### KNOWLEDGE AND ATTITUDE PRACTICES TOWARDS SPECIAL OPERATING PROCEDURES ON COVID-19 PREVENTION AMONG HEALTH WORKERS AT BUKAKATA HEALTH CENTER, MASAKA DISTRICT. A CROSS-SECTIONAL STUDY.

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# Abstract.

#### Background.

The study aimed to assess; the knowledge, attitude, and practices towards SOPs on covid 19 prevention among health workers at Bukakata Health Center III, Masaka district.

#### Methodology.

A descriptive cross-sectional study design was employed with a quantitative approach. Data was collected from a sample of 50 respondents using a semi-structured questionnaire; results were systematically computed into frequency and percentages using Microsoft Excel to generate tables and figures for easy presentations.

#### **Results.**

Results from the study showed that 50% of the respondents were aged (40-45) years, 52% were females and about 34% were Baganda by tribe. (96%) of the participants had ever heard about SOPs on COVID-19 prevention and (60%) said they obtained the information from social media. (40%) knew viruses as the causative agent. About (94%) agreed that covid 19 SOPs can reduce the spread of covid 19 and (60%) believed that at one time they could be infected with covid 19 however, (80%) disagreed with isolation as an effective way of preventing the spread of covid 19. close (70%) used to put on face masks and (50%) used to use alcohol-based sanitizers as a preventive measure against covid 19.

#### **Conclusion.**

Generally, study participants exhibited fair knowledge, attitudes, and practices toward SOPs on COVID-19 prevention. Many knew viruses as the causative agent and most had a strong belief that hand washing can prevent the spread of covid 19. Quite a number mentioned putting on masks and regular use of alcohol-based sanitizer as the most common practices against covid 19 prevention.

#### **Recommendation.**

There should be adequate sensitization of health workers by MOH on different SOPs used in COVID-19 prevention. We are increasing the supply of personal protective equipment in health centers by the MOH.

*Keywords:* COVID-19, Special Operating Procedures, Bukakata Health Center III, Health workers, knowledge. *Submitted:* 2024-05-19 Accepted: 2024-08-04

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### Background.

Standard Operating Procedures (SOPs) in the context of Covid 19, are guidelines put in place to prevent the spread of the Covid 19 virus. These guidelines include measures such as frequent hand washing or disinfection with alcoholbased sanitizer, wearing face masks, social distancing, and disinfection of surf access (WHO). However, many people including health workers have relaxed on SOPs which can increase the cases of COVID-19. As of 2nd September 2022, Uganda is headed for difficult times; hospital beds in Kampala are filling fast, with 2600 confirmed cases meaning that SOPs have generally been dropped in the public. While taxis were ordered by the president to ferry only 8 passengers for social distancing purposes, passengers report that the case is different in the crowded suburbs and the country is seeing an explosion in COVID-19 cases and a patient hospitalized in Mulagohospital said on condition of anonymity, that four floors of new Mulago complex are at full bed capacity (The Observer).

The Viruses constantly change through mutation and new variants of a virus are expected to occur. Some variants seem to spread more easily and quickly than other variants, which may lead to more cases of COVID-19. An increase in the number of cases will put more strain on healthcare

resources, leading to more hospitalizations and potentially more deaths. For health and Health Care Workers (HCWs) around the world, the pandemic caused a heightened risk of occupational exposure to a new spreading disease and created the need to adapt roles and responsibilities for a wide range of tasks and professional settings. HCWs are not only

at a high risk of infection, but they may also contribute to Page | 2 their spread from hospital to community environments and vice versa.

This pandemic resulted in many infections and deaths among HCWs and their households. The healthcare sector is one of the most severely hit by the pandemic as the HCWs face multiple hazards that affect their physical, mental, and social well-being. Lack of preparedness, the pandemicrelated changes in working conditions, and access to and utilization of healthcare seemed to interact and create social tension among HCWs. In the beginning, COVID-19 infected many healthcare workers, posing a big challenge for epidemic control. For instance, as of early March 26th, 2020, there were over 4824 health workers infected, with 24 dying in Italy, and 3300 cases of health workers confirmed in China. On June 27th, 2021, 34 staff of Masaka Regional Referral Hospital were undergoing treatment for Covid 19 after they contracted Covid 19. Dr. Faith Nakiyemba the DistrictHealth Officer said that a total of 496 covid 19 cases with 32 deaths since May 27th with Kimanya-kybakuza 161 cases, Katwe- Butego division 106 cases. The resident city commissioner Fred Bamwine said some people have failed to comply with COVID-19 SOPs (New Vision). Therefore, this study aimed to assess the knowledge, attitude, and practices towards SOPs on COVID-19 prevention among health workers in Bukakata Health Centre III, Masaka district.

# Methodology. Study design.

A descriptive cross-sectional study design was employed with quantitative approaches where data was gathered at only one point at a time. This design was preferred for this study because it considers issues for instant economy, rapid data collection, and the ability to understand the population from part of it.

### Study area.

Bukakata Health Centre III is located in Masaka district approximately 120 kilometers from Kampala, the capital city of Uganda on the eastern showers of Lake Victoria. The facilities provide several services such as COVID-19 vaccination, maternity, and general medicine among others.

# Study population.

The study population consisted of health workers at Bukakata Health Centre III.

### Sample size determination.

The sample size was determined using Burton's formula (1965) Sample size (n) = QR/O

Where, O- Total number of days taken for data collection. R- Maximum number of respondents who were interviewed

per day.

O- Maximum time taken on each respondent per day.

Values: Q= 10 days R=5 respondents.

O=1 hour (Time duration was from 8 am- 1 pm each day) Therefore, n = QR/O

N = (10x5)/1 = 50 Respondents

### **Dependent variables.**

The dependent variable was SOPs on COVID-19 prevention.

### Independent variables.

Knowledge and attitude practices toward SOPs on COVID-19 prevention among health workers were the independent study variables.

### Inclusion criteria.

Health workers in Bukakata Health Centre III consented voluntarily during the time of data collection.

### Sampling technique.

Simple random sampling was used to select the sample from the source population where in a pool of 15HWCs, a sample of 5HWCs was selected randomly regardless of the carder. The technique was preferred because it ensured freedom from human bias and each member of the target population had an equal and independent chance of being included.

### Data collection tool.

Semi-structured questionnaires consisting of both closed and open-ended questions written in English language and translated into local languages by other research participants involved in collecting data. The researcher considered questionnaires as the most convenient way of collecting data from respondents because it would be easy for the researcher to administer and obtain data within a short time from a large number of respondents and a total number of 50 respondents was obtained.

# Piloting the study.

To ensure the validity and reliability of the research tool, the researcher took certain measures; where the researcher was regularly present to draft the research tool to the research assistant for advice and assistance. The researcher prior tested the first draft of the questionnaire among 10 respondents at Masaka Regional Referral Hospital. The results from the pre-test were used to modify the items in the instruments.

# Quality control.

The filled questionnaires were checked for completeness at the interview site before leaving the place. Partly filled questionnaires were handed back to the respective respondents for completion before being re-submitted to the supervisor.

### Page | 3 Data analysis and presentation.

Data was analyzed manually by use of tally sheets, a scientific calculator; systematically computed into frequency and percentages using Microsoft Excel to generate tables and figures for easy presentations.

After approval of the proposal by the supervisor, permission to collect and obtain data was sought with the help of an introductory letter from the Kampala School of Health Sciences administration to Bukakata Health Centre III; once permission was granted, the researcher explained the study objectives to the participants and a consent form was signed by each respondent before collecting data. Information obtained from the respondents was kept confidential. This was done to ensure that the research ethics were observed throughout the study.

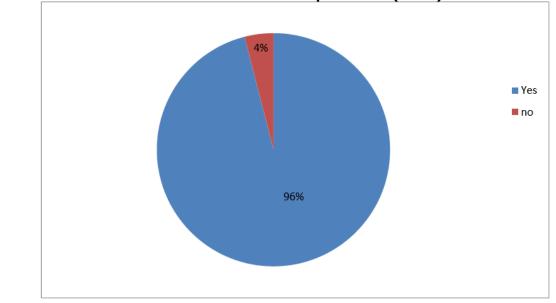
# Results.

### Ethical considerations.

Table 1: Shows the distribution of res	pondents according to	o demographic data (	(N=50).

Age	Frequency(f)	Percentage (%)
18-23 years	3	6
24-29 years	7	14
30-35years	5	10
36-39 years	10	20
40-45years	25	50
Total	50	100
Gender		
Male	24	48
Female	26	52
Total	50	100
Religion		
Catholic	20	40
Muslim	18	36
Protestant	10	20
Others such as Orthodox, etc.	2	4
Total	50	100
Occupation status		
Medical officer	6	12
Clinical officers	8	16
Nurses/midwife	14	28
Other (cleaners, drivers, etc.)	22	32
Total	50	100
Marital status		
Single	2	4
Married	20	40
Widowed	13	26
Separated	15	30
Total	50	100
Tribe	1	
Muganda	17	34
Munyankole	10	20
Mukiga	7	14
Others (Musoga, Aholi, etc.)	16	32
Total	50	100

Table 1 shows that (28%) of the respondents were nurses/midwives, (16%) were clinical officers, (12%) were qualified medical officers, and (32%) were other frontline health workers such as facility lab technicians, cleaners, and drivers among others.



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# Figure 1: Shows the distribution of respondents according to whether they had ever heard about SOPs on COVID-19 prevention (N=50).

Figure 1 indicates that the majority of the respondents (96%) had ever heard about SOPs on covid 19whereas the minority (4%) had never heard about SOPs on covid 19.

Information about SOPs on COVID-19 prevention (N=50)		
Response	Frequency (f)	Percentage (%)
Health workers	15	31.25
Social media	18	37.5
Radio	13	27.05
Others (TV, newspapers, etc.)	4	6.2
Total	50	100

# Table 2: Shows the distribution of respondents according to where they obtained information about SOPs on COVID-19 prevention (N=50)

Table 2; shows that most of the respondents (37.5%) obtained information about SOPs on covid19 prevention from social media whereas the least (6.2%) reported other sources of information.

# Table 3: Shows the distribution of respondents according to their knowledge about the causes of covid 19 (N=50)

Response	Frequency (f)	Percentage (%)
Virus	27	54
Bacteria	10	20
I don't know	8	16
Others (dust, allergies, etc.)	5	10
Total	50	100

Table 3; indicates that most of the respondents (54%) knew viruses as the common type of organisms they knew as causative agents for COVID-19 19 whereas the least (10%) mentioned other causes of COVID-19 19 such as dust, and allergies among others.

Table 4: Shows the distribution of respondents according to their knowledge about PPEs in covid 19 prevention (N=50)

Response	Frequency (f)	Percentage (%)
Gloves	20	40
Face masks	22	44
Apron	08	16
Total	50	100

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Table 4 shows that most of the respondents (44%) knew gloves as examples of PPEs in covid19 prevention whereas the least (16%) mentioned aprons as examples of PPEs.



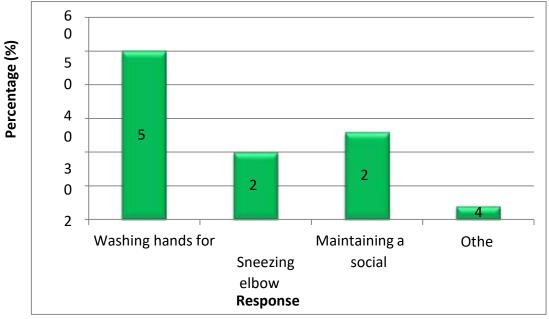
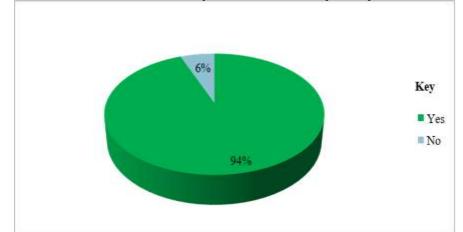


Figure 2: shows that half of the respondents (50%) knew washing hands for 20 seconds was the common preventive measure against covid 19 whereas the least (4%) knew other preventive measures against covid 19.

# Attitude towards Sops on Covid 19 Prevention among HealthWorkers.



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Figure 3: Shows the distribution of respondents according to whether they agreed that SOPs can reduce the spread of Covid 19 (N=50).

Figure 3: shows that almost all respondents (94%) agreed that SOPs can reduce the spread of COVID-19 19 whereas (4%) disagreed.

# Table 5: Shows the distribution of respondents according to whether they believed that washing hands with water and soap can reduce the spread of covid 19 (N=50)

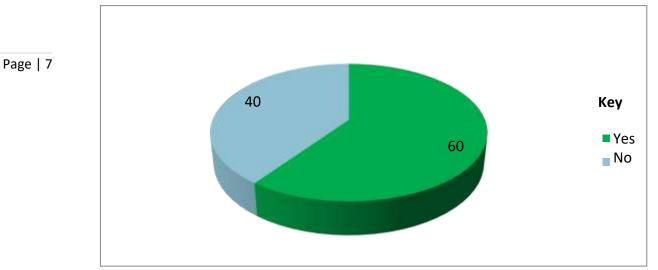
Response	Frequency (f)	Percentage (%)
Yes	45	90
No	05	10
Total	50	100

Table 5: indicates that the majority of the respondents (90%) believed that washing hands with soapand water can reduce the spread of COVID-19 19 whereas the least (10%) did not believe it.

Table 6: Shows the distribution of respondents according to whether they could accept to go	
into isolation (N=50)	

Response	Frequency (f)	Percentage (%)
Yes	10	20
No	40	80
Total	50	100

Table 6: shows that the majority of the respondents (80%) disagreed with the act of going into isolation whereas the minority (20%) were willing to go into isolation.



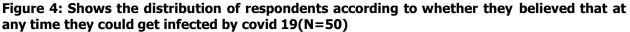


Figure 4: indicates that most of the respondents (60%) believed that at one time they could get infected whereas the least (40%) never believed in it.



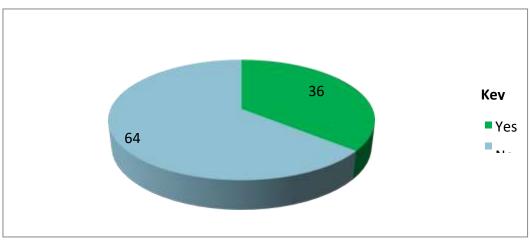


Figure 5: shows that most of the respondents (64%) believed that COVID-19 could be controlled successfully whereas the least (36%) ever believed that covid 19 can be controlled successfully.

# Practices towards SOPs on Covid 19 Prevention among HealthWorkers

# Table 7: Shows the distribution of respondents according to whether they used put-on masks. (N=50).

Response	Frequency (f)	Percentage (%)
Yes	35	70
No	15	30
Total	50	100

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Table 7: shows that the majority of the respondents (70%) reported that they used to put on maskswhereas the minority (30%) reported that they had never put on masks.

# Table 8: Shows the distribution of respondents according to the different practices that they used during the COVID-19 pandemic (N=50).

Response	Frequency (f)	Percentage (%)
Visiting other people	10	20
Covering the nose and mouth	20	40
Avoiding close contact	5	10
Washing hands	15	30
Total	50	100

Table 8: shows that almost half of respondents (40%) reported covering the nose and mouth whereas the least (10%) reported avoiding close contact during covid 19.



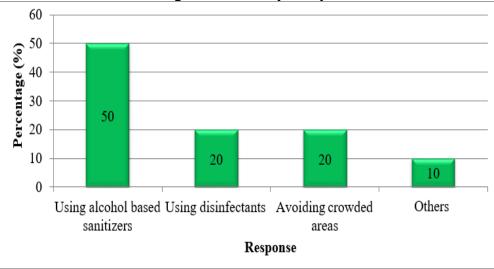


Figure 6: indicates that half of the respondents (50%) reported using alcohol-based sanitizers whereas the least (10%) reported other preventive practices against COVID-19 19 such as surface cleaning, and staying home among others.

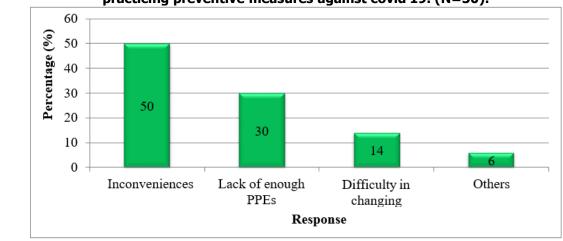


Figure 7: Shows the distribution of respondents according to some of the barriers in practicing preventive measures against covid 19. (N=50).

Figure 7: indicates that half of the respondents (50%) reported inconvenience as the barrier that stops them from practicing most of the preventive measures whereas the least (6%) reported that they had other reasons such as chronic illnesses, and cultural norms among others.

### **Discussion.**

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# Knowledge of SOPs on COVID-19 prevention among health workers.

The study results revealed that the majority of the respondents (96%) had never heard about SOPs on covid 19 prevention and therefore, this implies that most of the study participants were familiar with the study context. This is in line with a study that was carried out in Mumbai, India by Kwajal (2020), where it was revealed that (86%) of the respondents had ever heard about SOPs in Covid 19 prevention.

The study also revealed that almost half of the respondents (40%) obtained information about SOPs on COVID-19 prevention from social media. This could be attributed to the fact that study participants had good access to the internet which provided them with information compared to other sources of information. This is in line with a study that was conducted by Kwajal et al (2020), where results regarding the source of information about COVID-19 was social media (60%) for most of the participants.

The study further revealed that most of the respondents (40%) reported the virus as the causative microorganism of covid 19. This is attributed to the fact that most of the respondents had enough knowledge about covid 19. This is in line with Yesuf (2012), where results regarding the causative agent showed that most of the respondents knew that COVID-19 is caused by a virus (85.2%). However, the study revealed that nearly half of the respondents (40%) knew gloves as one of the examples of PPEs in COVID-19

prevention which implies that these were known by the respondents before COVID-19. The study results were in line with Asemahagan et al (2020), where it was discovered that (76%) pointed out gloves, face masks, and aprons as examples of PPEs in covid 19 prevention.

Findings from the study showed that more than half of the respondents (50%) knew that washing their hands for 20 seconds was one of the preventive measures against covid 19. This reveals that participants were aware of the different preventive practices against covid 19. The results were in agreement with a study that was carried out in Saudi Arabia by Siddiqui, et al (2020), where results regarding knowledge about some of the preventive measures against covid 19 showed that (84%) knew that they had to wash their hands for 20 seconds.

# Attitude towardsSOPs on covid 19 prevention among health workers.

The study revealed that almost all respondents (94%) agreed that SOPs could reduce the spread of Covid 19. This could be attributed to the fact they had observed effective recovery from the covid 19 sufferers. The current findings were in line with Melesie et al (2020), who showed that (20.6%) of subjects agreed that SOPs can reduce the spread of covid 19. In addition to that, more than half of the respondents (90%)believed that washing hands with soap and water could reduce the spread of covid 19. This implies that study participants had a good attitude toward testing SOPs for COVID-19 prevention. This is consistent with Gabremeskel et al(2021), where it was revealed that (97.4%) of the participants believed that washing hands with soap and water could reduce the spread of COVID-19. Most of the respondents (60%) believed that at one time they could be infected. This could be attributed to the fact that they used to have living conditions that were risking them to contract

covid 19 for example places of work. The study results were in agreement with Shrestha et al (2021), where (56%) had the feeling that they would be infected with coronavirus at some point of time of the pandemic.

The study showed that the majority of the respondents (80%) disagreed with the act of going into isolation if they

happened to get infected with covid 19. This implies that Page | 10 study participants had a negative attitude toward the act of isolation and this could be attributed to a lack of knowledge within participants about current and important prevention and isolation strategies. This is not in line with a study done by Shrestha (2021), where (92%) that they would stay in isolation if they happened to get infected by covid 19.

> Given the study results, most of the respondents (64%) believed that COVID-19 could be controlled successfully. This clearly shows that most of the study participants had a positive attitude toward the control of covid 19. The current results were in line with Shrestha et al (2021), whose findings revealed that the majority (80.5%) of the participants were positive that covid 19 would successfully be controlled.

#### SOPs on COVID-19 Practices towards prevention among health workers.

Results from the study showed that most of the respondents (40%) used to cover their nose and mouth while sneezing or coughing. This strongly confirms the respondent's perception of being assured of the protection against covid 19. This is a lie to Melesie (2020), where results showed that (91.7%) of respondents had practiced covering their nose and mouth whenever they were sneezing or coughing. The study discovered that more than half of respondents (70%) reported putting on masks during the pandemic and this implies that a significant number of respondents had a good perception of wearing masks which could be attributed to the availability and affordability of masks plus some of the restrictions that were being put to people. The study results were consistent with Yesufet al (2021), where (70.7%) of the participants responded that they sometimes wore a mask.

Half of the respondents (50%) reported using alcohol-based sanitizers as a preventive practice against covid 19. This could be attributed to the fact that most of the sanitizers were easily affordable. The results of the study were in agreement with Asemahagn et al, (2020), where the respondents (82%) regularly practiced using alcohol-based sanitizers. Findings revealed that half of the respondents (50%) reported inconvenience as a major barrier in practicing preventive measures against covid 19. This indicates that respondents often practiced preventive measures. This is not in line with Tien (2020), where results showed that more than half (56.4%) of the participants found it difficult to change their daily habits as the major barrier to practicing preventive measures.

### Conclusion.

Based on the overall findings from the study, the following conclusions were made: The study established that knowledge towardsSOPs on covid 19 prevention among health workers is fair because (96%) of respondents had never heard about SOPs on covid 19, (40%) obtained information about covid 19 from social media, (40%) knew virus as the cause of covid 19, (40%) knew gloves as one of the examples of PPEs in covid 19 prevention and (50%) knew that washing hands for 20seconds was one of the preventive measures against Ovid 19.

It was discovered that study participants exhibited a pleasing attitude towards SOPs in covid 19 prevention since (94%) of respondents agreed that SOPs can reduce the spread of covid 19, (90%) believed that washing hands with water and soap can reduce the risk of spreading COVID-19 19 and (60%) believed that at one time they could get infected with covid 19 and (64%) believed that covid 19 could be controlled successfully.

Overall practices towards SOPs on COVID-19 prevention among health workers were agreeable because (70%) of the respondents used to put on masks during the pandemic, (50%) had practiced using alcohol-based sanitizers as a preventive practice against COVID-19 19, and also (50%) of the respondents used to cover the nose and mouth while sneezing or coughing.

The researcher generally concluded that study participants exhibited fairly pleasing knowledge, attitude, and practices towards the SOPs on covid 19 prevention among health workers since almost all respondents had the relevant knowledge about the causes, spread examples of PPEs and SOPs and prevention of covid 19, generally, the participants also had a good attitude towards the SOPs on covid 19 prevention of and lastly most of the participants had good practices towards the SOPs on covid 19 prevention.

The researcher also experienced limited availability of literature review data as the topic under study is new and few studies that regard have been carried out which brings out that concerning limitations.

#### **Recommendations.**

More emphasis the government of Uganda through the Ministry of Health should be put on sensitization health workers can improve their attitude towards for example facial masks whenever people are in public, encouraging social distancing of at least two meters to reduce the spread of covid 19 among people.

The researcher strongly recommended that local authorities and community health workers adequately provide information that stipulates the use of approved protective measures for example COVID-19 vaccination and going for regular testing in case they develop any symptoms of covid 19.

Joint efforts by the government through the Ministry of Health should put up standard isolation centers which can help to change the attitude of people towards the isolation centers hence reducing the spread of covid 19.

The government through the Ministry of Health should provide enough personal protective gear in all health centers to use by the health workers whenever they are on duty.

The administrative staff of BukakataHealth Centre III should inclusively do more sensitization of their staff to improve the attitude towards SOPs.

The community of Bukakata Health Centre III should also be provided with enough health education on how to continue observing COVID-19 SOPs by the staff of Bukakata Health Center III.

More research students should be encouraged to identify COVID-19 research problems to improve the accessibility of more credible information on COVID-19.

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### List of Abbreviations.

COVID 19:	Coronavirus Disease 19
WHO:	World Health Organization.
SOPs:	Standard Operating Procedures
HCWs:	Healthcare Workers
MOH:	Ministry of Health
OPD:	Outpatient Department
PPEs:	Personal Protective Equipment

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### **Conflict of interest.**

The authors declare no competing interest.

### Authors' biography.

Ssennyonga Geofrey is a student with a diploma in clinical medicine and community health at Kampala School of Health Sciences.

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### **References.**

- Asemahagn, Mulusewo Andualam (2020. Factors determining the knowledge and prevention practice of health workers towards covid 19 in Amhara region, Ethiopia: A cross-sectional survey
- 2) Cetu Melesie Taye, Lemma Bose, Tamirat BekeleBeressa, Gosaye Mekomen Tefena,Birok
- 3) Mosisa, HundumaDinsa, Adana Birhanu,Gurmu Umeta (2020.Covid 19 Knowledge,
- 4) Attitudes, and Preventive PracticesAmong people with Hypertension and Diabetes Mellitus attending public health facilities in Ambo Ethiopia. Vol 2020, No.13 4203- 4214pp.
- 5) Gebremeskel TG, KirosK, Gesesaw HA and Ward PR (2021. Assessment of Knowledge and Practices Toward Covid 19 Prevention among Healthcare Workers in, North Ethiopia. *Front PublicHealth* 9:614321.
- 6) Kwajal E, Lewis B, Angonzi S (2020). Knowledge among health workers about prevention of covid 19 in Mumbai, India. Vol 3 No.4 44-46pp.
- Shrestha A, Thapa TB, Giri M. Knowledge and attitude on prevention of covid 19 among community health workers in Nepal (2021. A cross-sectional study. *BMC Public Health* Vol21, No. 1424.
- SidiquiA, Alshammary F, Amin J, Rathore, Hassan I, IlyasM, Alam MK. (2020. Vol 66, Knowledge and practice regarding prevention of covid 19 among the Saudi Arabian
- 9) Population. Vol 66 No. 4 767-775pp.
- 10) Yesuf M, Abdu M .(2021. Knowledge, attitude, prevention practice, and associated factors Towards covid 19 among preparatory school students in southwest Ethiopia. Vol, 17 No.1.WHO, 2020.

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