

# KNOWLEDGE, ATTITUDE AND PRACTICES TOWARDS USE OF ANALGESICS AMONG PATIENTS IN RUBAGA HOSPITAL IN KAMPALA. A DESCRIPTIVE CROSS-SECTIONAL STUDY.

Feni Daniel\*, Mulodokayi Niwagira

*Kampala School of Health Sciences, P.O. Box 14263. Kampala, Uganda.*

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## Abstract

### Background:

The study assessed the knowledge, attitude and practices towards the use of analgesics among the patients attending to Rubaga hospital in Kampala Uganda.

### Methodology:

The study employed was a descriptive cross-sectional in nature, on a sample of 50 respondents using simple random sampling technique. Semi-structured questionnaires were designed and used as data collection tool, data was using Microsoft excel to generate tables, pie charts and bar graphs for easy presentation of findings.

### Results,

the majority of the respondents (70%) understood analgesics as drugs that relieve and treat pain incidences, 66% of the respondents agreed that analgesics reduce pain in every pain incidences, 90% of the respondents have heard about analgesics as drugs of relieving and treating pain, 56% of the respondents obtained this information from the media and 45% obtained from their friends and family members and 30% obtained from the health workers, 76% of the respondents agreed that taking analgesics to relieve pain has side effects such as dizziness, headache, depression, 86% of the respondent recommended their friends and family members to get advice from health workers before utilizing over the counter medicines, 86% of the respondents agreed that they have used analgesics without consultation of the health workers.

### Conclusion,

Patients had good attitude towards the use of analgesics for pain relieve and treatment but, most of them did not have more knowledge about the use of analgesics for treatment and relieving of pain.

### Recommendations :

The ministry of health should carry out sensitization sessions to educate the patients about the possible side effects of analgesics and dangers of its use without consultation of the health workers in order to reduce or possibly eliminate the side effects of the drugs and resistances where necessary.

**Keywords:** Rubaga hospital, Knowledge, Attitude, Analgesics, Submitted: 2023-07-07 Accepted: 2023-08-20

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## 1. Background of study.

Analgesics are drugs people use mostly to relieve pain. These include Paracetamol and NSAIDs. They are widely used and generally are

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\*Corresponding author.  
Email address: [fenidaniel@gmail.com](mailto:fenidaniel@gmail.com) (Feni Daniel)

safe but some people consume excessive quantities that causes side effects. Ibuprofen has side effect on kidney function, while an over dose of Paracetamol has severe side effect on liver. Analgesics are commonly used to treat pain due to arthritis, surgery, injury, tooth ache, headache, menstrual pain etc. There are two classes of oral analgesics; opioid and non-opioid. Non-opioid analgesics include Paracetamol and NSAIDs such as ibuprofen. Opioid analgesics are further classified into two; mild and potent opioids. Mild include codeine and tramadol, and potent include morphine and methadone (Manuela, 2017).

Side effects generally are dizziness, constipation, itching, and skin rashes. Some of them have serious side effects (Sloot, 2015). Any type of pain can impair an individual's quality of life. Pain is a major problem on global scale and can be classified as acute, chronic or intermittent, Individuals experiencing severe pain frequently face difficult choices regarding pain relief therapy as majority of treatment for pain involve use of analgesics and adjuvant medications, which may adverse side effects. Analgesics are medications that significantly reduce pain by acting on the central nervous system or peripheral pain receptors without impairing consciousness. It is classified into two categories; narcotic/opioid analgesics and non-narcotic/non-steroidal anti-inflammatory drugs. NSAIDs are the most frequently prescribed medicines for the treatment of pain. They work by interfering with cyclo oxygenase pathways [COX], which is critical for the conversion of arachidonic acid to prostaglandins by the enzyme COX. COX is found in two forms; COX1, regulates physiological functions such as stomach mucus production, kidney water excretion. COX 2 is involved in production of prostaglandins that are involved in the anti-inflammatory response (Queremelet al, 2022).

Opioid analgesics have a wide variety of adverse effects including respiratory depression, nausea, vomiting, dizziness, mental fogging, and dysphonia. Tramadol is a synthetic codeine analogue that acts as a weak agonist, A portion of its analgesic effect is due to its inhibition of norepinephrine and serotonin uptake. The use of anal-

gesics has also been increased in developed and developing countries over the last three decades. Improper use of analgesics increases morbidity and mortality, degrades the quality of life and wastes health resources (Van et al, 2018).

Another cross-sectional study conducted among Nurses in Mbarara toward total pain management showed that vast majority of people tend to experience body pain and head pain at some point in their lives. Pain was defined as unpleasant sensation that lowers individual quality of life (Natwijuka, 2022).

### **1.1. General objectives.**

The general objective of this study is to assess the knowledge, attitude and practices towards the use of analgesics by the patients in Rubaga hospital.

### **1.2. Specific objectives.**

- To assess the knowledge of the patients towards the use of analgesics to relieve pain in Rubaga hospital.
- To determine the attitude of patients towards the use of analgesics to relieve pain.
- To find out the practices by patients towards the use of analgesics to relieve pain.

## **2. METHODOLOGY.**

### **2.1. Study design:**

This will be a cross sectional descriptive study design which will employ both quantitative method of data collection because it is more accurate and it has strong research outcomes.

### **2.2. Study area.**

The study will be conducted in Rubaga hospital from March to May 2023 the Rubaga hospital is found in Kampala city Wakiso district, central-region of Uganda, about 3km from city Centre. Rubaga hospital will be chosen for the study with the reason that it will be easy to reach. It has many patients and many analgesic drugs in which the patients are interested in to relieve their various kinds of pain.

### **2.3. Study population:**

All the male in between the age range of 45-65 attending to Rubaga hospital will be considered. This is said to be the active age range of the males who at least have serious pain issues to deal with. They will also be able to consent and participate in the study.

### **2.4. Sample size determination:**

The sample size will be determined using the formula below; Burton's formula (1952)

$S=2(QR) O$ : where S=required sample size

Q=number of days the researcher spends while collecting data R=maximum number of people per day

O=maximum time the interviewer spends on each participant.  $5 \times 10 \times 1hr$   
=50

Therefore, the researcher will use 50 respondents.

### **2.5. Sampling technique:**

The researcher will use simple random sampling which will be used to select the particular individuals who will answer the questionnaires in order to obtain information about knowledge, attitudes and practices towards use of analgesics among patients in Rubaga hospital. This method is chosen because it is time saving and less prone to biasness.

### **2.6. Sampling procedure:**

Simple random sampling will be used. The selection will be done within the hospital in a way that the patients shall be collected together and after introduction and explanation of the procedures, their number will be counted and small paper will be provided corresponding to their numbers. The paper will be labelled yes or no with the yes labels corresponding to the required samples size at that point. The papers will be folded and spread, both members shall be allowed to pick one paper without replacement only once and those who will pick no will not be given questionnaires. It will also be less time-consuming, cheaper, easy to collect the data.

### **2.7. Data collection method:**

Data will be collected using both well-designed and tested some structured questionnaires.

### **2.8. Data collection tool/research instrument:**

A questionnaire set in English will be used for data collection. The questionnaires will contain both structured and semi structured questions with both closed and open questions and 30 questions only. The questionnaires shall be chosen in this study because it is less expensive method, the questionnaires shall be filled at the respondents' convenience. It will produce quick results and cover wider geographical areas.

### **2.9. Data collection procedure:**

After seeking permission from the people in higher authorities in the hospital, the data will be collected by going from one department to another to the patients with the head of the facility or any other health practitioner available and the respondents shall be met from their wards. Others can be met outside the wards like the canteen, kitchen and just on the compound. The procedures will be explained to the respondents and then one will have to consent. He will answer the questionnaires in private and will only be helped by the researcher or assistant where necessary. The questionnaire will then be kept in a separate bag under key and lock.

### **2.10. Quality control:**

To ensure accuracy in the results, the items in the instruments will be adequately and appropriately be organized according to the objectives of the study. For consent and reliable results from the research, the instrument will be constructed using a simple language and appropriate vocabulary for easy understanding for the selected respondents.

Also, to ensure quality, I will include research assistants to ensure that questionnaires are filled in private and allowing each patient a space to sit alone so that individuals are got correctly.

### **2.10.1. Piloting the study:**

The study tool will be pre-tested on six (6) patients in the hospital. Thereafter the tools will be edited to fill in all the missing gaps. The comments of the respondents will help in improving the sequence and layout of the questionnaire and important to know the time will be taken by the interview.

### **2.11. Data analysis and presentation:**

This will involve collection of data, data cleaning, coding and designing, processing and analysis using a computer programs like statistical package for social (SPSS) version 17:3 and MS- Excel which will present in form of tables, figures and percentages.

After analysis, the data shall be converted into percentage, frequency distribution tables and presented using tables and figures (graphs and pie charts) which will be interpreted to give meaningful information.

### **2.12. Ethical considerations.**

Ethical clearance to execute data collection in Rubaga hospital, Kampala city will be obtained by getting introductory letter from the principal of Kampala school of Health Sciences addressed to the in charge of the health facility who will then permit me to reach to the heads of different departments to allow me go ahead with my research process. The photocopy of the letter will be carried along by me to assure respondents of legal permission to carry out data collection and the questionnaires will be kept under key and lock.

Consent will be obtained from each respondent during data collection after my introduction and explanation before interviewing the respondents. The researcher will observe confidentiality, privacy and dignity by use of codes not names of the respondents. This will ensure that the respondents' participation will have no effect in any way on him.

## **3. STUDY FINDINGS.**

### **3.1. Individual factors contributing to use of analgesics by patients.**

From table 1, most 56% of the respondents were aged 21-25 years and the least (6%) were aged 31-35 years.

Basing on the study findings relating to marital status majorities (64%) were single and the least were (4%) widowed.

In regards to tribe majority (88%) of the respondents were Baganda whereas the least (2%) were Bateso.

The study further revealed that majority of the respondents (54%) were Catholics while the least (4%) had more than three children.

From the study findings, majority of the respondents (80%) were Ugandans while the minority (4%) were others from different countries.

Basing on the study findings, most (38%) of the respondents were at primary level whereas the least (6%) were none of secondary level or tertiary/University

From the study findings most of the respondents (62%) were living in rural area whereas the minority (38%) in urban area.

From the study findings basing on occupation, majority of the respondents (64%) were peasants and the minority of the respondents (8%) were formally employed.

### **3.2. Knowledge towards the use of analgesics in pain management.**

From the figure 1, majority of the respondents (70%) understood that analgesics are drugs that relieve and treat pain whereas the rest (30%) knew they are drugs that treat variety of diseases.

From table 2, most of the respondents (66%) agreed that use of analgesics relieves and treats pain whereas the least (10%) were not aware.

Most of the respondents (60%) feel headache and dizziness after taking analgesics while 20% were not aware.

From table 3, more than a half of the respondents (90%) have heard about analgesics as drugs that relieve and treat pain and the least (1%) had not heard at all.

Table 1: Shows

<b>Variable</b>	<b>Frequency (f)</b>	<b>Percentage (%)</b>
<b>Age</b>		
15-20	16	32
21-25	24	48
26-30	7	14
31-35	3	6
<b>Marital status</b>		
Single	32	64
Married	10	20
Divorced	6	12
Widowed	2	4
<b>Tribe</b>		
Muganda	44	88
Munyankole	2	4
Mussoga	3	6
Muteso	1	2
<b>Religion</b>		
Islam	16	32
Catholics	27	54
Protestants	5	10
Pentecostal	2	4
<b>Nationality</b>		
Ugandan	40	80
Kenyan	8	16
Others	2	4
<b>Education level</b>		
Non	3	6
Primary level	19	38
Secondary level	17	34
Tertiary /University level	7	14
<b>Address</b>		
Urban	19	38
Rural	31	62
<b>Occupation</b>		
<b>Response</b>		
Peasant	32	64
Business man	14	28
Formal employment	4	8

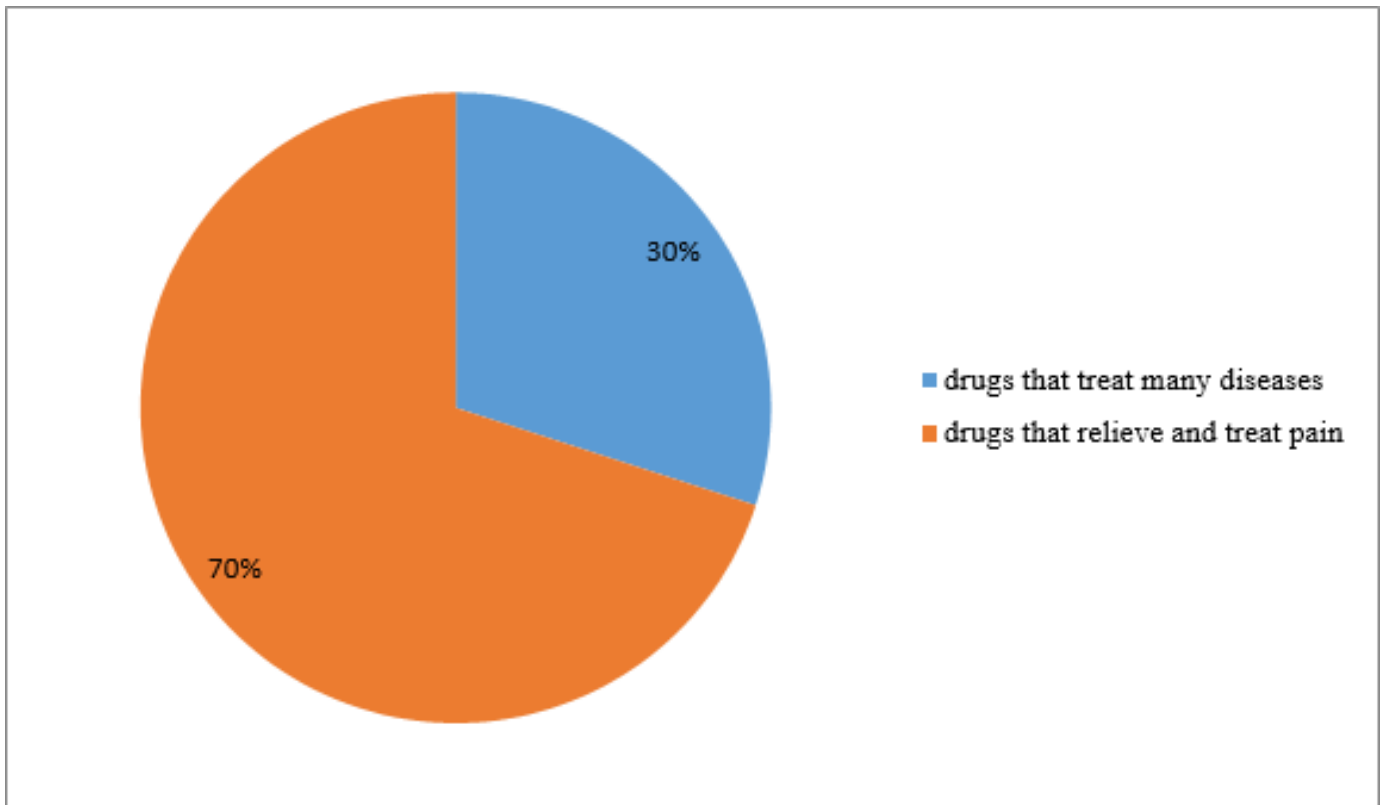


Figure 1: Shows the distribution of the respondents according to what analgesics are?

Table 2: Shows the distribution of the respondents according to whether the use of analgesics relieves and treats pain. N=50

Respondents	Frequency(f)	Percentages (%)
Agree	33	66
Disagree	12	24
Not aware	5	10
<b>TOTAL</b>	<b>50</b>	<b>100</b>

Table 3: Shows the distribution of respondents according of whether they have heard about analgesics as drugs that relieve and treat pain. N=50

Response	Frequency	Percentage (%)
Disagree	4	8
agree	45	90
Not aware	1	2
<b>Total</b>	<b>50</b>	<b>100</b>



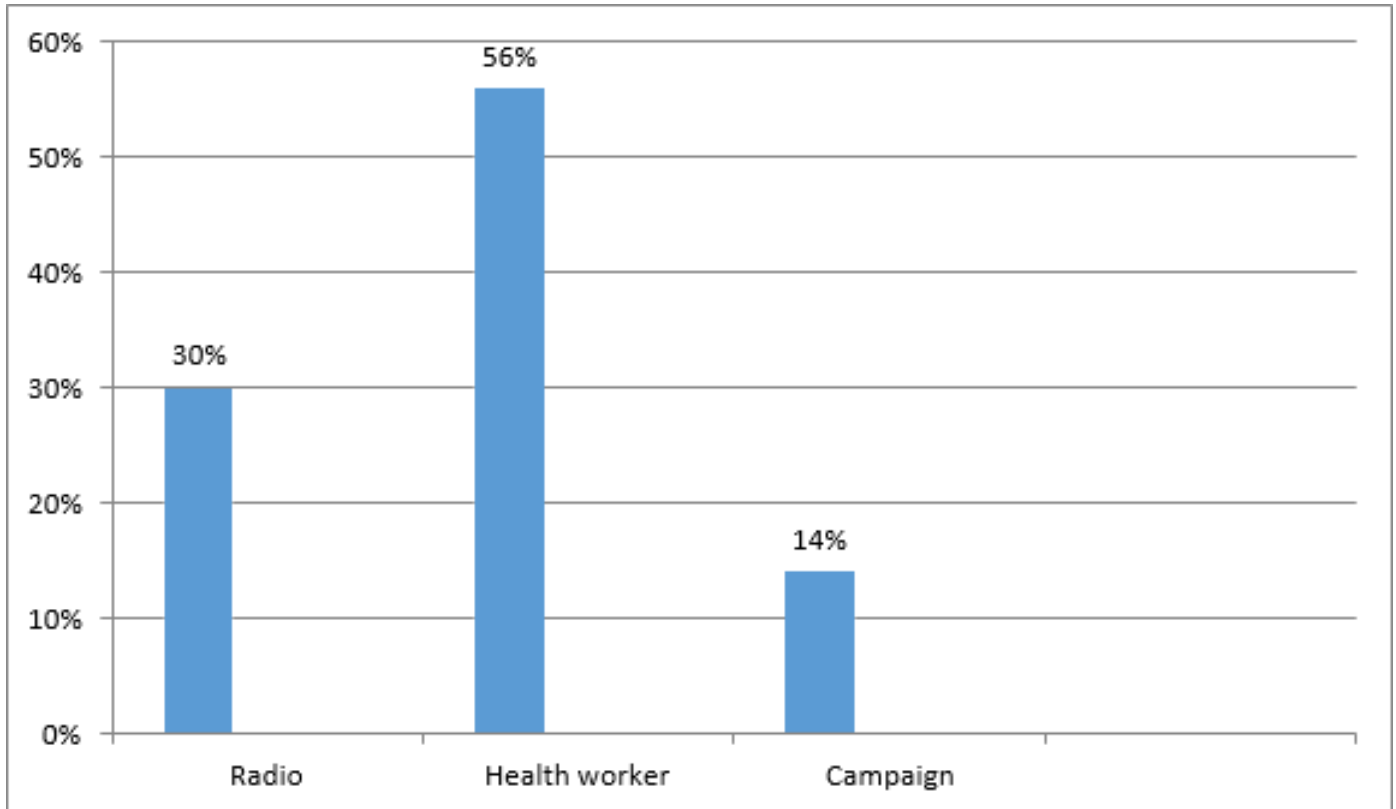


Figure 2: Shows that distribution of the respondents according to where they got the information N=50

From the figure 2, majority of respondents (60%) obtained information from health workers whereas the minority (14%) obtained information from campaigns other than radios and health workers.

### ***3.3. Attitude of patients towards use of analgesics.***

From figure 3, majority of the respondents (52%) took prevention of self-medication helps in preventing adverse drug reactions whereas the minority took it neither to prevent irrational drug use nor to prevent risks of overdose.

From table 4, most of the respondents (76%) agreed that it is important for all patients feeling pain to take analgesics to relieve pain whereas the least (10%) were not aware.

From figure 4, majority of the respondents (58%) knew that the general health condition of a patient is usually not affected after taking analgesics whereas the minority (8%) did know at all.

From figure 5, majority of the respondents (86%) recommended their relatives/friends to

get analgesics traditionally whereas the minority (4%) recommended them to get analgesics religiously and the rest medically.

From figure 6, majority of the respondents (52%) strongly agreed that use of analgesics causes sexual dysfunction and severe headache whereas the minority (8%) strongly agreed that use of analgesics does not affect sexual pleasure.

### ***3.4. Practices of patients towards the use of analgesics.***

From the figure 7, majority (92%) of respondents take analgesics whereas (8%) don't take analgesics

From figure 8, most of the respondents (86%) got analgesics traditionally whereas the least (6%) got religiously.

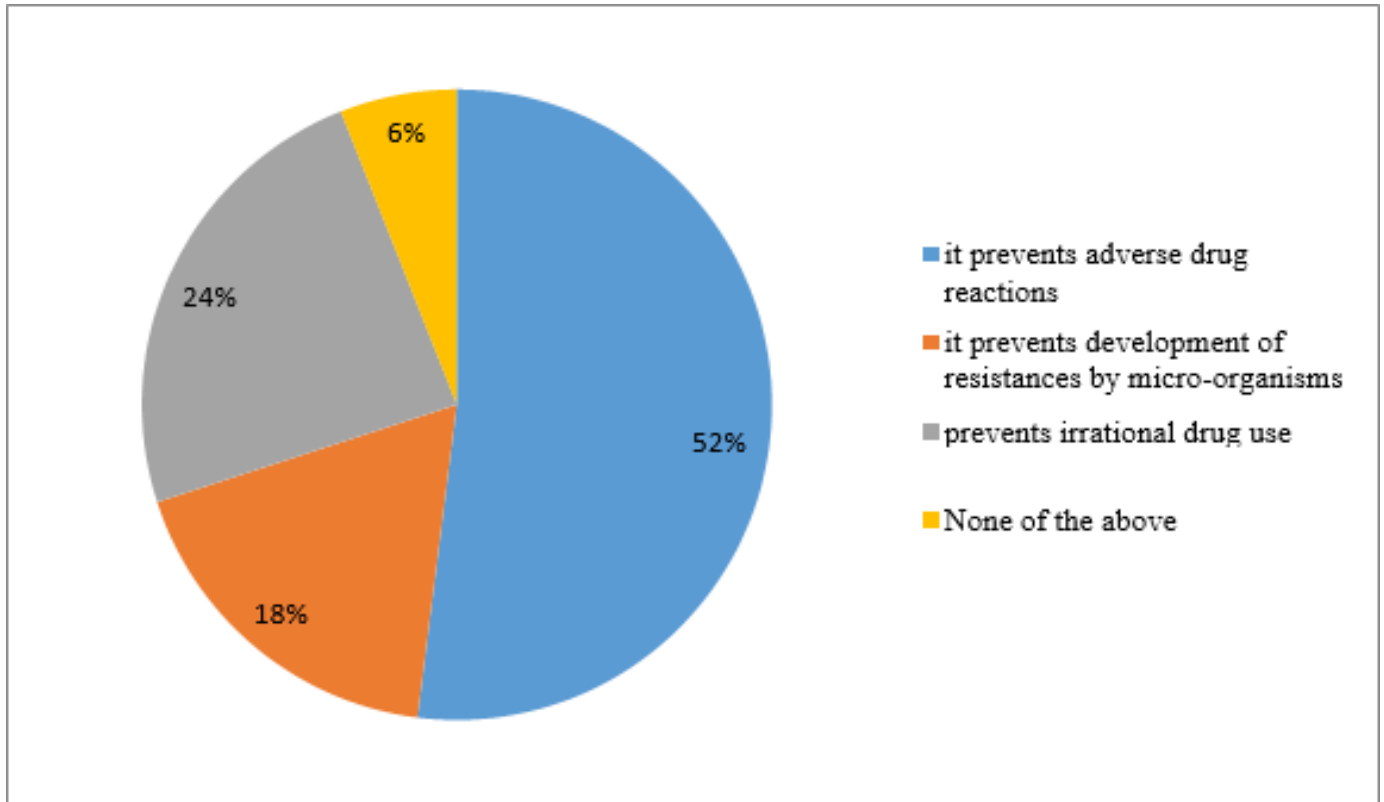


Figure 3: Shows the distribution of respondents according to education about prevention of self-medication in using analgesics being an important health program because?

Table 4: Shows the distribution of respondents according to whether it is important for all patients feeling pain to take analgesics to relieve and treat the pain. N=50

Response	Frequency	Percentage (%)
Agree	38	76
Disagree	7	14
Not aware	5	10
<b>Total</b>	<b>50</b>	<b>100</b>

## 4. Discussion.

### 4.1. Knowledge of the patients about using analgesics.

From the study findings, it revealed that majority of the respondents (70%) defined analgesics as drugs that are used to treat and relieve pain. This implies that respondents were aware of analgesics as drugs that treat and relieve pain and the study results were in line with a study that was conducted in Ghana by Shamsou, 2020.

The study showed that most of the respondents (66%) reported that taking analgesics relieves and

treats pain and this shows that most of the patients are aware of the outcomes of being using analgesics in relation to pain management. This is in line with a study that was conducted by Serge, 2019 where 60% of the respondents in the study discovered that the general benefits of using analgesics in pain management outweighs the risks, but the main challenge is the increased risks of severe headache and sexual dysfunction which arises as a result of self-medication and not seeking advises from health workers and practitioners.

From the study findings, majority of the respondents related to problems of taking analgesics



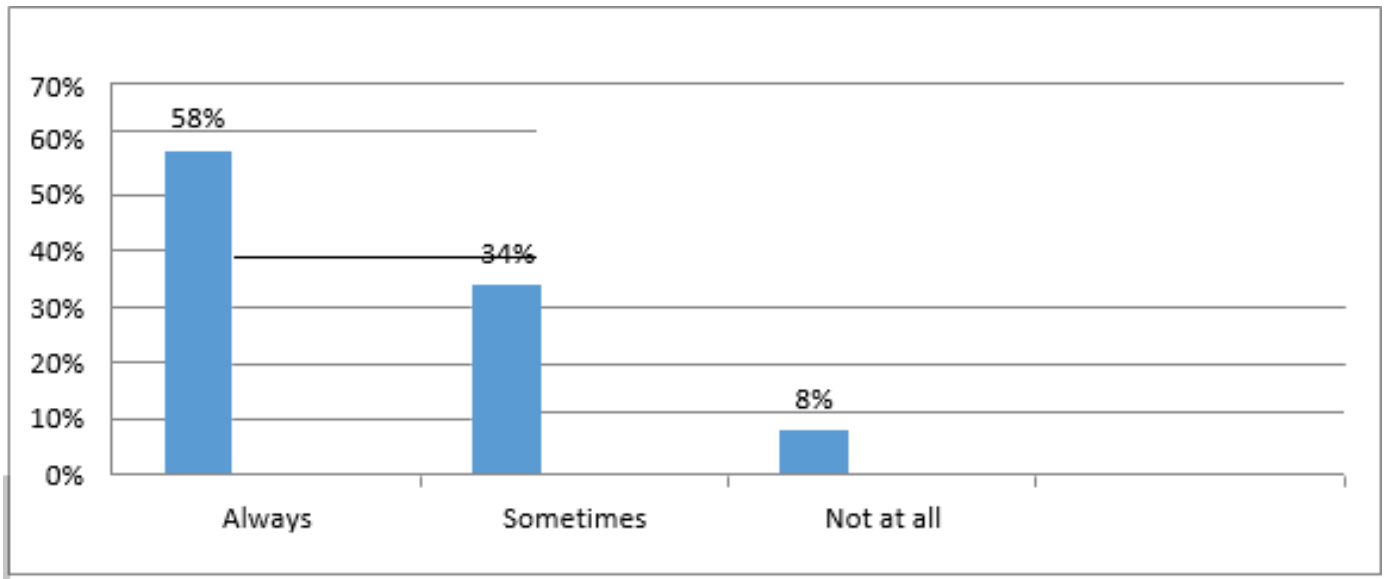


Figure 4: Shows the distribution of respondents according to whether general health condition of a patient is not affected after taking analgesics.

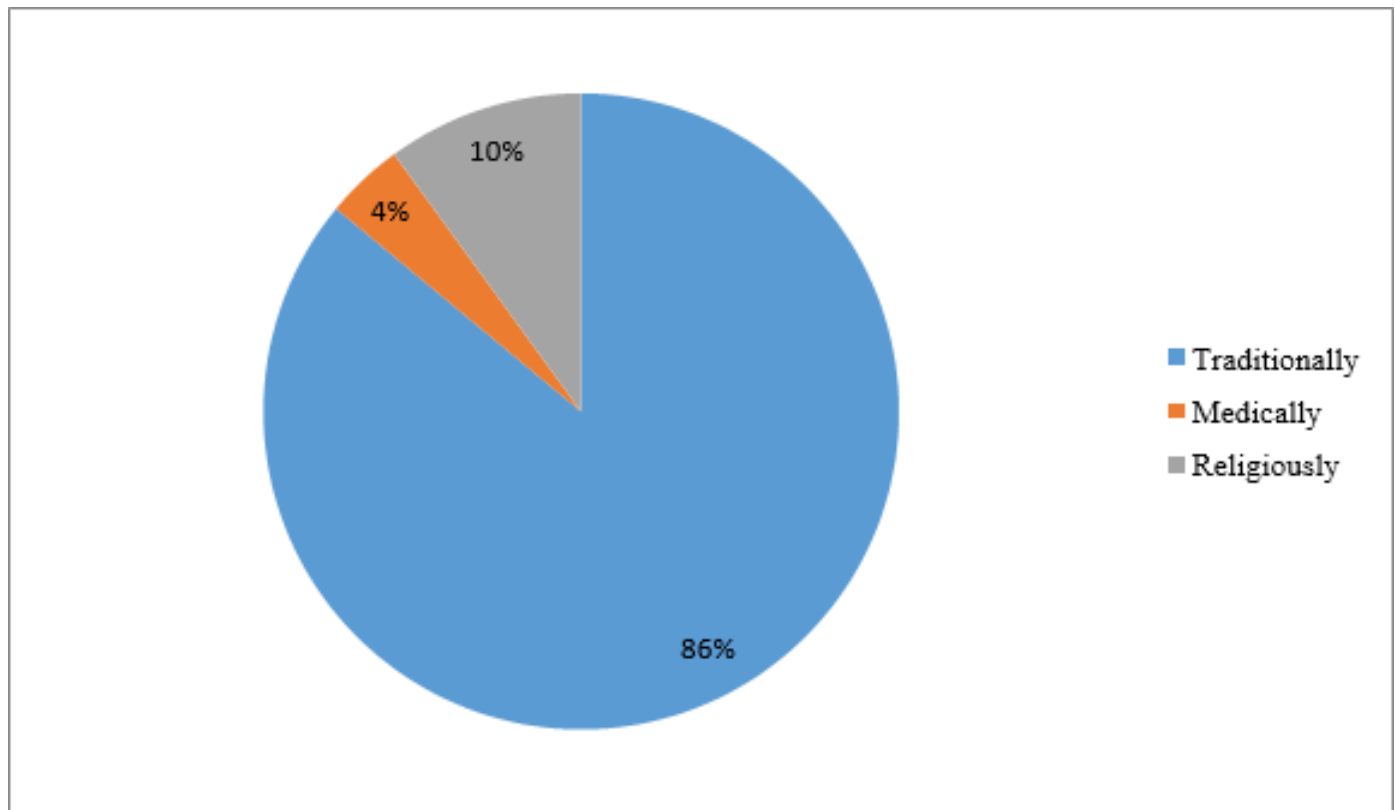


Figure 5: Shows the distribution of respondents according to how you can recommend your friends and relatives having pain to get analgesics. N=50

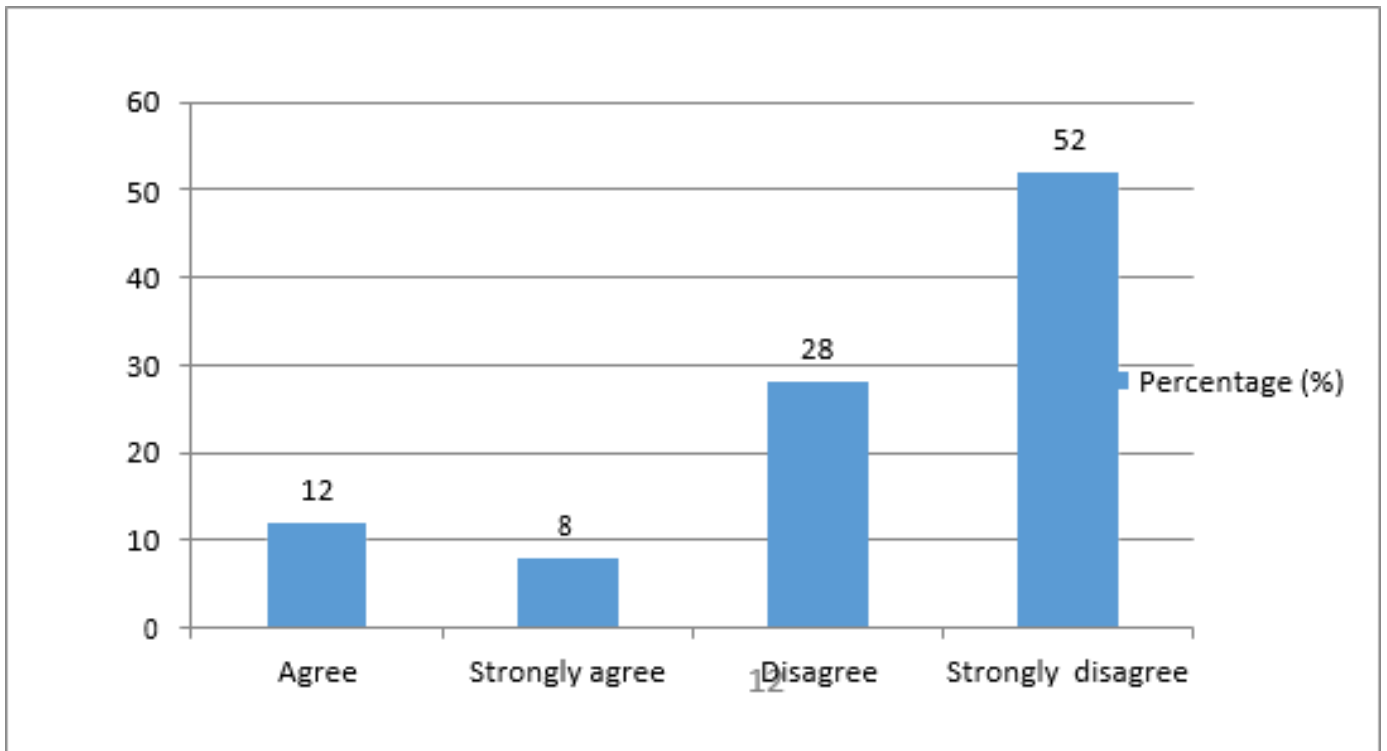


Figure 6: Shows the distribution of respondents according to whether use of analgesics does not cause severe headache and sexual dysfunctions. N=50

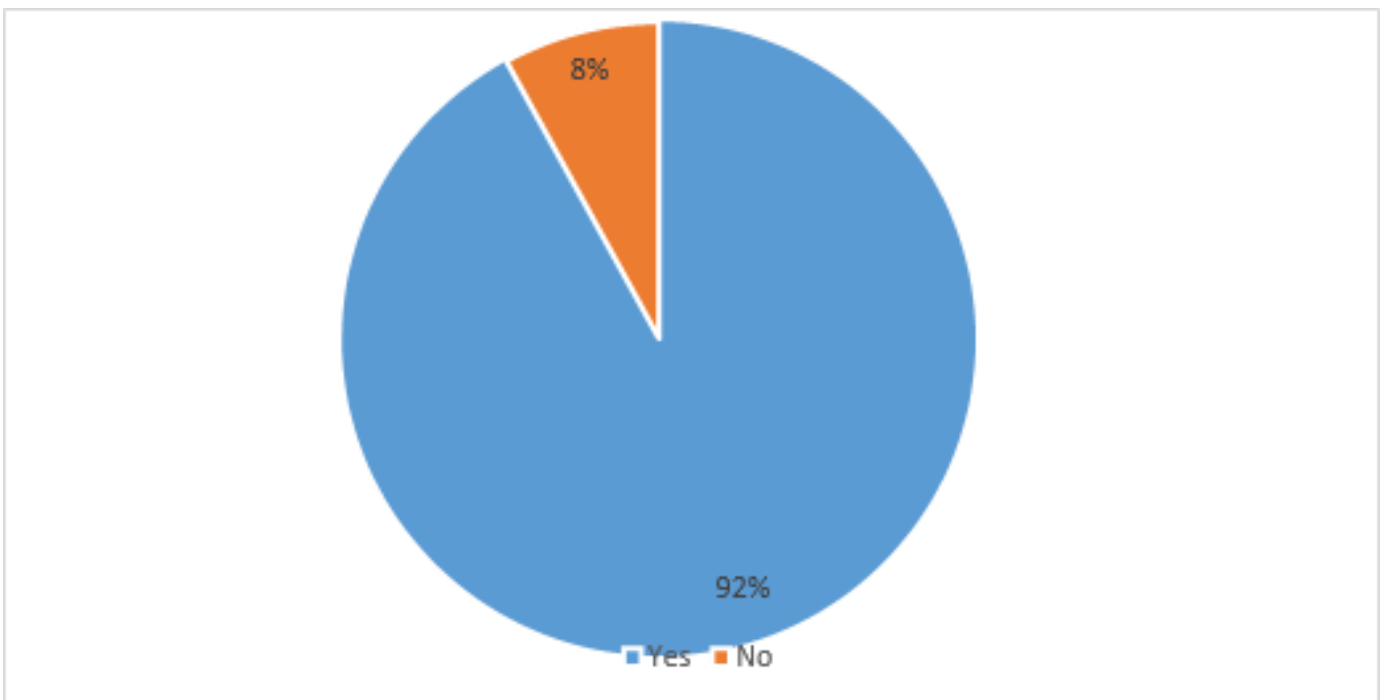


Figure 7: Shows the distribution of respondents according to whether they take analgesics N=50

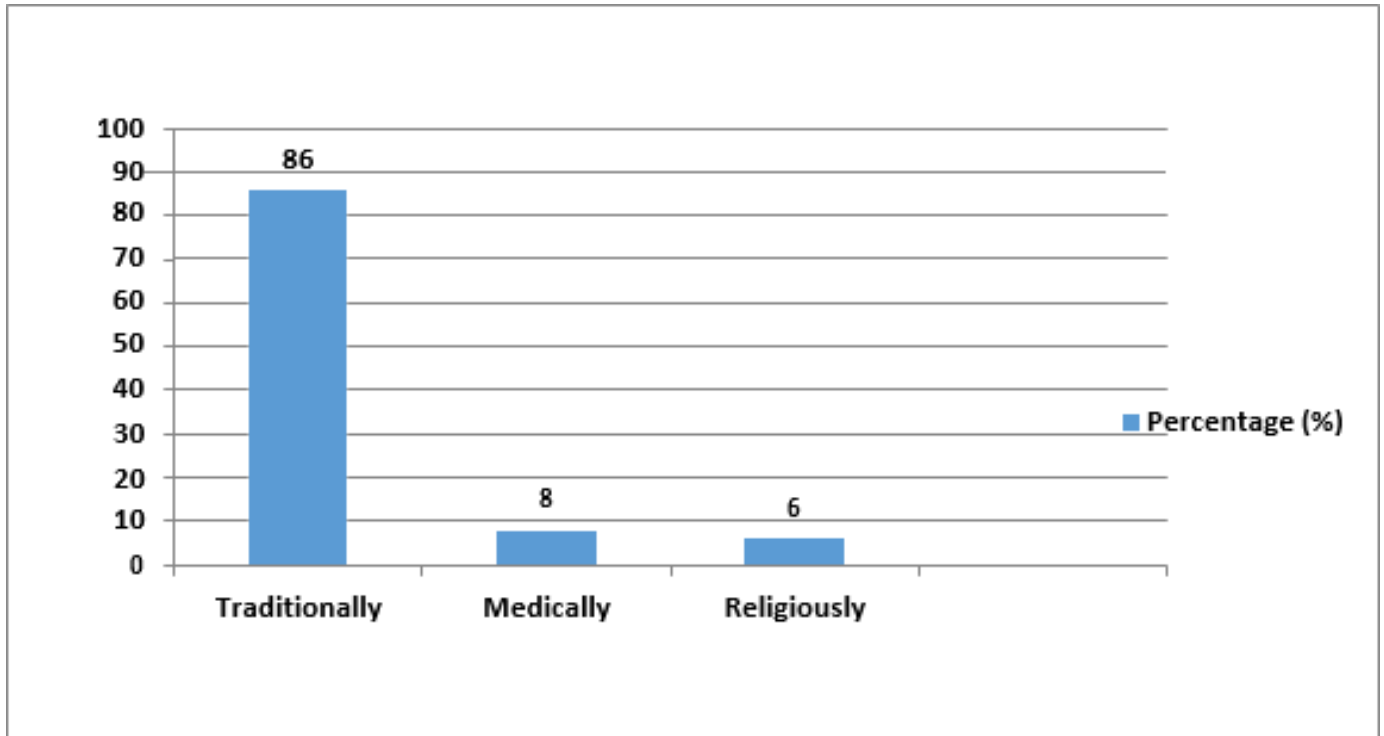


Figure 8: Shows the distribution of respondents according to how they got the analgesics. N=50

(60%) feel headache and dizziness this study was in line with the study that was carried out by Rania M Saudi Arabia, 2022.

From the study findings, majority of the respondents (90%) have heard about analgesics as drugs that relieve and treat pain and this was in line with the study N-H Peng, 2018 revealed

that youth who had heard of analgesics as drugs that treat and relieve pain were more likely to have more knowledge of analgesics compared to those who had never heard of it.

From the study findings most of the respondents (56%) reported that they got the information from the health media.

#### **4.2. Attitude of the youths towards safe male circumcision.**

From the study findings, majority of the respondents (52%) took analgesics as drugs that prevents and treats pain, this was in line with a study carried out by Ningning, 2019 which showed that there is reduced risk of severe headaches such as migraine and rheumatism pains after using analgesics.

The study showed that all most of the respondents (76%) agreed that it is important for all patients feeling particular to use analgesics to relieve the pain such as NSAIDs and this was in line with the study that was done by Raja, 2020 in Iraq. Over 60% of the respondents had a positive attitude towards the use of analgesics to relieve pain.

From the study findings most of the respondents (58%) knew that the general health condition of the patient is not affected after using analgesics as this was in line with the study conducted by Kevin, 2021 in USA shows the reasons for taking analgesics as a prevention, treatment and reducing pain such as rheumatic pains, headache.

From the study, majority of the respondents (86%) recommended their relatives/friends to get analgesics traditionally as this was in line with the study conducted by Marco in Italy, 2018 showed that there were conflicting views on public use of analgesics to the traditional secrecy of analgesics where the chiefs and elders turned into resistance.

From the study, majority of the respondents (52%) strongly disagreed that use of analgesics

does not affect sexual pleasure as this was in line with the study conducted by serge, 2019

revealed that it was discovered that the general benefits of using analgesics outweighs the risks, but the main challenge is the increased risky sexual behavior and severe headache due to over use leading to resistances to the drugs.

#### **4.3. Practices of youths towards safe male circumcision.**

From the study, majority of the respondents (92%) take analgesics to relieve pain.

Out of the 50 respondents, (70%) of them take analgesics for relieving pain due to rheumatism and this is in line with the study that was carried out by Wuraola, 2020 conducted in Nigeria. Most of the patients were prescribed NSAIDS such as ibuprofen and aspirin for rheumatic pain while acetaminophen for headache, opioid analgesics for postsurgical pain.

From the study findings, 86% of the respondents got their analgesics traditionally as this was in line with the study conducted by Charles in 2017 that there were conflicting views on public safe male circumcision to the traditional secrecy of circumcision where chiefs and elders turned into resistance.

From the study findings, patients gave different views on why they take analgesics to relieve pain as with the main reasons being because they are cheap and available as the over-the-counter-medicines and also reduction and treatment of pain as manifested by most of the patients as this was in line with the study conducted by MHRA in 2012. Medical practitioners prescribe analgesics for health reasons, religious leader viewed it as an act of faith, and traditional healer upheld it for cultural identity.

#### **5. Conclusion.**

The overall results on knowledge of the patients was not that pleasing, about (56%) of the respondents reported health workers as their source of information in regards to the analgesics, majority of the respondents (66%) reported that taking

analgesics reduces and treats pain, and (90%) respondents had heard about analgesics as drugs that relieves and treats pain.

In relation to the overall attitude, the study revealed that the attitudes of the patients towards the use of analgesics were pleasing where majority of the respondents (52%) took analgesics as prevention and treatment to pain, most of the respondents (76%) agreed that it is important for all patients having pain sensations to take analgesics to relieve and treat the pain, and more than half of the respondents reported that always the general condition of a patient is not affected after taking analgesics, majority of the respondents (86%) reported that they recommend their relatives/friends to get analgesics traditionally and (52%) of the respondents strongly disagreed that taking analgesics does not affect sexual pleasure.

The general practices of the patients towards the analgesic use revealed that most of the respondents (92%) take analgesics, majority of the respondents (70%) take analgesics to relieve and treat rheumatic and migraines, most of them (86%) of the respondents got their analgesics traditionally from the herbalists, and majority of the respondents (92%) accepted to take analgesics to relieve and treat pain since they are easy to get as over the counter-medicines.

#### **6. Study limitations:**

The main study limitation is biasness in answering the question due to the social, cultural and religious differences among the patients. This is a sensitive topic and some patients found it hard to answer some of the questions and therefore some respondents may intentionally or unintentionally not give the right information. Distance from the school of the researcher that is more than 40km away from the study site offered a great deal of limitations as frequent visits was not be possible for the researcher to do data collection. Some respondents were not cooperative and lack general knowledge on the use of analgesics. The funding was also a limitation to carry out an effective study in the all wards of the hospital.

## 7. Recommendations.

Ministry of Health should make further studies on use of analgesics by patients all over Uganda and puts restrictions on the self-medication of analgesics especially by preventing the accessibility of the drugs from over the counter systems.

They should put restrictions on the medicines to be sold only after approval by the National Drug Authority and Uganda National Bureau of Standards. This helps to eliminate acquisition of the drugs traditionally from the herbalists who do not standardize their products.

Health care providers should advise the patients on dangers of getting medication traditionally and from over the counter systems. They should advise patients that analgesics have side effects

and adverse reactions if taken with some other particular drugs and over use of analgesics may lead to serious health risks like drug resistances and some can lead to addictions especially opioid analgesics.

## 8. Acknowledgement.

With gratitude I thank the almighty God for his great and wonderful peace, knowledge, protection, wisdom and understanding making it possible and easier for my completion of this research report.

Furthermore, thanks go to my parents and my friends for supporting me through my research report and the study.

Special thanks also go to my research supervisor Mr. Niwagiira Mulodokayi for the technical support he has given me to develop this research report.

## 9. List of Abbreviations.

**COX** : Cyclooxygenase enzymes.  
**KAP** : Knowledge Attitude and Practices.  
**OTC** : Over the Counter medicine.  
**PCM** : Paracetamol.  
**WHO** : World Health Organization.  
**MOH** : Ministry of Health

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