Knowledge and Attitude about Covid-19 Pandemic Containment Measures among Students in Technical Institutions in Kakamega County, Kenya

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Abstract Objectives: The goal of this research was to determine how well students understand and their attitudes towards strategies to prevent the spread of the COVID-19 pandemic. *Study Design:* Cross-sectional research was conducted using a questionnaire. Technical Vocational Education and Training (TVET) students in three institutions filled out the survey after it was made available to them physically and online. *Methods:* It was determined whether or not there was a statistically significant correlation between KAP (knowledge and attitude) and other socio-demographic factors by using chi-square testing. Using binary logistic regression, we were able to isolate and adjust for any confounding variables. SPSS was used for the statistical analysis (version 26). *Results:* According to the respondents' demographic information, the vast majority of participants were male. Participants' average age was under 24. 42% (165/392) of the sample exhibited above-average expertise (good knowledge level [GKL]). As a whole, 42% of those polled had heard of COVID-19 and understood that it is a respiratory virus. Male students had less COVID-19 knowledge than female students (OR = 0.54, p = 0.01), suggesting that gender plays a role in students' exposure to and understanding of the virus. The aggregated attitude items showed that 63.5% of people had a favorable outlook. Sixty-six percent of those polled were concerned about a member of their immediate family contracting COVID-19. It was revealed that students with GKL had a considerably lower rate of anxiety (28.2%, p = 0.015). Knowledge was shown to have a positive association with attitudes (r =.48, p .001), while attitudes were found to have a positive correlation with behaviors (r =.23, p .001). *Conclusions:* Overall, the survey found that more than half of respondents had enough understanding, and that those with higher levels of expertise were more inclined to go to the appropriate authorities for help. To further understand cultural similarities and variations, the study suggests that future research poll a larger sample of students and those from other nations.

Keywords: TVET, students, knowledge, attitude, sociodemographic characteristics, prevalence, COVID 19

1. Introduction

As reported by the World Health Organization (WHO) in Geneva, Switzerland, the new coronavirus (pandemic) has been dubbed "Corona Virus Disease 2019" (2019-nCoV) [1]. On January 30, 2020, the World Health Organization proclaimed a worldwide public health emergency (pandemic) due to the new corona virus [2]. More than 150million individuals have been infected with COVID-19 globally, and more than 3million have died from the virus in various parts of the globe. As of 2020-08-02, all of Africa has reported a total of 802,792 confirmed cases of COVID-19, with 13,779 fatalities, according to a report by WHO Africa [1]. On 13th March 2020, the first case of COVID 19 was confirmed in Kenya

(MoH, 2020). Since then, the SARS-CoV-2 has spread to 44 counties with 160,000 confirmed cases and 2,500 deaths as at July 2021 [3,4].

COVID-19 forced millions of students worldwide to shift their learning from school to a home environment. According to Daniel [5], remote learning was associated with many challenges since it required preparations to ensure that students get all the required resources. According to Imran et al. [6], staying away from school significantly impacted to the social, physical, and emotional development of students. As a result, the quality of education and guidance that all students received changed, negatively impacting their developmental process.

A study on knowledge by Olaimat et al., [7] found that 348 out of 350 participants (88.1%) knew a lot about COVID-19, with the majority of healthcare professionals learning about the virus from social media (73.6%) and

television (82.6%). 75.5% and 82.6% of participants said, that COVID-19 has no specific treatment and vaccine, respectively (71.5 percent). But 424 (80.3%) of people say they learned about COVID-19 via TV/radio, with 372 (70.5%) saying the same thing about social media [7]. According to a survey conducted by, 67.6 percent of pupils believe that COVID-19 may be spread via the air. This amounts to 276 students. Similarly, 375 (91.9%), 343 (84.1%), and 324 (79.4%) of the participants said that patients with COVID-19 can present with fever, dry cough, and shortness of breath, respectively; 293 (71.8%) of the students have gotten information about COVID-19 from mass media (TV, magazines, newspaper, radio); and nearly fifty percent (54.2%) of the participants have gotten information from social media (Facebook, Instagram, Whatsapp, and telug). Results from studies across Europe that seem to contradict each other. The findings are not entirely clear, thus more research is needed.

With regards to attitudes, Adnan, [8] performed research on students' perceptions of online education in the midst of the COVID-19 epidemic in Pakistan, echoing the approach used by Zhou & Li [9]. They see that, like many other elements of life, education has been severely impacted by the COVID-19 pandemic. Using it, students may easily make the switch from the more conventional methods of learning to the novel approach of virtual learning. In addition, since this is the first-time online education has been widely used, it poses unique issues for both students and educational institutions. It was impossible to know how long the epidemic would last, so that was out [8]. In particular, students in rural and underserved parts of Pakistan faced difficulties due to a lack of inexpensive and dependable internet connections. Some students were unable to participate in the learning process because they were unable to access online resources because of difficulties accessing them through cellphones [8]. In nations with a robust digital infrastructure, online education has the potential to be very successful. However, due to a lack of cutting-edge digital infrastructure, online education in Kenya is inefficient.

There's a lack of previous studies determining the impacts of strategies on students affected their reliance on positively impacting learners' perception of academic performance and social-emotional development [10]. Students' responses to the spread of the COVID-19 epidemic in different parts of the world are mostly unknown [11]. There is evidence in the research to suggest that the COVID-19 epidemic had a detrimental impact on students' perspectives and attitudes about learning, but some students had adjusted to the new realities. Because of this context, the study sought to evaluate students' levels of understanding, and attitudes towards pandemic containment measures against covid-19 in Kakamega County, Kenya.

2. Methods

This study focused on gathering quantitative information through the implementation of a cross-sectional study design. Participants were excluded because of an incomplete questionnaire and others due to lack of a consent form. The purpose of the study and the procedures

of the questionnaire were explained to the participants. Those who agreed to participate completed an informed consent form and the questionnaire. The participants completed the questionnaires in person enabling them to ask questions or withdraw from the study at any time during the data collection. No incentive was provided to participants. All study protocols and the survey instrument were approved by the University Human Research Ethics committees and conducted in accordance with the ethical principles of the Declaration of Helsinki. To conduct the study among Kakamega students, a research authorization from the National Council of Science and Technology (NACOSTI) was sought. NACOSTI License Number was NACOSTI/P/22/17110

2.1. Study Area

The research was conducted in Kakamega County, which is in the western part of Kenya among three Technical and vocational training institutions. A breakdown of enrolment at three Kakamega County technical schools is shown in Table 1.

Table 1. Summary of number of students as per the registry office

Sub-county.	Name of institution	Students
Ikolomani	Sigalagala National Polytechnic	6566
Lurambi	Bukura Agricultural College.	5978
Malava	Shamberere	5090
	Total	17634

2.2. Participants

The population of current study was technical students. Then the targets, sets of measures, research procedures, sampling days, and details of the study which were conducted according to the study process, was explained to the subjects, and they were asked to hand in the consent form, and study and sign the written pledge. The inclusion criteria for the volunteers were that they were students. Researchers excluded potential participants who did not meet these criteria from the study. Random sampling was used to obtain a sample for inclusion in this research in the first phase of the study. The study population was 422. The total response rate was 93 percent, meaning that more students responded to the survey than were anticipated during the sample size calculation process. A response rate of 50% is considered sufficient, 60% is considered excellent, and 70% is considered very good by [12].

2.3. Protocol

The information was gathered over the course of two weeks via the use of a self-administered questionnaire that had been pre-coded based on previous research [9,12,13]. Students were given the questionnaires and consent letters either by a research assistant or via an internet connection. Similar studies conducted in other countries have shown the reliability of using self-report as a behavior measurement tool [13]. The sequencing and subject of questions in the questionnaire was based on the research objectives. The questionnaire contained 3 different domains: 1) demographics; 2) knowledge items; 3) and

Attitude items on covid- 19 containment measures. Data were presented descriptively, and an 18-item scale was constructed to measure participants' familiarity with the virus, its manifestations, and preventative measures. The scale's internal consistency was calculated to be 0.77 using the Cronbach's alpha value. Each right answer counted for one point. We recoded a scale such that a score of 27.16 or below indicates an acceptable knowledge level (AKL), while a score of 27.17 or above indicates an excellent knowledge level (GKL). Attitudes construct was assessed using 14 items scored on a Likert scale. At the Shagungu Vocational Training Centre, the questionnaire instrument was pre-tested. Deficits were identified by comparing data from the preliminary test. Discrepancies with the instrument were corrected using necessary adjustments before using it to ensure validity.

2.4. Statistical Analysis

The expectation-maximization (EM) technique was used to randomly impute missing data in order to remove any potential statistical biases that might arise from utilizing more conventional missing data processes, such as list-wise deletion or pair-wise deletion [14]. Descriptive statistics such as mean and standard deviation were used to describe data. Both univariate and multivariate statistical methods were utilized to examine the correlation and dissimilarity between the dependent and independent variables. Chi square test of independence and logistic regression were used to check association between categorical variables. Findings were considered significant at p <0.05. Researchers used IBM SPSS version 26 for statistical analysis.

3. Results

The background results of the respondents revealed that majority of the respondents were male (n = 197, 50.3%). The average age of the respondents was less than 24 years (n=197, 50.3%). Majority of the respondents were single (n = 306, 78.1%) and were studying for diploma qualification (n = 238, 60.7%). In addition, most of them were in their second year of study (n = 192, 49.0%). Summary of findings in frequencies and percentages are presented in Table 2. Chi-square test of independence was performed to examine the relation between social demographics and respondents' institution. The relation between institution and the variable education ($\chi2$(df=1, n=392) =48.28, p<0.01) and year of study ($\chi2$(df=2, n=392) =63.46, p<0.01) were statistically significant and the rest were all not statistically significant.

3.1. Knowledge about COVID-19

Of the total sample of 392 participants, 55% had acceptable knowledge levels (AKL; n=219) and 42% had excellent knowledge levels (n=168) (GKL). The total sample size was n=167, and 42% of those people knew that COVID-19 is a virus that mostly affects the lungs. Bats are thought to be COVID-19's natural host, although only 45% of the general public knows this (n=177). It was reported that 94.5 percent, 93.1 percent, 39.8 percent, and 26.5 percent of respondents were aware that COVID-19 could be spread through sneezing, coughing, touching one's face, eyes, nose, or mouth with contaminated hands, coming into direct contact with patients, or touching contaminated surfaces (Table 3).

Logistic regression findings are shown in Table 4, which confirm that the amount to which students know about COVID-19 varies considerably by gender; men had lower knowledge levels compared to males (OR = 0.54, p = 0.01). In compared to those aged 24 or younger, individuals aged 25-29 (OR = 1.841, p = 0.004) and older than 30 (OR = 3.462, p 0.001) showed a greater degree of COVID-19 understanding. Students in their second (OR = 2.717, p 0.001) and third (OR = 2.249, p = 0.003) years of college were also statistically significantly more likely to have GKL than those in their first year of college. Compared to students at Sigalagala University, those at Shamberere University were shown to be the least likely to have GKL (OR = 0.235, p = 0.016).

Table 2. Sociodemographic characteristics of respondents

Socio-demographic characteristics		Total	Institution						χ2, p
			Shamberere		Sigalagala		Bukura		
			N	%	N	%	n	%	
Gender	Male	197(50.3%)	61	15.6%	78	19.9%	58	14.8%	1.916, P=0.384
	Female	195(49.7%)	53	13.5%	72	18.4%	70	17.9%	
Age	<=24 yrs	197(50.3%)	58	14.8%	80	20.4%	59	15.1%	1.551, P=0.818
	25-29 yrs	102(26.0%)	29	7.4%	36	9.2%	37	9.4%	
	>30 yrs	93(23.7%)	27	6.9%	34	8.7%	32	8.2%	
Marital status	Single	306(78.1%)	90	23.0%	114	29.1%	102	26.0%	0.622, P=0.733
	Married	86(21.9%)	24	6.1%	36	9.2%	26	6.6%	
Education level	Certificate	154(39.3%)	72	18.4%	57	14.5%	25	6.4%	48.28, P=0.00
	Diploma	238(60.7%)	42	10.7%	93	23.7%	103	26.3%	
Year of study	First	122(31.1%)	60	15.3%	46	11.7%	16	4.1%	63.46, P=0.00
	Second	192(49.0%)	24	6.1%	82	20.9%	86	21.9%	
	Third	78(19.9%)	30	7.7%	22	5.6%	26	6.6%	

Note. Due to rounding error, percentages may not sum to 100%, *The Chi-square statistic is significant at .05 level.

Table 3. Students' knowledge about COVID-19

Statement	Yes: *n* (%)	No: *n* (%)
COVID-19 is an infectious viral disease that affects the respiratory system?	167(42.6)	225(57.4)
Bats are considered the original host of COVID-19 infections?	178(45.4)	214(54.6)
Is COVID-19 transmitted by touching and approaching pets?	370(94.4)	22(5.6)
Is COVID-19 transmitted by direct contact with patients?	365(93.1)	27(6.9)
Is COVID-19 transmitted through respiratory droplets from sneezing or coughing?	156(39.8)	236(60.2)
Is COVID-19 transmitted by contact with contaminated surfaces?	104(26.5)	288(73.5)
Is COVID-19 transmitted by touching the face, eyes, nose, and mouth with contaminated hands?	171(43.6)	221(56.4)
Is Sore throat, Fever, cough, General fatigue Flu and nasal congestion symptoms of COVID-19	63(16.1)	329(83.9)
All people infected will develop symptoms of COVID-19	65(16.6)	327(83.4)
The elderly and People with chronic diseases (hypertension, diabetes, heart disease and respiratory system) are at high risk of developing COVID-19 complications	126(32.1)	266(67.9)
People who are immunocompromised (patients receiving chemotherapy, kidneys, and organ-transplant recipients) are at high risk of developing COVID-19 complications	109(27.8)	283(72.2)
Drinking hot beverages and non-pharmacological precautions for personal hygiene are an optimal method for preventing COVID-19 infection	300(76.5)	92(23.5)
Wearing protective masks by healthy people who are not in contact with infected individuals is an optimal method for preventing COVID-19 infection	63(16.1)	329(83.9)
Washing the nose and gargling with water is an optimal method for preventing COVID-19 infection	334(85.2)	58(14.8)
Eating garlic, onions, and pickles is an optimal method for preventing COVID-19 infection	348(88.8)	44(11.2)
Taking antibiotics is an optimal method for preventing COVID-19 infection	153(39.0)	239(61.0)
A vaccine for COVID-19 has been developed and is currently available in global markets	93(23.7)	299(76.3)
COVID-19 is a curable disease	288(73.5)	104(26.5)

Table 4. Effect of different significant variables on the level of respondents' knowledge; obtained by binary logistic regression (odds ratios and 95% confidence intervals

Independent variable		Acceptable knowledge level (AKL)	Good knowledge level (GKL)	P value	Regression coefficient B	OR (95% CI)
Gender	Male	111(28.2%)	89(22.7%)	Reference		0.567 (0.390-0.882)
	Female	111(28.4%)	81(20.7%)	0.001	0.54	
Age	<=24 years	101(25.8%)	95(24.35)	Reference		
	25-29 years	61(15.5%)	40(10.3%)	0.004	0.610	1.841 (1.215–2.791)
	>30 years	60(15.2%)	35(8.8%)	P-value < 0.001	1.242	3.462 (2.230–5.375)
Marital status	Single	175(44.7%)	130(33.1%)	0.522: not significant, no regression was done		
	Married	47(11.9%)	40(10.3%)			
Education level	Certificate	87(22.2%)	67(17.1%)	0.127: not significant, no regression was done		
	Diploma	135(34.4%)	103(26.4%)			
Year of study	First	79(20.2%)	45(11.4%)	Reference		
	Second	104(26.6%)	86(22.0%)	P-value < 0.001	1.0	2.717 (1.640–4.501)
	Third	38(9.8%)	40(10.1%)	0.003	0.811	2.249 (1.321–3.831)
Institution of study	Shamberere	61(15.5%)	52(13.2%)	Reference		
	Sigalagala	77(19.6%)	73(18.6%)	0.331	0.190	1.210 (0.824–1.776)
	Bukura	84(21.45%)	45(11.6%)	0.016	-1.448	0.235 (0.072–0.765)

3.2. Attitude toward COVID-19

Table 5 shows that the majority of respondents (66.6%) were concerned that a member of their immediate family might get COVID-19, and that an astonishing 7.1% of respondents believed that all people, regardless of socioeconomic class, should take precautions against contracting COVID-19. When asked what they would do if they or a family member showed signs of COVID19, 58.9 percent said they would contact the proper authorities for help. The overall results of the attitude survey showed that 63.5% (n= 249) had an optimistic outlook whereas 36.5% (n= 143) had a negative outlook.

According to Table 6, whereas over 66.4% of respondents were concerned that a family member would get COVID19,

students with GKL were found to be substantially less likely to be concerned (28.2%, p = 0.015). Students with AKL were more likely to agree that precautions shouldn't be limited to high-risk populations and the elderly (34.6 percent, p = 0.018). (49.9 percent respectively). Participants with GKL were also more likely than those with AKL to reach out to the proper authorities for guidance (30.5 percent vs. 12.5 percent, p 0.001). (28.7 percent). There was a statistically significant difference (p = 0.004) in the percentage of students with GKL and AKL who believed that local government efforts to stop the spread of COVID 19 would fail (23.3 percent respectively). In addition, 35.1% more pupils with GKL than AKL held the view that the Kenyan government's preventative efforts were neither timely nor enough (43.7 percent respectively).

Table 5. Students' attitudes toward COVID-19

Students' attitudes toward COVID-19	Agree: *n* (%)	Don't agree: *n* (%)	Don't know: *n* (%)
Are you worried that your chance of getting COVID-19 is high	261(66.6)	98(25.0)	33(8.4)
Do you think that COVID-19 prevention measures should only be applied by older adults and groups most at risk?	28(7.1)	331(84.4)	33(8.4)
In the event that I or a family member develop symptoms of COVID-19 infection, I will seek advice and assistance from the authorities responsible for providing health services	231(58.9)	113(28.8)	48(12.2)
My perception of someone will change if they contract COVID-19	114(29.1)	242(61.7)	36(9.2)
Do you think that the practice of limiting the movement of individuals between countries and imposing strict quarantine on travelers will limit the transmission and spread of COVID-19 between individuals?	188(48.0)	166(42.3)	38(9.7)
Do you think that the attempts of the local authorities at your place of residence will succeed in curbing the spread of COVID-19?	190(48.5)	154(39.3)	48(12.2)
Do you think that the local authorities have sufficient tools to deal with confirmed and suspected cases of (COVID-19)?	31(7.9)	349(89.0)	12(3.1)
Do you think that the preventative measures that were taken by the Kenyan government were sufficient and effective?	310(79.1)	39(9.9)	43(11.0)
Do you think you are invincible from COVID-19?	26(6.6)	346(88.3)	20(5.1)
Do you think in severe cases of COVID-19, infection can cause Pneumonia, Acute respiratory distress syndrome and Death?	190(48.5)	148(37.8)	54(13.8)
Do you think COVID-19 is a conspiracy	29(7.4)	336(85.7)	27(6.9)
Do you think vaccination provides the best method of COVID-19 prevention	351(89.5)	18(4.6)	23(5.9)
Do you think SymptomaticCOVID-19 should self -quarantine to prevent transmission Practicing personal hygiene prevent transmission	294(75.0)	72(18.4)	26(6.6)
Do you think all persons with COVID-19 will develop severe cases	5(1.3)	370(94.4)	17(4.3)

Table 6. Distribution of different students' attitudes and measures with their knowledge level about COVID-19

Statement		Acceptable KL: *n* (%)	Good KL: *n* (%)	*P*-value
My chance of getting COVID-19 is high	Don't know	17(4.4)	16(4.1)	0.015
	No	55(14.0)	43(11.1)	
	Yes	150(38.2)	111(28.2)	
Beneficiaries to COVID-19 prevention measures are mainly the elderly and immunosuppressed individuals?	Don't know	11(2.8)	22(5.7)	0.018
	No	196(49.9)	136(34.6)	
	Yes	16(3.9)	12(3.1)	
The county government should provide assistance if a member in the community develops signs and symptoms of COVID-19 infection	Don't know	27(6.7)	21(5.2)	0.00
	No	83(21.2)	30(7.8)	
	Yes	112(28.7)	119(30.5)	
If an individual in the community is infected with the virus, my perception will change.	Don't know	17(4.4)	19(4.9)	0.222
	No	145(37.0)	97(24.8)	
	Yes	60(15.2)	54(13.7)	
Movement limitation of infected individuals will control the transmission and spread of COVID-19	Don't know	17(4.4)	21(5.4)	0.031
	No	106(26.6)	60(15.0)	
	Yes	99(25.6)	89(23.0)	
The county government authorities will succeed in containing the spread of COVID-19?	Don't know	31(8.0)	17(4.4)	0.004
	No	100(25.3)	54(13.7)	
	Yes	91(23.3)	99(25.3)	
The county governments have sufficient resources to manage confirmed and suspected cases of COVID-19	Don't know	4(1.0)	8(2.1)	0.245
	No	201(51.2)	148(37.7)	
	Yes	17(4.4)	14(3.6)	
The mitigation measures that were instituted by the Government of Kenya were adequate and successful?	Don't know	28(7.2)	15(3.9)	0.485
	No	22(5.7)	17(4.4)	
	Yes	172(43.7)	138(35.1)	
Do you think you are invulnerable from COVID-19?	Don't know	12(3.1)	8(2.1)	0.152
	No	200(50.9)	146(37.2)	
	Yes	10(2.6)	16(4.1)	
Severe cases of COVID-19, infection can cause Pneumonia, Acute respiratory distress syndrome and Death?	Don't know	29(7.5)	25(6.5)	0.001
	No	102(25.8)	46(11.6)	
	Yes	91(23.3)	99(25.3)	
Do you think COVID-19 is a conspiracy	Don't know	15(3.9)	12(3.1)	0.042
	No	197(50.1)	139(35.4)	
	Yes	10(2.6)	19(4.9)	
Vaccination provides the best method of COVID-19 prevention	Don't know	11(2.8)	12(3.1)	0.367
	No	8	10(2.6)	
	Yes	203	148(37.7)	
Symptomatic COVID-19 should self -quarantine to prevent transmission Practicing personal hygiene prevent transmission	Don't know	12	14(3.6)	0.525
	No	43	30(7.5)	
	Yes	169	126(32.3)	
Individuals with COVID-19 have a high risk of developing severe cases	Don't know	8	9(2.1)	0.026
	No	214	156(40.1)	
	Yes	0	5(1.3)	

4. Discussion

The objective of this study was to assess knowledge and attitudes of TVET students towards COVID 19 containment measures. Although fewer than half of the participants in this research had an in-depth understanding of COVID-19, the findings reveal that none in the sample group was fully unaware of its existence. Both the date of the research and the widespread media coverage of the COVID-19 pandemic in Kenya at the time might be to blame. A survey of health care professionals revealed disparities in COVID-19 knowledge and opinion within specialties; the very small proportion of research participants with excellent knowledge is in line with those findings [15]. However, the percentage of participants with a good knowledge level is lower than in studies conducted among different segments of society against MERS [16,17] and against COVID-19 [1,9,18,19], where participants demonstrated good knowledge with regard to transmission, symptoms, and treatment of COVID-19.

The level of skill expected varied depending on the kind of question being asked. Only around half of those polled knew that COVID-19 is a respiratory virus, but almost all understood how it spreads and agreed that maintaining high standards of personal hygiene is the best approach to protect against infection. Diploma program students learned more than their non-diploma counterparts. This may be due to the fact that these students are enrolled in health-related courses, which has raised their knowledge of pandemic threats like COVID-19. These findings are consistent with previous research showing that college students know more than those outside of college [20,21], but they contradict the results of a study conducted in Jordan that found no significant difference between the mean of medical and non-medical students in terms of knowledge, attitude, and practice level [20]. Olum et al. [22] conducted research in Uganda and discovered that, generally speaking, women had lower levels of knowledge than males. We discovered no significant relationship between gender and specialization in either knowledge or attitude, in contrast to earlier studies [9,19,23] that revealed females had a substantially higher score than men [24].

Unexpectedly little knowledge of COVID 19 exists among Kenyan students, despite Facebook's dominance as the country's preferred social networking tool. The media in Kenya has been notably silent on the topic of the COVID-19 outbreak, in contrast to other countries where the official government spokesman and the Minister of Health held two press conferences per day on national TV channels regarding the latest updates about COVID-19 and relatable information regarding this disease, including modes of transmission and preventive instructions. Our findings challenge the notion that the media plays a significant role in disseminating information about the COVID-19 and SARS epidemics, which has been the conclusion of previous studies [25,26]. Our finding is generally in line with those of previous studies [15,27,28,29,30] which revealed that most participants used social media to learn about COVID-19.

4.1. Attitudes towards COVID 19 Containment Measures

Most were worried that someone close to them would get COVID-19, and they all agreed that everyone should take the necessary safety measures. Similar findings have been found in a large body of prior research conducted in Egypt [28] and Pakistan [31]. Our findings show that only about a third of those who identify as young do not believe they can be infected with COVID-19, despite the fact that many studies have found that young people make up a disproportionate share of those infected with COVID-19 [2,32,33]. The study's findings provide strong evidence that exposing participants to additional information about COVID-19 improved their impressions of the virus. While AKL students were more worried about catching COVID-19, GKL students were more inclined to say that everyone, not only the elderly and those at high risk, should take precautions. Results also showed that those with GKL were less confident in their immunity to COVID-19 than those with AKL. On top of that, just 26% of people said they were confident in the ability of local authorities to effectively deal with confirmed and suspected cases of COVID-19. A lack of financial and medical resources, as well as gaps in the health care system, may account for discrepancies between our findings and those of research including other communities [9,13,34].

5. Conclusions

In conclusion, over half of the respondents had adequate knowledge, and just under half had excellent knowledge, based on all the questions used to measure knowledge in this study. Significant findings were also seen with increasing years of study; students in their second year or beyond were more likely to have strong knowledge compared to first-year students. The second inquiry aimed to uncover how students felt about efforts to rein in COVID-19. Participants with superior expertise were also more inclined to approach the appropriate authorities for guidance and support.

6. Recommendations

Based on the findings of this research, the following are the recommended corrective measure which can contribute to effective COVID 19 containment measures. Future studies could attempt to survey a greater number of students, as well as those from other countries, in order to observe cultural similarities and differences. This in turn could help us identify how Kenyan students compare to those of other locations; maybe there are philosophical and or concrete training differences.

Disclaimer

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Abbreviations and Acronyms

COVID-19: Corona virus disease-19
MERS: Middle East Respiratory Syndrome
NACOSTI: National Council of Science and Technology
SPSS: Statistical Package for Social Sciences version
TVET: Technical Vocational Education and Training
WHO: World Health Organization

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