Factors Affecting Utilization of Oral and Dental Services among Patients attending Dental Clinic at Katate Health Center IV, Kanungu District. A Cross-sectional study.

Syrus Arineitwe*

Medicare Health Professionals College, Kampala, Uganda

Abstract

Background.

The Global Burden of Disease Study (2017) estimated that oral diseases affect 3.5 billion people worldwide, with untreated dental caries being among the most prevalent non-communicable diseases (WHO, 2017). The main objective of this study was to determine the factors affecting the utilization of oral and dental services at Katate Health Centre IV, Kanungu district.

Methodology.

A descriptive cross-sectional study was done on 61 randomly sampled respondents from whom data was collected using a questionnaire and then analyzed using SPSS version 21.

Results.

The study identified individual factors affecting the utilization of oral and dental services which were; traditional beliefs (4.6%), traditional healers being part of dental care (67%), use of native herbs (63.9%), lack of awareness (80%), myths and misconceptions (21.3%) and some believe that dental caries and tooth extractions do not require medical interventions (9.8%).

More still, the study revealed different socio-economic factors which included; high costs of dental service (71%), unemployment (19.7%), lack of insurance (75%), low levels of education (77%), and low family income (50.8%). Health system-related factors were; poor transport systems (55.7%), long distances (47.4%), poor relationship with the health workers (23%), long waiting times and delays (19.7%), lack of confidentiality (29.5%), inconveniences at oral and dental care clinics (32.8%).

Conclusion.

Factors affecting Utilization of Oral and Dental Services include Traditional beliefs and traditional healers, myths, and misconceptions, Unemployment, low education levels, low family income, and high costs. Long waiting times, lack of confidentiality, and poor relationship with health workers.

Recommendation.

There is a need for the administration of Katate Health Centre IV in Kanungu district in conjunction with the Ministry of Health to ensure that dental services including dental equipment, sundries, drugs, and medical dental practitioner available for clients at every level of health care.

Keywords: Oral and Dental Services, Katate Health Center IV, Patients, Submitted: 16 th/12/2022 Accepted: 27 th/12/2022

1. BACKGROUND.

Oral and Dental services are services offered by qualified personnel aiming at keeping one smouth

^{*}Corresponding author.

*Email address: syrusarineitwe@gmail.com (Syrus Arineitwe)

clean and free from any form of diseases and other problems by regular brushing of teeth and cleaning between the teeth. Over time, Oral and Dental services have evolved from a primitive form of medicine to modern-day use of preventative oral and dental care, state-of-the-art diagnostics, and modern-age treatment. During the past several centuries, Dentistry has seen many improvements and changes. Different forms of Oral and Dental services are available which include Cosmetic dentistry services, Endodontic procedures, Pediatric dental services, Periodontal treatments, Orthodontic services, Diagnostic and preventive Oral and Dental services, Prosthodontic services, and Oral and Maxillofacial Surgery (Friedman, 2019).

About 3.5 Billion people worldwide and around 520 Million people in Africa have no access to Oral and Dental services (WHO, 2017). In the USA an estimated 32.4 million people lack dental services (NADAP, 2017). According to the WHO access to oral health services, unequal distribution of oral health professionals and a lack of appropriate health facilities in most countries means that access to primary oral health services is often low. According to a survey of adults expressing a need for oral health services, access ranges from 35% in low-income countries to 60% in lower-middle-income countries, 75% in upper-middle-income countries, and 82% in high-income countries (WHO, 2020).

Oral health is a key indicator of overall health, well-being, and quality of life. It encompasses a range of diseases and conditions that include dental caries, periodontal disease, tooth loss, oral cancer, and others. Oral diseases affect 3.5 billion people worldwide, with untreated dental caries being among the most prevalent noncommunicable diseases (WHO, 2017).

Evidence suggests that oral health and the coverage of its services are not suitable worldwide, especially in developing countries. The average coverage of oral and dental care is 56.2% worldwide and 43.8% in developing countries. However, oral health care services are considered expensive health services, with oral diseases being the fourth most expensive diseases. The direct financial bur-

den of dental services in the world is estimated at \$276 billion per year. (Soraya, et al, 2018).

A study conducted by the Scientific Advisory Committee on Nutrition in 2017 points to exposure of teeth to sugars through sugary snacks and drinks as a key cause for these variations. As well as being preventable and distressing, poor dental health among children is costly. £28 million was spent on hospital-based tooth extractions for children in 2017/18 (BDA, 2018).

Studies from the African continent highlight poor utilization of dental care across urban and rural populations because of economic difficulties, dwindling health funding, poor perceived oral needs, competing demand, misconceptions about oral health, inadequate facilities, and a shortage of dental workforce (Akaji, et al, 2019). According to United Nations 2017, 32 African countries are among the world's 48 least developed nations, and 80% of the people in the region fall into the low socio-economic category. Around 80% of African countries can be considered to be materially deprived. The presence of widespread poverty and underdevelopment n Africa means that communities are increasingly exposed to all the major environmental determinants of oral diseases.

However, available literature from some East African countries showed that periodontal oral diseases are on rising due to the higher consumption of sugar, lack of knowledge of oral health, and inadequate dental health care (Adid, et al, 2017). A study conducted in Laikipia Sub-county, Tanzania showed that 61% of 164 participants had dental problems with more than half having gingival inflammation. (Collins, et al, 2019)

In Uganda, a study conducted in the Mbarara district showed that the oral hygiene of school-going children was poor where 68% of the students had dental plaques showing poor oral hygiene practices. (Aisha, 2017). This indicates that Oral and Dental services in Uganda and other regions within Uganda are poorly utilized.

2. METHODOLOGY

2.1. Study design

This study employed a descriptive cross-sectional study design on factors affecting the utilization of Oral and Dental services. The cross-sectional study design was the most suitable research design because all the required data from the study respondents were obtained once with no need for follow-up. The phenomena also remained constant throughout the entire study period.

2.2. Study area

The study took place at Katate Health Centre IV, Kanungu District. Kate health center IV is located approximately 2km from Kanungu district headquarters.

2.3. Study population

The study population constituted clients from the Kanungu town council attending a dental clinic at Katate health center IV.

Sample size determination.

Keish Lesly's formula was used to determine the sample size. n=Z2PQ

d2

Where; n =the desired sample size

Z = Standard deviation usually at 1.96 at a 95% confidence interval.

P=Prevalence in the population, 19.7% of the population have access to oral health care services

Q = (1-P)

D = Absolute precision usually at 0.1 Therefore, n = 1.962X19.7%X(1-19.7%)

0.12

n = 61

2.4. Sampling technique

Simple random sampling was used to select the clients to be included in the study. This type of technique was selected because it was easy to administer and it took an accurate representation of the larger population.

2.5. Sampling procedure

Every individual in simple random sampling had an equal opportunity of being selected and included in the study. 122 papers were made, 61 written on "1" and another 61 written on "2". All the papers were put in a box and shuffled and everyone was allowed to pick a paper. Only 61 respondents who picked papers with "2" were included in the study.

2.6. Selection criteria

2.6.1. Inclusion criteria

All clients who were present at Katate Health Centre IV in Kanungu Town Council, Kanungu District during the period of data collection were eligible and therefore took part in the study.

2.6.2. Exclusion criteria

All clients who did not consent or withdrew their consent to participate in the study at Katate Health Centre IV Kanungu Town Council, Kanungu District were excluded from the study.

Definition of variables

Independent variables:

This comprised individual, social economic, and health facility-related factors affecting the utilization of oral and dental services.

Dependent variables:

These comprised factors affecting the utilization of oral and dental services.

2.7. Research Instruments

The study instrument was a questionnaire consisting of both structured and semi-structured questions. The questionnaire was designed with guidance from the supervisor and pre-tested to reduce the ambiguity of some of its questions before it was used for the actual data collection. Questions were translated into the known language of the participants during the period of data collection.

2.8. Data collection methods

Quantitative data was collected using a structured questionnaire. Completed questionnaires were checked for accuracy and completeness daily after data collection at the end of the day.

2.9. Data collection tools

Data was collected using questionnaires with both structured and semi-structured items.

2.10. Data collection procedure

After approval of the research proposal, an introductory letter was obtained from Medicare Health Professionals College that was used as an entry into the Kanungu town council. The principal investigator informed the clients about the study and obtained consent on their willingness to participate in the study. He continued to inform the clients about the rationale, background of the study, and procedures. Data were collected by administering questionnaires to the selected participants. They filled in their responses in the questionnaire before it was submitted to the researcher. The questionnaires were immediately reviewed to see if they were filled and those found to be partially filled were handed back to the respective participants for completion before being re-submitted to the researcher.

2.11. Pilot study

The researcher pre-tested the questionnaire on 15 patients with oral or dental illnesses attending a dental clinic at Kihihi Health Centre IV in Kanungu district. Piloting was done to ensure the validity of the research questions.

Quality control.

The quality of research was assured through the early and timely training of research assistants, piloting of the study, and proper testing of the research tools to be used.

2.12. Data analysis and presentation.

The results from the questionnaire were manually analyzed and entered into the computer using a computer program called Microsoft excel before being presented in form of tables, graphs, and pie charts.

2.13. Ethical considerations.

This study was approved first by the administration of Medicare Health Professionals College, which then issued an introductory letter to the DHO, Kanungu district. The DHO forwarded the

researcher to the in charge of Katate Health Centre IV who granted permission for the study to be conducted at Katate Health center IV, Kanungu town council, Kanungu district. Consent was also obtained from the study participants before they were enrolled in the study. The study participants were further assured of confidentiality and their identity was kept anonymous by using study numbers instead of their names during data collection.

2.14. Study limitations.

Some participants refused to participate in the study. The researcher explained the purpose of the study to them and they consented to participate in the study.

The researcher also encountered financial constraints during the study. However, efforts were made to solicit funding from relatives and friends and the study was completed in time.

3. RESULTS

3.1. Individual factors affecting utilization of oral and dental services.

Majority, 41 (67%), of the respondents believed that traditional healers are part of the dental and oral care providers and only 20 (33%) did not believe in traditional healers.

Findings show that 48, (78.7%), of the total respondents, believed that myths and misconceptions cannot affect dental clinic visits whereas 13 (21.3%) believed that myths and misconceptions affect dental clinic visits. Also, 26 (42.6%) mentioned that traditional beliefs can affect the utilization of dental services and the majority 35 (57.4%) disagreed that traditional beliefs cannot affect the utilization of oral and dental services.

Results in table 2 revealed that the majority, 53 (86.9%), of the total respondents were satisfied with oral and dental services being offered while 8 (13.1%) were not satisfied.

The majority, 39 (63.9%), mentioned that native herbs can treat dental problems more than medical treatment and 22 (36.1%) mentioned that native herbs cannot treat dental problems more than medical treatment.

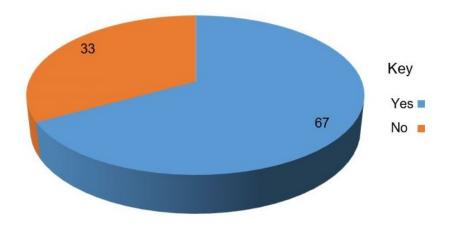


Figure 1: Shows distribution of responses on traditional healers towards oral and dental care provision.

Table 1: shows the distribution of responses on the following variables. (n=61)

Variable	Agree	Disagree
Traditional beliefs can affect utilization of dental services.	26	35
Myths and misconceptions affect dental clinic visits.	13	48

Table 2: shows the distribution of respondents by whether they are satisfied with oral and dental services being offered

Response	Frequency (f)	Percentage (%)
YES (Satisfied)	53	86.9
NO (Not satisfied)	8	13.1

Table 3: Shows the distribution of response on whether herbs can treat dental problems. n=61

Response	Frequency (f)	Percentage (%)
True (Can treat)	39	63.9
False (Cannot treat)	22	36.1

Majority, 38 (62.3%), of the respondents mentioned that visiting a dental facility regularly for checkups was very important, 19 (31.1%) of the respondents mentioned that it was less important and 04 (6.6%) mentioned that it was not important to visit a dental facility for regular checkups.

Results showed that the majority, 49 (80%), of the total respondents were not aware of the different dental services that were being offered and the minority 12 (20%) were aware of the different dental services offered at the facility. The majority, 21 (34.4%), of the respondents mentioned that the services included tooth extraction, and 04 (6.6%) mentioned tooth cementing (gap filling) as the dental service being offered.

Findings from the study show that majority, 55 (90.7%), of the respondents cited that dental caries and tooth extraction requires medical intervention, and 06 (9.8%) of the total respondents mentioned that dental caries and tooth extraction do not require medical intervention.

Results indicated that all the 06 respondents

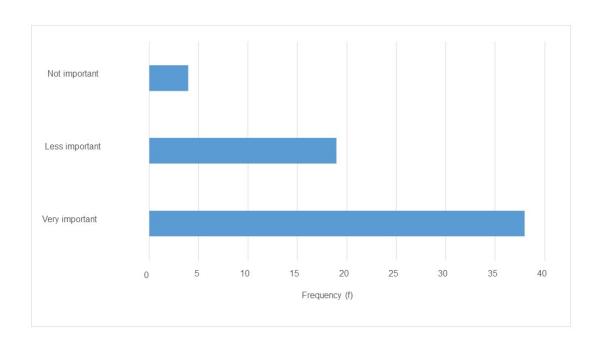


Figure 2: Shows distribution of responses according to importance of regularly attending dental facilities. n=61

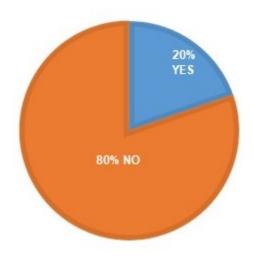


Figure 3: Shows responses on awareness of dental services that are being offered. n=61

Table 4: Shows the different dental services offered as outlined by the respondents. n=61

Responses	Frequency(f)	Percentage (%)
Tooth extraction	21	34.4
Tooth cementing (gap filling)	4	6.6

Note: Respondents gave multiple responses (mentioned more than one answer)

Table 5: shows the distribution of responses on whether dental caries and tooth extraction require medical intervention.

Response	Frequency (f)	Percentage (%)
NO (Do not require)	06	9.8
YES (Requires)	55	90.7

Table 6: Shows the different reasons why dental caries and tooth extraction do not require medical intervention.

Response	Frequency (f)	Percentage (%)
It can heal by itself	06	100
Decayed tooth can be removed with a thread	06	100

Note: n=6 and Respondents gave multiple responses (mentioned more than one answer).

mentioned that dental caries and tooth extraction do not require medical intervention, they went ahead and revealed that they can heal by themselves and that decayed teeth can be removed by use of a thread at home.

3.2. Socioeconomic factors affecting utilization of oral and dental services.

More than two-thirds of the respondents, 43(71%), mentioned that the costs of dental services were high, 11 (18%) mentioned that the costs were moderate and 07 (11%) of the total respondents mentioned that the costs were low.

More than two-thirds, 42 (69%), of the total respondents could not afford the current dental services in the area, 13 (21%) of the total respondents could at certain times afford and only 06 (10%) could afford all the dental services being offered.

The majority, 40 (65.6%), of the total respondents, agreed that the cost of dental services can limit access to the services by clients, and approximately a third of the respondents 21 (34.4%) disagreed and mentioned that the cost of dental services cannot limit access of the services. Also, similar findings revealed that more than two-thirds 47 (77%) of the total respondents agreed that low levels of education hinder the utilization of oral and dental services whereas 14 (23%) disagreed and stated that low levels of education cannot hinder the utilization of oral and dental services. On the levels of family income, at least half 31 (50.8%) agreed that low family income affects

the utilization of oral and dental services and 30 (49.2%) disagreed and said that low family income cannot affect the utilization of oral and dental services.

Majority, 49 (80.3%), of the total respondents were employed and 12 (19.7%) of the total respondents were unemployed.

Majority of the respondents, 46 (75%), were not in any insurance and 15 (25%) were under insurance coverage.

3.3. Health system related factors affecting utilization of oral and dental services.

More than a half, 47 (77%), of the respondents mentioned that there is no enough dental facilities and the least 14 (23%) of the respondents said that there is enough dental facilities.

The majority, 34 (55.7%), of the respondents mentioned that poor transport systems can affect the utilization of oral and dental services. More still, the majority 38 (62.3%) of the respondents said that lack of privacy or mistrust among health workers can affect the utilization of oral and dental services. While the minority 20 (32.8%) of the respondents agreed that inconveniences at the dental care clinic or health facility affect clients from accessing oral and dental services.

More than two thirds, 45 (73.8%), of the respondents agreed that they have a good relationship with the health workers, 08 (13.1%) of the respondents said that the health worker's relationship is somehow good, 06 (9.9%) of the clients mentioned that health workers relationship is not

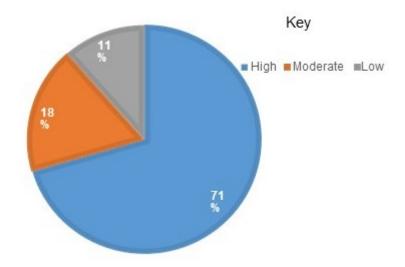


Figure 4: shows the distribution of responses about the costs of dental services in the area. n=61

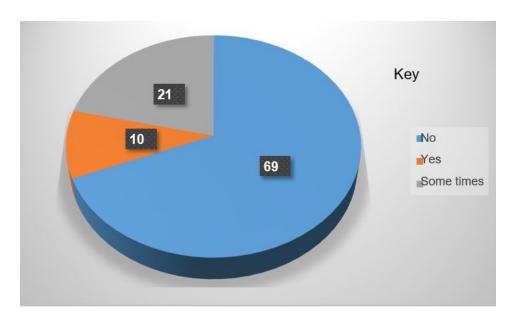


Figure 5: Shows the distribution of responses on the affordability of dental services in the area.

Table 7: Shows distribution of responses according to the following variables. n=61

Table 1. Shows distribution of responses according to	0110 101101	ving variables	. 11-01	
Variable	Agree	Percent-	Dis-	Percent-
		age	agree	age
The cost of dental services can limit the access of services	40	65.6	21	34.4
by clients				
Low levels of education hinder utilization of oral and	47	77	14	23
dental services				
Low family income affects utilization of oral and dental	31	50.8	30	49.2
services.				

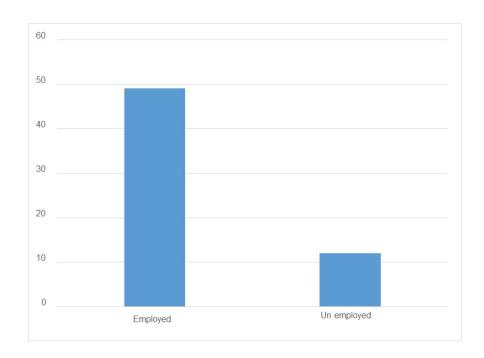


Figure 6: Shows the distribution of responses according to the employment status of the respondents. n=61

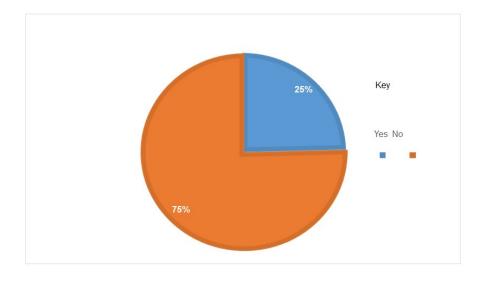


Figure 7: shows distribution of responses on the insurance status.n=61

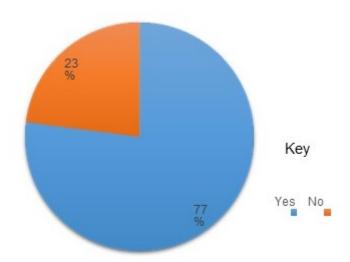


Figure 8: The distribution of responses on availability of oral and dental services. n=61

Table 8: Distribution of responses on the following variables. n=61

Table 6. Distribution of responses on the following variables. II—01		
Variable	Agre	e Dis-
		agree
Poor transport systems are likely to affect utilization of oral and dental services	34	27
Lack of privacy or mistrust among health workers can affect utilization of oral and	38	23
dental services		
Inconveniences at the dental care clinic or health facility affects clients from	20	41
accessing oral and dental services		

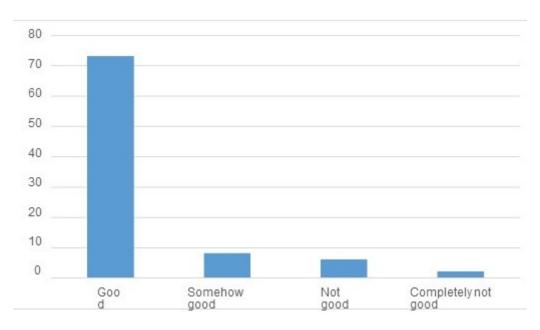


Figure 9: Distribution of responses on the relationship between the clients and health workers at the facility. n=61

good and only 2 (3.3%) mentioned that health worker"s relationship is completely not good. The results showed good relationship between clients and health workers.

Almost half, 29 (47.4%), of the respondents, mentioned that long distances or distant facilities can affect access to dental services, and a few 12 (19.7%) of the respondents mentioned that long waiting times or delays at the health facility can affect utilization of oral and dental services and minority 15 (24.6%) of the total respondents mentioned that poor relationship with health workers can affect utilization of oral and dental services.

Minority, 18 (29.5%), of the respondents had concerns with confidentiality about oral and dental service providers whereas 43 (70.5%) of the respondents had no any issues with confidentiality.

Results show that 13 (21.3%), of the respondents, mentioned that dental care providers revealed their appointment with them, 09 (14.8%) mentioned that dental care service providers talked to neighbors about their diseases, 18 (29.5%) said that dental service providers revealed their medical insurance status to other family members and 10 (16.4%) of the respondents mentioned that dental care service providers revealed their treatment options.

A minority, 07 (11%), of the respondents, had encountered unpleasant experiences from the health facility attended to access oral and dental services whereas the majority 54 (89%) of the respondents had not had unpleasant experiences from the health facility.

Results show that, 08 (13.1%), of the respondents were abused by health care providers whereas 03 (4.9%) of the respondents were bullied.

4. DISCUSSION:

4.1. Individual factors affecting utilization of oral and dental services.

The study revealed that majority, 41 (67%), of the respondents believed that traditional healers are part of the dental and oral care providers. This affects the uptake of oral dental services by clients because they still believe in traditional healers. In contrast, results in a study carried out in Tanga Region of Tanzania showed that 60% of these dental patients believed they would get cure from traditional healers by use of local herbs while 40% would seek treatment from dental facilities (LA, Mosha, & Poulsen, 2017). Similar findings from a study in Cameroon on utilization of dental services in both public and private health facility settings revealed that 67% believed that native herbs from traditional healers would provide complete cure of dental diseases (AM & S, 2016).

Furthermore, about three quatres, 48 (78.7%), of the respondents believed that myths and misconceptions can affect dental clinic visits. They still believe in myths and misconceptions such as no going to the dental clinic unless the tooth pains and believing it is normal for the gums to bleed hence affecting uptake of oral and dental services. This agrees with a study conducted in India about individual barriers to the effective utilization of dental services where the majority (43.4%) of the respondents believed that myths and misconception regarding dental development and care were the associated factors to utilization of dental services (Gargi C. Nimbulkar, 2020).

This study revealed that majority, 53 (86.9%), of the respondents were satisfied with oral and dental services being offered. The high degree of satisfaction among the respondents wasbecause of the good health worker-patient relationship, good treatment outcomes and the good conduct manifested by the health workers towards their clients. This was evidenced in a study conducted in Kenya to determine client satisfaction which revealed that 81% were satisfied with the services (Mbayaki, et al., 2018).

More so, majority, 39 (63.9%), of the respondents mentioned that native herbs can treat dental problems than medical treatment. This affected utilization of oral and dental services in that clients employed native herbs in treatment of oral and dental diseases. In contrast, a study conducted in India found out that majority of respondents 51.6% were relying on self-medication with native drugs (Nimbulkar, et al., 2020).

Table 9: Shows distribution of responses on the following variables. n=61

Variable	Yes	No
Long distances or distant facilities can affect access of dental services by clients.	29	32
Long waiting time or delays at the health facility affects utilization of oral and dental	12	49
services.		
Poor relationship with health workers affects utilization of oral and dental services.	15	46

Table 10: Distribution of responses on concerns with confidentiality about oral and dental service providers. n=61

Response	Frequency (f)	Percentage (%)
Yes (Had concerns with confidentiality)	18	29.5
No (Had no concerns with confidentiality)	43	70.5

Table 11: Shows responses of clients with concerns about confidentiality. n=61

Responses	Frequency (f)	Percentage (%)
Revealed my appointment with the doctor	13	21.3
Talked to my neighbors about my disease	09	14.8
They told my family members that I am in medical insurance	18	29.5
He told my friends the drugs I was taking.	10	16.4

Note. Respondents gave multiple responses (mentioned more than one answer).

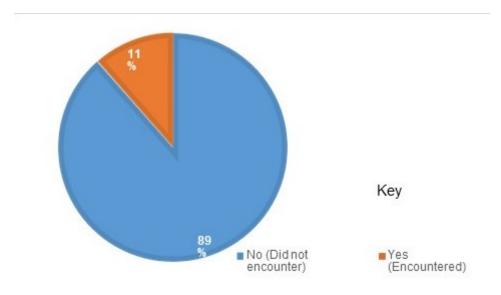


Figure 10: Shows distribution of responses on exposure to unpleasant experiences from the health facility attended to access or al and dentalservices.

Table 12: Shows distribution of responses about examples of unpleasant experiences encountered by the health facility attended to access or al and dental services. n=61

Responses	Frequency (f)	Percentages (%)
Abusive health workers	08	13.1
Bullying by health workers	03	4.9

Further still, nearly two thirds of the respondents, 38 (62.3%), mentioned that visiting a dental facility regularly for checkups was very important. This was due to community sensitization and health education about the advantages of regular checkups. These findings defer from the results from a study conducted by Nimbulkar, et al., (2020) in India, where only 5% would regularly visit the dental clinic for oral and dental services.

The study further revealed that majority, 49 (80%), of the total respondents were not aware of the different dental services that were being offered. This is likely due to inadequate health education on different services available. This was also seen in a study conducted in Singapore on utilization of dental health services where findings showed that 38% respondents lacked awareness towards or lealth services (Desmond, et al, 2020). Also agrees with the study by Bhasin, et al, (2018) to assess knowledge about prosthodontic rehabilitation and utilization of dental services by central India population of Jabalpur City, India which revealed that only 44.3\% of respondents had sufficient knowledge and could utilize the available dental services.

The study found out that the majority, 21 (34.4%), of the respondents mentioned that the services included tooth extraction and 04 (6.6%) mentioned tooth cementing (gap filling) as the dental services being offered. Only a few services were mentioned which indicates that patients who had cases different from those mentioned could not visit the dental clinics. means that the greater percentage lack awareness about the different dental and oral care services being offered at the facility. Similar findings were revealed in a study conducted in Ghana on individual factors and children"s oral health where 76% of the respondents lacked knowledge about the importance of utilization of dental services (Hilton, 2019).

More so, the biggest number of respondents, 55 (90.7%), mentioned that dental caries and tooth extraction does not require medical intervention. They associated this with the high risks of extraction complications and beliefs that dental caries

can heal by themselves and that decayed tooth can be removed by use of a thread at home and will not seek medical intervention for the above stated reason. This reflects a study conducted by Hilton (2019) in Ghana on individual factors and children"s oral health which revealed that 19% of the total respondents believed that extraction of primary teeth should be done by cultural leaders and traditional healers followed by application of paste that help in development of fresh teeth.

4.2. Socio economic factors affecting utilization of oral and dental services.

The study found out that more than two thirds, 43 (71%), of the respondents said that the costs of dental services were high. A highest percentage would not afford the increased costs of dental services hence affecting utilization of oral and dental services. This relates with a study conducted in China on utilization of dental services and economic Burden of oral diseases in China where results indicated that 33.6% of the respondents highlighted the high costs of dental services were limiting them from accessing dental services (CHENG, et al., 2018).

More still, the study found out that more than two thirds, 42 (69%), of the respondents could not afford the current dental services in the area. The affordability of dental services was low which can be linked to increased costs hence affecting utilization of oral and dental services. This agrees with a study by Onyejaka, Folayan, & Folaranmi, (2016) on barriers of effective utilization of dental services in Enugu State, Nigeria where results showed that there was low utilization of dental services due to socioeconomic strata and only 14.7% were able to utilize oral and dental services and 85.3% were affected by the socio-economic strata.

The study further revealed that majority, 40 (65.6%), of the respondents agreed that the cost of dental services can limit access of the services. As mentioned by the respondents, it indicated that the cost of dental services can limit access of the services. This agrees with a community- based study that was carried out by Juliet Ocwia, (2021) in central division of Nebbi District in Uganda

where 47.5% of the respondents could not utilize dental services due to high costs of treatment. This also agrees with a study conducted in Cameroon on factors affecting the utilization of dental services which showed that poverty (63.2%) had a large influence on uptake of dental services (Shakim, et al, 2018).

Furthermore, majority, 47 (77%), of the respondents agreed that low levels of education can hinder utilization of oral and dental services. This is most likely because these people are not informed about the different dental services. This was also seen in a study conducted by Telez, et al, (2017) on socio-economic determinants for utilization Oral and Dental services in Illinois, U.SA where utilization of oral and dental services was low and 12.7% was linked to low educational attainment.

More still, the study showed that about a half, 31 (50.8%), of the respondents agreed that low family income affects utilization of oral and dental services. The family heads lack enough money to cater for the entire family due to increasing costs of dental services. This agrees with a study by Telez, et al, (2017) on socio-economic determinants for utilization Oral and Dental services in Illinois, U.SA which found out that low utilization of oral and dental services is associated with poor socioeconomic status which linked 23.4% to family income.

Furthermore, majority, 49 (80.3%), of the total respondents were employed. This means people who are employed are more likely to afford the costs of dental services. This was seen in a study conducted on socio-economic determinants for utilization Oral and Dental services in Illinois, U.SA, which identified unemployment in 31.9% to be associated with low utilization of oral and dental services (Telez, et al, 2017). This also agrees with the study by Nalugya, (2019) conducted at Mubende Regional Referral Hospital dental outpatient clinic which indicated majority (50%) of these were self-employed.

More still, majority of the respondents, 46 (75%), were not in insurance and 15 (25%) of the total respondents were in insurance. It thus indicated that lack of insurance cover was less likely

to affect utilization of oral and dental services. This disagrees with the study conducted in Egypt to assess determinants for dental care attendance and findings linked 70.6% of respondents to lack of insurance (Maryam, et al, 2017). It then agrees with a study conducted in Kenya on barriers to utilization of dental services which showed that respondents with insurance coverage 183 (61%) utilized dental services (Adholf, 2017).

4.3. Health system related factors affecting utilization of oral and dental services.

The study revealed that majority, 47 (77%), of the respondents said that there are no enough dental facilities. This was linked to long travel distances because the facilities are few meaning they are in distant places and only a few can access them. This was seen in a study conducted by Sarika, et al, (2017) on oral health service utilization among rural population of western Rajasthan, India, findings which revealed that 52.1% had no access to the oral health services due to few dental facilities available.

Furthermore, majority, 34 (55.7%), of the respondents agreed that poor transport systems can affect utilization of oral and dental services. This is attributed to lack of transport means and poor road networks connecting villages to oral and dental facilities. This agrees with the study conducted by Sarika, et al, (2017) on oral health service utilization among rural population of western Rajasthan, India where findings showed that 52.1% were affected by poor transport means. This clearly indicate that low utilization and uptake of oral and dental services was linked to poot transport means.

More so, majority, 38 (62.3%), of the respondents agreed that lack of privacy or mistrust among health workers can affect utilization of oral and dental services. This is because client"s appointments, diseases and drugs taken were being revealed to their relatives and friends by oral and dental care practitioners. This agrees with the study by Sandy, et al, (2017) in Spain on barriers to effective utilization of dental services which indicated that 62% of the respondents highlighted lack of privacy and mistrust to be prominent fac-

tors in the effective utilization of oral health services.

More so, minority, 20 (32.8%), of the respondents agreed that inconveniences at the dental care clinic or health facility such as blaming them for their oral health status affects clients from accessing oral and dental services. This implies that majority were being valued by dental care providers who made them aware of existing preventive options, educated them about how to maintain a healthy mouth and teeth, and supported and reassured them frequently during visits. This agrees with the study by Rakhi, et al, (2019) which showed that 34.5% of the respondents had not visited dental clinic due to inconveniences.

When it came to relationship between the clients and health workers at the facility, majority, 45 (73.8%), of the respondents mentioned that they had a good relationship with the health workers. The results showed good relationship between clients and health workers. This is less likely to affect utilization of oral and dental services because staffs greeted them warmly and their consultation was private. This agrees with a study done in Kenya to determine client satisfaction, which found out that 81% reported being satisfied with health services (Mbayaki, et al., 2018).

About a half of the respondents, 29 (47.4%), said that long distances or distant facilities can affect access of dental services. This implies that people will need to travel long distances and this will affect utilization of oral and dental services. This agrees with a study done by Yaddanapalli, et al., (2020) to assess the health system related factors affecting utilization of dental services in East-Cost India which showed that 65.5% of the total respondents were not able to utilize the dental services which was linked to long distances to health facilities.

The study revealed that majority, 54 (89%), of the respondents had not had unpleasant experiences from the health facility. In relation to these results, it was revealed that, 08 (13.1%), of the respondents were abused whereas, 03 (4.9%), of the respondents were bullied. This indicates that unpleasant experiences are less likely to affect utilization of oral and dental services. This agrees with the study by Mbayaki, et al., (2018) done in Kenya which showed that most clients (89%) reported that health facility staff greeted them warmly and 82% said their consultation was private.

5. Conclusion

According to the study results, there were many factors affecting the utilization of oral dental services at Katate Health Centre IV, in Kanungu District and these factors were categorized into three categories that included; individual, socio economic and health system related factors affecting utilization of oral and dental services.

The study identified individual factors affecting utilization of oral and dental services which were; traditional beliefs (4.6%), traditional healers being part of dental care (67%), use of native herbs (63.9%), lack of awareness about the services being offered (80%), myths and misconceptions (21.3%) and some believe that dental caries and tooth extractions do not require medical interventions (9.8%).

More still, the study revealed different socioeconomic factors affecting utilization of oral and dental services which included; high costs of dental services (71%) which makes them un affordable, unemployment (19.7%), lack of insurance (75%), low levels of education (77%) and low family income (50.8%).

In addition, health system related factors affecting utilization of oral and dental services were; lack of enough dental facilities, unpleasant experiences such as abusiveness and bullying, poor transport systems (55.7%), long distances and distant facilities (47.4%), poor relationship with the health workers (23%), long waiting time and delays (19.7%), lack of confidentiality among dental service providers (29.5%), lack of privacy and mistrust among health workers (62.3%), inconveniences at oral and dental care clinics (32.8%).

6. Recommendations.

The following recommendations were drawn with the aim of bridging the identified gaps

The administrators of Katate Health Centre IV in Kanungu District should advocate for programmed health education sessions to be carried out on regular basis in the surrounding communities in order to sensitize people and create awareness on the need for regular dental checkups and to make them aware that cultural practices alone cannot help to deal with dental problems.

There is need for the administration of Katate Health Centre IV in Kanungu District in conjunction with the Ministry of Health to ensure that dental services including dental equipment, sundries, drugs and medical dental practitioner available at the facility.

The Ministry of Health (MoH) in conjunction with the government of Uganda should improve on the infrastructure most especially the poor roads connecting to the health facilities as it was cited by clients that they are always disturbed by poor transport systems.

The government of Uganda through the Ministry of Health should harmonize with the traditional healers to refer clients to the facility for early and prompt medical interventions as poor referral puts the lives of people at risk as far as their health is concerned.

The administrators Katate Health center IV should also address the concerns of their subordinates (health workers) and to also carry out training sessions concerning customer care and client"s satisfaction in order to overcome the challenges of negative attitudes of health workers as it was seen from then above study that patient"s satisfaction and care were affected by poor health workers" relationship with their clients.

7. ACKNOWLEDGEMENT

I thank the Almighty God who has always guided me to work on the right path of life.

A special thanks to my parents Mr. Rwamunahe Jackson and Ms. Rosemary Tumwekwase (Rest in Eternal Peace) for your continued support. My sisters A. Rosette, A. Susan and friends for their endless support.

A great thanks to my supervisor Ms Oyella Lydia Anywar who worked tirelessly in helping me to correct out my mistakes during preparation of my research report.

God bless you all.

8. ABBREVIATIONS AND ACRONYMS.

BDA: British Dental Association
DHO: District Health Officer

GBDs : Global Burden Diseases Study

HCIV : Health Centre IVMoH : Ministry of Health

NADAP : National Association of Dental

Plans

NCDs : Non Communicable Diseases

OHR : Oral Health Report

UAHEB: Uganda Allied Health Examinations Board

USA : Unites States of AmericaWHO : World Health Organization

SPSS : Statistical Package for the Social

Sciences.

9. OPERATIONAL DEFINITIONS.

Dental care: This is the maintenance of healthy teeth

Oral hygiene: This is the practice of keeping the mouth and teeth clean in order to prevent dental disorders.

Dental Caries: It is the breakdown of the teeth due to bacteria.

Dentist: He or she is a person who specializes in the diagnosis, treatment and prevention of dental disorders.

10. Publisher details:

Publisher: Student's Journal of Health

Research (SJHR)

(ISSN 2709-9997) Online

Category: Non-Governmental & Non-profit

Organization

Email: studentsjournal2020@gmail.com

WhatsApp: +256775434261

Location: Wisdom Centre, P.O.BOX. 148,

Uganda, East Africa.



11. References:

- 1) AM, A., & S, N. (2016). Knowledge and practice of traditional healers in oral health in the Bui Division, Cameroon. Journal of Ethnobiology and Ethnomedicine.
- 2) Bhasin., S. G. (2018). Knowledge and attitude towards prosthodontic rehabilitation and utilization of dental services by central India population of Jabalpur City, India. Annuals of Medical and Health Sciences Research
- 3) CHENG, M. L., XU, M. R., XIE, Y. Y., GAO, X. L., WUJ, H. J., WANG, X., . . . SI, Y. (2018). Utilisation of Oral Health Services and Economic Burden of Oral Diseases in China. Economic Burden of Oral Diseases. doi:doi: 10.3290/j.cjdr.a41086 Friedman, M. (2019).
- 4) Gargi C. Nimbulkar, A. C. (2020). Conceptual Measures of Oral Health Literacy and Oral Health Behaviour. Department of Public Health Dentistry Journal. doi:DOI: 10.14260/jemds/2020/156
- 5) Hilton. (2019). Oral Health Literacy. IIUM Medical Journal. doi:https://doi.org/10.31436/imjm.v19i3.1668
- 6) Juliet Ocwia, R. O. (2021). Oral health seeking behaviors of adults in Nebbi District, Uganda: community-based survey. BMC Oral Health. doi:https://doi.org/10.1016/S0140-6736

- $\begin{array}{l} (17)32152\text{-}9https://doi.org/10.1186/s12903\text{-}021-\\ 01824\text{-}5PMid:34535092\ PMCid:PMC8447567 \end{array}$
- 7) LA, N., Mosha, H., & Poulsen, S. (2017). The role of traditional healers in the treatment of toothache in Tanga Region, Tanzania. Community Dental Health.
- 8) Mbayaki, Munyao, P. M., Kabue, M. M., Mulindi, R., Change, P. M., Ikamati, R., . . . Mudany, M. (2018). Client satisfaction determinants in four Kenyan slums. International Journal of Health Care Quality Assurance, 28(7). Retrieved from https://www.emerald.com/insight/content/doi/10.1108/IJHCQA-12-2019-0110/full/html
 - 9) NADAP. (2017). 2017 Annual Report.
- 10) Nalugya, V. G. (2019). Factors Affecting The Uptake Of Routine Dental HealthCare Services Among Adults 18 Years And Above,At Mubende Regional Referral Hospital,Central Uganda. Retrieved 08 22, 2019, from http://dspace.ciu.ac.ug/xmlui/handle/123456789/1366
- 11) Onyejaka, N. K., Folayan, M. O., & Folaranmi, N. (2016, 03–15). Barriers and facilitators of dental service utilization by children aged 8 to 11 years in Enugu State, Nigeria. BMC health Service Research. Retrieved from https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-016-1341-6https://doi.org/10.1186/s12913-016-1341-6PMid:26979531 PMCid:PMC4793514
- 12) WHO. Oral Health Report; (2017). WHO. Oral Health Report; (2020).
- 13) Yaddanapalli, S. C., Sultana, S. P., Lodagala, A., Babu, P. C., Ravoori, S., & Pachava, S. (2020). Oral healthcare-seeking behavior and perception of oral health and general healthcare among WHO indexed age groups in East-Coast India. Journal of Family Medicine and Primary Care, 9. doi:https://dx.doi.org/10.4103%2Fjfmpc.jfmpc_350_20https://doi.org/10.4103/jfmpc.jfmpc_350_20PMid:33102336 PM-Cid:PMC7567212

Author biography

Syrus Arineitwe is a Student of Clinical Medicine at Medicare Health Professionals College, P.O.Box 16476, Kampala, Uganda.