#### KNOWLEDGE, ATTITUDE, AND PRACTICES TOWARDS THE USE OF ANALGESICS AMONG THE RESIDENTS OF KYENTALE WARD HOIMA DISTRICT. A CROSS-SECTIONAL STUDY.

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## Page | 1 ABSTRACT.

#### **Background:**

The purpose of the study was to assess the knowledge, attitude, and practices towards using analgesics among the residents of Kyentale Ward Hoima district Uganda.

#### Methodology:

The study design employed was a descriptive cross-sectional, to address the specific objectives of the study on a sample of 50 respondents using a simple random sampling technique. Semi-structured questionnaires were designed and used as data collection tools.

#### **Results:**

The majority % of the respondents 80% had ever used analgesics, 70% agreed that analgesics reduce pain, and 36% obtained this information from friends and neighbors.56% of the respondents agreed that taking analgesics to relieve pain has side effects such as dizziness, headache, and gastric ulcers, 56% were very satisfied with the use of analgesics, 30% were satisfied, 10% were neutral and 4% were not satisfied with the use of analgesics. The majority 80% had ever used analgesics whereas the minority 20% had not used analgesics. 62% of the respondents agreed that they have used analgesics without consultation with the health workers, of which most do not follow the doctor's advice. Half 50% took analgesics more than 3 times a day whereas the least 6% took analgesics once daily.

#### **Conclusion:**

Generally, the residents had inadequate knowledge, their attitude was reasonable and residents had a fair practice of analgesics since they were self-medicating with irrational drug use which increases the risks of toxicity, kidney damage, and gastric ulcers.

#### **Recommendation:**

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

Keywords: Knowledge, Attitude, Practices, Analgesics, Kyentale Ward Submitted: 2024-01-06 Accepted: 2024-02-06

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#### **BACKGROUND OF THE STUDY.**

Analgesics are medications used in the management of pain. Globally, Opioid analgesic consumption increased from 2015 to 2019 among 66 countries and regions included which represent approximately 74.5% of the global population. The average annual increase globally was approximately 4.0% from 27.52 MME per 1000/day in 2015 to 29.51% MME per 1000/day in 2019, (S Jayawardana, et al 2021).

Sub-Saharan Africa faces unique challenges regarding the supply and consumption of analgesics compared to other LMICs, OTC drugs including analgesics are commonly used in Saharan Africa by men and women (including pregnant women), children, and people from different locations to manage febrile illnesses, (J Yao 2023).

In Rwanda, revenue in the Analgesics market amounted to US\$2.38m in 2023. The market is expected to grow annually by 8.33%. Another significant trend is the prevalence of chronic diseases, which leads to a growing demand for analgesics used by people suffering from chronic and severe pain (*Analgesics - Australia / Statista Market Forecast*, 2023.). The growth of the Analgesics market is restricted by legislation, as the restriction on opioid analgesics differs from country to country (*Analgesics - Australia / Statista Market Forecast*, 2023.). In Uganda, revenue in the Analgesics market amounted to US\$45.18m in 2023. The market is expected to grow annually by 10.21% from 2023-2028. The mean compliance with dispensing and control stock was 82.9% and 23% respectively. 20% and 40% had prescription and invalid prescriptions respectively, showing a suboptimal compliance to controlled prescription compliance to dispensing requirements among Ugandan pharmacies, (PF Kamba 2020).

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| 2 The study aimed at assessing the knowledge, attitude, and practices of residents on analgesic use in Kyentale ward Hoima district.

#### METHODOLOGY.

#### Study design.

A descriptive cross-sectional design was used with quantitative methods because it allows the determination of the independent and dependent variables at the same point in time with no follow-up of the participants. Study area

The study was conducted in the Kyentale ward found in Hoima town council in Hoima District, Western Uganda, Bunyoro sub-region. Kyentale ward is boarded by Mparo ward, Bujumbura ward, and Cyprian ward. It lies along the Hoima Kampala highway. This study was carried out within a period of three (3) months, that is to say, from September 2023 to November 2023

#### Study population.

The study population was residents (men and women) of the Kyentale ward parish, (villages include; Kihanga, Kihemba, Kyentale, and Butanjwa) Sample size determination The sample size was 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 collecting data R=maximum number of people per day O=maximum time the interviewer spends on each participant.  $2 \times 5 \times 10 \times 0.5 hr=50$ Therefore, the researcher used 50 respondents.

#### Sampling technique.

A simple random sampling technique was used to choose the participants for the study. Simple random sampling is a non-biased probability sampling technique as it ensures that everyone has an equal opportunity to participate in the study.

#### Sampling procedure.

The researcher explained the procedure to the respondents about the study, and those who turned positive (willing) were given tools (questionnaires) for capturing data and they filled them out at their convenience/ free time. Those who were not able to read and write were interviewed while using an interview guide.

#### Data collection method.

Data was collected using both interview and questionnaire methods. This is because the study involved gathering information from men and women, where some could write yet others couldn't.

#### Data collection tool.

Both interview guides and open and closed-ended questionnaires were used to collect data from the respondents. Questionnaires were written in English language and later translated into local languages that is to say; Runyoro. Interview guides were used to guide the researcher during the process of data collection.

#### Data collection procedure.

An introduction letter was obtained from the Principal of Kampala School of Health Sciences and then taken to the Chairperson LC II (Kyentale ward). After getting permission, the researcher explained the purpose of the study to the respondents, then the researcher administered the questionnaires to the respondents and translated interview guides were used. Verbal or written consenting was allowed, and then data collection. Participants were thanked for taking part in the study.

#### Study variables.

The study's independent variables were the knowledge, attitude, and practices toward the use of analgesics among residents, while the dependent variables were the analgesics.

#### Quality control.

Research assistants were first trained on how to use the interview guides and how to manage respondents during the period of data collection. Also, the interview guides were first pretested before being used in the actual period of data collection to ensure the correctness of questions in terms of the research questions. Also, the interview guides were kept confidential to only research team members. Also pre-testing the questionnaire from residents of Kihemba among 10% of the sample.

#### **Ethical considerations.**

The researcher introduced the topic, purpose, and significance of the study to the respondents. The respondents were assured of confidentiality in the study as no names were used and thereafter asked to sign a consent form. No respondent was forced to participate in the study. Each respondent was interviewed alone and information obtained from any respondent was not shared with other colleagues. The data collected was kept in a locked cupboard.

#### Data analysis and presentation.

#### **RESULTS.**

Data was tallied and analyzed manually using a pen and A4 sheets of paper. It was then `entered into Microsoft Excel to generate tables, graphs, and pie charts for easy analysis

Social Demographic data.

#### Page | 3 Table 1: Shows the distribution of respondents according to their bio data. (N=50)

	Frequency (F)	Percentage (%)	
Age Of Respondents			
15-25	06	12	
26-37	12	24	
38-49	18	36	
50 years above	14	28	
Total	50	100	
Sex Of Respondents			
Male	22	44	
Female	28	56	
Total	57	100	
Marital Status			
Married	25	50	
Single	17	34	
Divorce	8	16	
Total	50	100	
Occupation			
Self-employed	15	16	
Unemployed	25	50	
Employed	10	20	
Total	50	100	
Religion			
Catholic	15	30	
Muslim	12	24	
Protestant	10	20	
Others	13	26	
Total	50	100	
Educational Level			
Tertiary Level	20	40	
Secondary Level	15	30	
Primary Level	10	20	
Never Gone To School	05	10	
Total	50	100	

According to table 1,

From the study findings, most (36%) of the respondents were aged 38-49 years whereas the least (12%) were aged 15-25 years.

Based on the study findings relating to marital status half (50%) were married whereas the least (16%) were not married.

The study findings further revealed that more than half (56%) were females whereas the least (44%) were females.

About study findings, most of the respondents (30%) were Catholics whereas the least (20%) were Protestants.

Findings from the study showed that almost half (40%) of the respondents had attained tertiary level whereas the least (10%) had never gone to school.

Findings further revealed that 50% of the respondents were unemployed whereas the least 20% were employed.

#### Knowledge of the use of analgesics.



#### Figure 1: Shows the distribution of respondents according to whether they had ever heard about analgesics. (N=50)

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From Figure 1, (72%) had never heard about analgesics whereas the least (28%) had ever heard about analgesics.

Table 2: Shows the distribution of res	pondents according to where they obtained
information about analgesics. (N=14)	

Response (R)	Frequency (F)	Percentage (%)
Radio/ TV	3	21
Friends/neighbor	5	36
Health facility	2	15
Social media	3	21
Others	1	7
Total	14	100

From Table 2, most (36%) got information from friends and neighbors whereas the least (7%) obtained information from other sources.





From Figure 2, most (40%) of the respondents knew aspirin whereas the least (5%) didn't know any analgesic drug.

## Table 3: Shows the distribution of respondents according to the conditions that can be managed by the analgesics. (N=50)

_	Response (R)	Frequency(F)	Percentage (%)
	Back pain	11	22
	Headache	15	30
	Toothache	07	14
	Period pain	05	10
	Muscle pain	09	18
	I don't know	03	6
	Total	50	100

From Table 3, most (30%) of the respondents knew headache as a condition that can be managed by analgesics whereas the least (6%) didn't know any condition that can be managed by analgesics.

#### Attitude towards the use of analgesics.

## Figure 3: Shows the distribution of respondents according to whether analgesics can effectively relieve pain. (N=50)



From Figure 3, the majority (70%) agreed that analgesics relieve pain whereas the minority (10%) were not sure whether analgesics relieve pain.

## Table 4: Shows the distribution of respondents according to their views about whether it is necessary to seek a doctor's consultation before taking the analgesics. (N=50)

Response(R)	Frequency(F)	Percentage (%)
Agree	10	20
Disagree	15	30
Not sure	25	50
Total	50	100

From Table 4, half (50%) were not sure about consulting medical workers before taking analgesics whereas the least (20%) agreed with consulting medical workers before taking analgesics.



Figure 4: Shows the distribution of respondents according to their satisfaction with the use of analgesics. (N=50)

From Figure 4, More than half (56%) were very satisfied with analgesics whereas the least (04%) were not satisfied with analgesics.

# Table 5: Shows the distribution of respondents according to their perception about whether they thought there was any possibility of any adverse effect that could result from using analgesics. (N=50)

Response(R)	Frequency(F)	Percentage (%)
Agree	5	10
Disagree	15	30
Not sure	30	60
Total	50	100

From Table 5, the majority (60%) were not sure whether there is a possibility of any adverse effect that can result from using analgesics whereas the minority (10%) agreed.

Table 6: Shows th	ne distribution of	respondents	according t	o the side e	ffects they
experienced. (N=	:50)	-	_		_

Response(R)	Frequency(F)	Percentage (%)
Gastric ulcers	20	40
Dizziness	10	20
Vomiting	08	16
Kidney problem	03	6
Other	09	18

From Table 6, almost half (40%) of the respondents suffered gastric ulcers whereas the least (6%) experienced kidney problems.

Practice the use of analgesics.





From Figure 5, the majority (80%) had ever used analgesics whereas the minority (20%) had not used analgesics.

Table 7: Shows the distribu	tion of respondents according	to how often they used	the
analgesics per day. (N=40)		-	

Response(R)	Frequency(F)	Percentage (%)
Once	03	7
Twice	07	18
Thrice	10	25
Others	20	50
Total	40	100

From Table 7, half (50%) took analgesics more than 3 times a day whereas the least (6%) took analgesics once daily.

Table 8: Shows the distribution of respondents according to whether they first read th	e
pamphlets before taking the analgesics. (N=50)	

Response(R)	Frequency(F)	Percentage (%)
Agree	10	20
Disagree	18	36
Not sure	22	44
Total	50	100

From Table 8, almost half (44%) do not read through the pamphlets before taking the medicines whereas the least (20%) read through the pamphlets.

Table 5: Shows the distribution of respondents according to whether they followed	the
doctor's advice before taking any analgesic. (N=50)	

Response (R)	Frequency(F)	Percentage (%)
Yes	06	12
Not at all	31	62
Some times	13	26
Total	50	100

From Table 9, the majority (62%) do not follow the doctor's advice whereas the minority (12%) follow the doctor's advice.



# Figure 4: Shows the distribution of respondents according to where they obtain analgesics. (N=50)

From Figure 6, almost half (42%) got analgesics from pharmacies whereas the least (14%) got analgesics from hospitals.

#### DISCUSSION.

#### Knowledge of analgesic use.

A study of 50 participants showed that the majority (72%) had never heard about analgesics. This is simply because most people didn't know the term analgesics, this was in disagreement with Feni (2023), where the majority of the respondents (70%) understood that analgesics are drugs that relieve and treat pain.

From the study findings, most (36%) obtained information from friends and neighbors and this was attributed to peer influence. The current findings were not in line with the findings of (Karami, et al,2018) where (36.5%) of participants brought their information for analgesic use from the pharmacist.

Based on the study findings, most (40%) of the respondents knew aspirin. This could be attributed to the fact that aspirin is the most given drug they always purchase for relieving pain, this was in line with the findings of Saeng Charoen et al, (2016), where the residents knew paracetamol and NSAIDS like aspirin.

Further findings revealed that most (30%) of the respondents knew headache as a condition that can be managed by analgesics. This could be attributed to the fact that most people were suffering from headaches due to too much stress and hence managing. This was comparable to the findings of Sarah (2019), where (61.3%) of common reasons for taking analgesics were dysmenorrhea, headache, and other conditions.

#### Attitude toward analgesic use.

A study of 50 participants showed that the majority (70%) agreed that analgesics relieve pain this was because whoever felt pain took analgesics and got relief. This was in line with Feni (2023), where (76%) agreed that it is important for all patients feeling pain to take analgesics to relieve pain.

Based on the study findings, half (50%) were not sure about consulting medical workers before taking analgesics. This was attributed to the unawareness of residents, findings were consistent with the findings of Mohammed et al, (2022), where (81%) didn't consult a doctor or pharmacist.

From the study findings, more than half (56%) were very satisfied with analgesics. This could be because they felt relieved, this was similar to the findings of (Wong et al, 2018), where they were very satisfied with the analgesics that they had used.

Findings further revealed that the majority (60%) were not sure whether there is a possibility of any adverse effect that can result from using analgesics simply because they were ignorant of the outcomes of using analgesics.

Studies revealed that almost half (40%) of the respondents suffered gastric ulcers, this was attributed to the increased use of NSAIDS like aspirin this was in contrast with the findings of Cheah et al, (2018), where (40.5%) claimed kidney problems as the side effect.

#### Practice the use of analgesics.

In a study of 50 participants, the majority (80%) had ever used analgesics because most people had ever felt pain similar to the findings of (Feni 2023), where (92%) of respondents took analgesics.

Based on the study findings, half (50%) took analgesics more than 3 times a day depending on how severe the pain was similar to the findings of Ozkan et al , (2020), where (44.4%) expressed that they used analgesics three times a day.

From the study findings, almost half (44%) did not read through the pamphlets before taking the medicines, this is because people saw it as a waste of time, this was similar to the findings of Kafeel et al, (2017), where (79.8%) of them didn't read medicine usage instructions before using medicines

Based on the study findings, the majority (62%) did not follow the doctor's advice simply because people were not taking the doctor's advice seriously. This was in line with the findings of Ozkan et al, (2020), where (81.5%) of them used medicines without a doctor's advice.

Findings revealed that almost half (42%) got analgesics from the pharmacies because pharmacies were more accessible.

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#### **Original Article**

#### CONCLUSION.

In regards to overall findings that were obtained from the study; the following conclusions were made: The residents had inadequate knowledge of the use of analgesics since few (28%) had ever had analgesics, (36%) of the respondents reported friends and neighbors as their source of information in regards to the analgesics, and (80%) respondents had heard about analgesics as drugs that relieves and treats pain.

Regarding the overall attitude, the study revealed that the attitudes of the patients towards the use of analgesics were reasonable whereby the majority of the respondents (56%) were very satisfied with analgesics as prevention and treatment to pain, most of the respondents (70%) agreed that it is important for respondents having pain sensations to take analgesics to relieve and treat the pain,

Overall practices were fair due to the fact (80%) had ever used analgesics but they were self-medicating without following the doctor's advice as noted by (62%), (44%) did not read through the leaflets and follow instructions before taking the medicines, with irrational drug use as (46%) used the analgesic more than 3 times a day.

Generally, the residents had inadequate knowledge, their attitude was reasonable and residents had a fair practice of analgesics since they were self-medicating with irrational drug use which increases the risks of toxicity, kidney damage, and gastric ulcers.

#### **RECOMMENDATIONS.**

The Ministry of Health should carry out sensitization sessions to educate the patients about the possible side effects of analgesics and the dangers of their use without consultation of the health workers to reduce or possibly eliminate the side effects of the drugs and resistance where necessary.

Ministry of Health should conduct further studies on the use of analgesics by patients all over Uganda and put restrictions on the self-medication of analgesics, especially by preventing the accessibility of the drugs

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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.

Healthcare providers within the community should advise the patients on the 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 overuse of analgesics may lead to serious health risks like drug resistance and some can lead to addictions, especially opioid analgesics.

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#### LIST OF ABBREVIATIONS.

LMICs:	Low and Middle-Income Countries
MOH:	Ministry of Health
NGAIDG.	Non Stanoidal Anti Inflammatany Davas

Non-Steroidal Anti-Inflammatory Drugs NSAIDS:

OTC: Over-the-Counter

- WHO: World Health Organization
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