31%), every 2 month 40(50%), every 3 month 10(13%), every 6 month 5(6%) and never 0(0%).

Table 13:Teeth brush after meal/sweets/fizzy drinks (n=80)

Teeth brush after meals/sweets/fizzy drinks.	Frequency	Percentages
YES I do	70	88%
No I don't	10	12%
<b>Total</b>	<b>80</b>	<b>100%</b>

**Table 4.4.13: Teeth brush after meal/sweets/fizzy drinks (n=80)**

The table above shows practice of brush after meals/sweets/fizzy drinks. 70(88%) peoples brush their teeth after meal and 10 (12%) do not brush their teeth after meal

Figure 7:Distribution of respondents on Regular tongue clean lines (n=80)



**Figure 4.4.7: Distribution of respondents on Regular tongue clean lines (n=80)**



The Figure above explain in deeply the clean your tongue regularly by the respondents, yes I do 76(95%) and no I don't 4(5%).

## **4.5. DISCUSSION OF FINDINGS**

### **4.5.1 SOCIAL DEMOGRAPHIC OF THE RESPONDENTS**

According to the numbers of date used by collecting data Kibogora District Hospital 08/02/2022:16(20%) Patients attending Kibogora District Hospital, 09/02/2022:20(25%) Patients attending Kibogora District, 10/02/2022: 10(13%), Patients attending Kibogora District 11/02/2022:18(22%) Patients attending Kibogora District and 12/02/2022:16(20%),related to the age of respondents like 60-65years: 50(62%), 65-70 years: 27(34%), 70 above 70 years 3(4%), the number of males and boys on sex of respondents in male 35(44%) and Female 45 (56%) and related to the job occupation worked by the respondents was been public worker 10(13%), Farmers 47(59%), Worker of others 9(11%), Individual 14(17%).

### **4.5.2.THE LEVEL OF KNOWLEDGE ABOUT ORAL HYGIENE AMONG ELDERLY PEOPLE.**

According to the Primary, it is essential to the health of own mouth, which can assist us in avoiding oral Infections like dental caries. Too many cavities can be hazardous, and those cavities transform into boil can lead to even worse troubles such as root canal or teeth extraction. Secondly, good Oral hygiene is essential cosmetically too. (Rushworth and Kanatas, 2020).our findings of research show the largest number of respondents 91% knew the importance of oral hygiene importance and 9% did not knew the importance of oral hygiene,the importance of oral hygiene like: To Maintain good breath 7(9%), To prevent oral diseases 23 (29%), It is essential for the wellbeing of an individual 19(24%), To look good and the smallest number of respondents was improve smile with 6 (7%),related to the meaning of Oral hygiene that are the largest number of respondent was 50(63%) on tongue twice a day and flossing gums once a day and the smallest number of respondents was 10(12%) I don't knew brushing teeth, the Timeline of teeth brush on Morning 15 (19%), Evening 17(21%), Morning and evening 10(12%), After eating and drink 20(25%), and Before slipping 18(23%), according to reasons why don't you brush regularly which explain the I don't have money 20(25%), no need 10(12%), Forgetfulness 35(44%) and I don't know its importance 15(19%),related to Mouth brushing after

having meals, sweets drinks prevents oral problems hence Yes 67( 84%), No 3(4%), and I don't know 10(12%).

#### **4.3.3 RELATED TO THE AVAILABILITY OF TOOLS USED IN ORAL HYGIENE**

According to the other Improving access to affordable dental coverage, promoting the establishment of oral home, encouraging cultural sensitivity among the oral team, and providing resources to those with limited English proficiency could improve utilization of oral health services among Latino and Hispanic population. (Gharlipour et al., 2016) Our research explain According thAccording to the People awareness on material of Months Hygiene shows Yes I know which have the frequency of 80 and percentages of 100% and No I don't know which have the frequency of 0 and percentages of 0%.according to the Material used to clean teeth,12(15%)people use chewing stick to clean their teeth, 60(75%) use tooth paste and 8(10%) use charcoal to clean their teeth, the material needed for oral hygiene are available. Yes 77(96%) and No 3(4%) and brush your teeth regularly if YES 60(75%) and NO 20 (25 %)

#### **4.3.4 RELATED TO THE PRATICAL MANERORAL HYGIENE AMONG ELDERLY**

According to Due to a lack /unequal distribution of oral health professionals, a lack of appropriate facilities, and - in many countries in Africa - no dedicated oral health budget, people incur significant out-of-pocket expenses to access oral health services, while most oral diseases in the African Region remain untreated(WHO,2017).our research show the reason for people do not brushing regularly by the 95% was people brushing regularly and 5% was people do not brushing regularly, the time you brush your teeth: once a day 10(12%), twice a day 20 (25%), once a week 0(0%), after meal and sweet drinks 50(63% and I have never 0(0%),The Frequency of teeth brush change, every month 25(31%), every 2 month 40(50%), every 3 month 10(13%), every 6 month 5(6%) and never 0(0%),the practice of brush after meals/sweets/fizzy drinks. 70(88%) peoples brush their teeth after meal and 10 (12%) do not brush their teeth after meal and the clean your tongue regularly by the respondents, yes I do 76(95%) and no I don't 4(5%)

#### **4.4. SUMMARY OF FINDINGS**

This chapter was covered by three specific objectives that are, the first objectives was assess the level of knowledge about Oral hygiene among elderly attending kibogora hospital. The oral hygiene is importance Because high number was responding yes the importance of oral hygiene and The second objectives was To find out the availability of tools used in Oral hygiene among elderly people attending kibogora district hospital ,types of materials used by oral hygiene that is tooth paste, And Third objectives To identify practical manner about oral hygiene among elderly people attending kibogora district hospital, the reason for not brushing regularly is two Getting up late the time you brush your teeth is After meal and sweet drinks, how often do you change your brush, every 2 month.

## **CHAPTER FIVE CONCLUSION AND RECOMMENDATION**

### **5.0. INTRODUCTION**

This chapter was consist of general conclusion about the research on assessment of knowledge on Oral hygiene in rural areas among elderly people attending kibogora district hospital, recommendations supporting the topics and suggestion for further research.

### **5.1. CONCLUSION**

the first objective about knowledge of oral hygiene the largest number of respondents was saying yes for Sweet drinks prevent oral problems for 84% and the smallest number of respondents who was saying on importance of oral hygiene is look good and improve smile 7%,the second objectives about the availability of materials used in oral hygiene the largest number of respondents saying the types of materials used by oral hygiene in tooth paste for 75% and smallest number of respondents saying charcoal for 10% and the third objectives was about Practical manner about oral hygiene the largest number of respondents saying after meal and sweet drinks in 63% and the smallest number of respondent the time you teeth is once a day 12%. According to the findings of our research, as conclusion all people should brush their teeth regularly and cleaning between their teeth by using dental floss, tooth brush and tooth paste.

### **5.2. RECOMMENDATIONS**

According to the information from the findings of the study related on assessment of knowledge on Oral hygiene in rural areas among elderly people attending kibogora district hospital, the following recommendations are suggested in this study.

#### **5.2.1. TO ELDERLY PEOPLE**

Should make forum group to study and how used tooth brush and tooth paste in regularly time.

Should brush at least twice a day with a fluoride-containing tooth paste, floss at least once a day-rinse with an antiseptic mouth wash.

Should eat a healthy diet and limit sugary food and drinks.

#### **5.2.2 TO KIBOGORA DISTRICT HOSPITAL**

Should facilitates elderly people in training for using tooth brush and others tools used to reduce the diseases of Oral hygiene.

### **5.2.3 To Ministry of health**

Ministry of health should be facilitate and mobilize people to use teeth brush.

### **5.3. SUGGESTIONS FOR FUTHER STUDIES**

The findings of the study was big reality which require to be expanded more. It was the same as system that we recommend other researcher to work on, the following areas are suggested for further study.

The role of lows and policy in increasing the use of oral health care system and services in rural areas among elderly.

Assessment of availability of materials used in oral hygiene among elderly people.

Actions of government on improvement of oral health care services among peoples.

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## **APPENDICES**

**Appendices 1: INTRODUCTORY LETTER**

**KIBOGORA POLYTECHNIC**

**FACULTY OF HEALTH SCIENCES**

**DEPARTMENT OF GENERAL NURSING**

Dear sir, madam,

We called UWONKUNDA MUGENI Honorine and UWIMANA Joyeuse; Our registration number are 2000853 and 2000857 a student of Kibogora Polytechnic, Faculty of Health Sciences, and Department of General Nursing and you write this letter to humbly request you to allow our carry out my research in your institution.

We currently carrying a research entitled study about assessment Of Knowledge on Oral Hygiene in Rural Areas among Elderly People Attending Kibogora District Hospital. Case Study: Kibogora - District Hospital .Period (2021-2022) for the sake of completing our Bachelor's Degree in Health Sciences at Kibogora Polytechnic

I hereby request you to fill this questionnaire in order to get relevant information for this research. Your responses will be kept confidential and will be used for only the purpose stated above.

Your cooperation is our promotion

## Appendices 2: QUESTIONNAIRE

### 1. Socio-demographic data

Age.....

Sex: female  Male

Level of Education:

Hospital.....

Social activities: Farmer  Public worker  others

### I. QUESTIONS ABOUT KNOWLDGE OF ORAL HYGIENE AMONG ELDERLY

#### Is Oral hygiene important?

Yes

no

#### If yes, choose its importance

1. To Maintain good breath
2. To prevent oral diseases
3. It is essential for the wellbeing of an individual
4. To look good and improve smile
5. All above

#### What is oral hygiene?

Action of brushing teeth and mouth

practice of brushing teeth, tongue twice a day and flossing gums once a day

I don't know

**When are we supposed to do oral hygiene?**

Morning

Evening

Morning and evening

After eating and drink sweet drinks

**4. Why don't you brush regularly?**

I don't have money

no need

Forgetfulness

I don't know its importance

**5. Mouth brushing after having meals, sweets drinks prevents oral problems?**

Yes

No

I don't know

**II. QUESTIONS ABOUT MATERIALS OF ORAL HYGIENE AMONG ELDERLY**

**1. Do you know the materials to use in oral hygiene?**

Yes I do

No I don't

**2. Which type of material do you use for cleaning your teeth?**

Chewing stick

tooth paste

Charcoal

other

none

**3. Are the materials needed for oral hygiene available?**

Yes

No

**III. QUESTIONS ABOUT PRACTICE OF ORAL HYGIENE AMONG ELDERLY**

**1. Do you brush your teeth regularly?**

Yes

no

**If no, reason for not brushing regularly?**

Lazy

Getting up late

I don't like

**2. How often do you brush your teeth?**

Once a day

Twice a day

Once a week

After meal and sweet drinks

I have never

**3. How often do you change your brush?**

Every month

Every 2 month

Every 3 month

Every 6 month

Never

**Do you brush your mouth after meals/sweets/fizzy drinks?**

Yes I do

No I don't

**Do you clean your tongue regularly?**

Yes I do

No I don't

## **IBIBAZO KUNDWARA YAMENYO**

1. Amakuru Agaragaza Umwirondoro wabazatanza amakuru

Itariki.... / ..... / 2022

Imyaka .....

Igitsina: igitsina gore  Umugabo

Ibitaro: .....

Aderesi: Akarere ..... Umurenge..... akagali .....umudugudu

Urwego rw'amashuri wize.....

Ibikorwa by'imibereho: Umuhinzi  Umukozi wa Leta  abandi

### **I. Ibibazo bijyanye n'ubumenyi**

1. 1. Isuku yo mu kanwa Ni ngombwa?

Yego

oya

Niba ari yego, hitamo akamaro kayo

1. Kugumana umwuka mwiza wo mukanwa
2. Kurinda indwara zo mu kanwa
3. Ni ingenzi mu mibereho yumuntu
4. Kugaragara neza no kugira inseko nziza
5. Byose nibyo

2. Isuku yo mu kanwa Ni iki?

igikorwa cyo koza amenyo n'umunwa

koza amenyo, ururimi kabiri kumunsi no kunyuza akadodo mumenyo rimwe kumunsi

Simbizi

3. Ni ryari dukwiye gukora isuku yo mu kanwa?

Mugitondo

Nimugoroba

Mugitondo na nimugoroba

Nyuma yo kurya

Nyuma yuko uryama

4. Kuki utoza amenyo buri gihe?

Nta mafaranga mfite

nta mpamvu

Kwibagirwa

Sinzi akamaro kabyo

5. Koza mu kanwa nyuma yo kurya, ibiryo n'ibinyobwa biryohereye birinda ibibazo byo mu kanwa?

Yego

Oya

Simbizi

## **II. Ibibazo bijyanye n'ibikoresho**

1. Waba uzi ibikoresho byo gukoresha isuku yo mukanwa?

Yego ndabizi

Oya ntabyo nzi

2. Ni ubuhe bwoko bw'ibikoresho ukoresha mu koza amenyo?

Guhekenya uduti

Umuti Woza amenyo

Amakara

ibindi

nta na kimwe

3. Ibikoresho bikenewe mu isuku yo mu kanwa biraboneka?

Yego

Oya

## **III. IBIBAZO BYEREKEYE UBURYO BWO KOZA AMENYO**

1. Woza amenyo yawe buri gihe?

Yego

Oya

Niba ari oya, impamvu yo kutoza amenyo buri gihe?

Ubunebwe

Kubyuka ntinze



Simbikunda

2. Ni kangahe woza amenyo?

Rimwe ku muni

Kabiri ku muni

Rimwe mu cyumweru

Sinigeze mbikora

3. Ni kangahe uhindura uburoso bw'amenyo?

Buri kwezi

Buri mezi 2

Buri mezi 3

Buri mezi 6

Nta na rimwe

4. Woza mu kanwa nyuma yo kurya / ibiryohereye / ibinyobwa bya gaz?

Yego

Oya

5. Woza ururimi rwawe buri gihe?

Yego

Oya

APPENDICES 3: Research letter from kibogora polytechnic



KIBOGORA POLYTECHNIC



Granted Accreditation and Legal Personality by the Ministerial Order N° 7/2015 Official Gazette N° 03 of 19/01/2015 P.O.Box: 31 Rusizi-Rwanda Tel:(+250)280100759 E-mail:info@kp.ac.rw Website: [www.kp.ac.rw](http://www.kp.ac.rw)

Student Dissertation Project's Letter

January,31<sup>th</sup>2022

**To whom it may concern**

We write this letter to humbly request you to allow Mrs UWONKUNDA MUGENI Honorine and UWIMANA Joyeuse (2000853 &2000857) to conduct research in your organization/institution/territorial entity. The above mentioned are bonafide students of kibogora polytechnic pursuing bachelor's degree in general nursing department. These candidates are currently conducting a research entitled "**Assessment of Knowledge on Dental Hygiene in Rural Areas Among Erdely People Attending Kibogora District Hospital**"we are convinced that your organization/institution/territorial entity will constitute a valuable source of information pertaining to their research. The purpose of this letter is to humbly request you to avail them with the pertinent information they may need. We pledge to ensure that all provided information will be used in the strict academic purpose.

Any assistance rendered to the candidates will be highly appreciated.

Approved by:

Yours,

*fo* **Dr Eleazar NDABARORA,Phd**

Dean of Health Sciences

Kibogora Polytechnic



## APPENDICES 4: RESEARCH LETTER FROM KIBOGORA DISTRICT HOSPITAL



KIBOGORA POLYTECHNIC

Granted Accreditation and Legal Personality by the Ministerial Order N<sup>o</sup> 7/2015 Official Gazette N<sup>o</sup> 03 of 19/01/2015 P.O.Box: 31 Rusizi-Rwanda Tel:(+250)280100759 E-mail:info@kp.ac.rw Website: [www.kp.ac.rw](http://www.kp.ac.rw)

### Student Dissertation Project's Letter

January, 31<sup>th</sup> 2022

#### To whom it may concern

We write this letter to humbly request you to allow Mrs UWONKUNDA MUGENI Honorine and UWIMANA Joyeuse (2000853 & 2000857) to conduct research in your organization/institution/territorial entity. The above mentioned are bonafide students of kibogora polytechnic pursuing bachelor's degree in general nursing department. These candidates are currently conducting a research entitled "**Assessment of Knowledge on Dental Hygiene in Rural Areas Among Erdely People Attending Kibogora District Hospital**" we are convinced that your organization/institution/territorial entity will constitute a valuable source of information pertaining to their research. The purpose of this letter is to humbly request you to avail them with the pertinent information they may need. We pledge to ensure that all provided information will be used in the strict academic purpose.

Any assistance rendered to the candidates will be highly appreciated.

Approved by:

Yours,

 **Dr Eleazar NDABARORA, Phd**

Dean of Health Sciences

Kibogora Polytechnic

