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### THE COVID-19 PERCEPTIONS AND ACTIONS: A STUDY OF THE GRADUATE STUDENTS IN TURBAT, KECH

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KEYWORDS	ABSTRACT
COVID-19 Pandemic, Knowledge, Attitude, Practices, Graduate Students	COVID-19 (Coronavirus Disease 2019) is a transforming disease caused by a novel coronavirus called SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2). High fever, cough, sore throat, breath shortness, weariness, rhinorrhea, and dyspnea are the most common symptoms of COVID-19. These symptoms are not specific when compared to common pneumonia symptoms. Neurologic symptoms of SARS-CoV-2 infection included myalgia, disorientation, anosmia, and ageusia. Some people experienced digestive issues, such as diarrhoea. The aim and objective of the current study was to check the knowledge, attitude and practices of the graduate students at District Kech. The quantitative research methodology was used to obtain a clear and succinct picture of students' knowledge, attitudes, and practices on COVID-19. Data were collected through structured questionnaire. 191 sample size acquired by applying Rao-soft sample size calculator. Stratified sampling technique for the distribution and allocation of the respondents was used. Findings of the research exhibited that graduate level students had a high level of knowledge, attitude and practices towards COVID-19 at district Kech. The gender, qualification and residential background of the students were positively correlated with knowledge, attitude and practices towards COVID-19.
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### INTRODUCTION

COVID-19 (Coronavirus disease 2019) is transformative disease that is caused novel coronavirus known as severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) (McIntosh, Hirsch, & Bloom, 2020). It is easily transferred from one person to another by shaking hands, coughing while talking to the next one. and it is instructed that individual should touch his/her mouth, face or nose, if he/she is confronted with other infected individual. It is reported that around 390.9 million people infected globally and more than 5.7 million dead in world (DAWN, 2021).

After affecting a lot of people, governments of the world and international agencies especially WHO has given some instructions to control the spread of virus. These instructions are called Standard Operation Procedures. When doctors have proved that it is transformative disease, the most of countries in the world have banned travels from one country to another. When the situation became under the control, all countries in world have banned traveling even traveling within the cities or areas were also banned. COVID-19 was firstly appeared in Wuhan, a city in China on 19th December 2019. On March 11, 2020, it has been declared the pandemic (Dhama, Khan, Tiwari, Sircar, Bhat & Rodriguez, 2020). In initial stage, it was not clear due to which it was not taken serious by Chinese authorities. With passage of time, spread of virus increased and it was transferred to great number of people within China as well as other some parts of the world.

At beginning, very few countries were affected but it spread other countries and all countries of the world have claimed its availabilities. Most of the countries started to conduct research and find out the diagnosis of the disease but they have failed. It was the only disease doctors could advise the proper medicine for its treatment as well. The only solution was to set at home and follow the SOPs. If a person died due to virus, their dead bodies were wrapped in plastics and put in the grave, burn out or thrown in the sea even some countries have born the dead bodies by digging huge walls. Likewise, if anyone found that he/she has COVID 19, he/she was kept in Quintana for 14 days. China was the only country which could control it in a better way because it was only country which could build a separate hospital for it within the 40 days. Likewise, the advanced countries continued their researches and thus found different diagnostic tools and techniques. Finally, they developed some vaccinations for controlling its intensity likewise, the Pfizer-BioNTech, Moderna, Johnson and Johnson's Janssen, mRNA Vaccines, and Viral Vector Vaccines (Centre of Disease Control and Prevention, 2022). As soon as traveling was allowed, the travelers had to vaccinate themselves for the international traveling. Among the countries, Pakistan was one of them which have faced this difficult situation. It was very difficult for the advanced or developed countries to cope this situation and such situation has affected a lot, the Pakistan.

The first case of COVID 19 was found in Karachi in 10th March 2021. The patient has come from Iran. After that it spread other parts of country. Pakistan also implemented the SOPs strictly such as wearing Mask, washing hands, social distance, smart lockdowns and many more. It has also banned international travels and restricted movement within the provinces and cities. Government has strictly instructed the people to follow SOPs so that it can protect its citizen from the pandemic. Majority of the citizens did not follow the SOPs due to which the cases of virus increased on daily basis. Ultimately, like other countries of world, Pakistan also started vaccination due to which situation became under control. According to report of Government of Pakistan, there are 1,463,111 confirmed cases, 110,213,721 have been partially vaccinated, and 86,200,581 are fully vaccinated in Pakistan (NCOC, 2022). Still, many people have not vaccinated and not following the SOPs of COVID-19 due to which the cases are increasing day by day. The present study tries to know the knowledge, attitudes and practices of the people regarding COVID-19. This research tries to know that whether people do not believe the impact of virus on their lives or deliberately avoiding the practices of SOPs. What are the reasons, that local people are not following the SOPs? The study focuses the graduate students of District Kech for knowing the knowledge, attitudes as well as practices of graduate students toward COVID-19.

### **Problem Statement**

COVID-19, massive destructive epidemic, is now sweeping the globe (Coronavirus disease 2019). SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) is transforming disease caused by novel coronavirus. High fever, cough, sore throat, breath shortness, weariness, rhinorrhea, and dyspnea are most common symptoms of COVID-19. These symptoms are not specific when compared to common pneumonia symptoms. Neurologic symptoms of SARS-CoV-2 infection included the myalgia, disorientation, anosmia, and ageusia. Some people experienced digestive issues, such as diarrhoea. However, current research effort attempted to learn about graduate students' knowledge, attitudes, and practises on covid-19 in District Kech. The focus of study will be on graduate students' understanding of the COVID-19 and their attitudes toward it. The study will look at graduate students' understanding of COVID-19 and how they react to the pandemic virus. Aside from that, the research project will look into the COVID-19's preventive measurements as well as COVID-19 procedures. Despite fact that there have been numerous studies on the current topic both internationally and nationally, this topic is quite distinctive and the new phenomena locally. As a result, it will aid in determining the knowledge, attitude, and behaviours of graduate level students in District Kech who have read COVID-19, allowing the researcher to form a valid conclusion and generalisation about the students and COVID-19 measurements.

### **LITERATURE REVIEW**

According to [Sirat, Sahrai, Rahimi, Asady and Wasiq \(2023\)](#), overall knowledge and attitudes regarding COVID-19 among university students were desirable. Higher university year, young age, male sex and living in urban areas were significantly associated with good KAP regarding COVID-19. [Ajaj, Shahin, Moda and Ahmed \(2023\)](#) found that the students from Abu Dhabi University possessed good knowledge, attitude, and practices in precautionary measures and face mask usage. A resounding 93.6% of participants still wore face masks while exiting their homes, even in this relaxed COVID-19 situation. This demonstrates the effectiveness of public awareness initiatives by Abu Dhabi University and Ministry of Health. Age, gender, and level of education were all determining factors in choice of suitable face masks for public use. According to [Adam, Gameraddin, Alelyani, Zaman, Musa and Gareeballah \(2021\)](#), Covid-19 was familiar to majority of Saudi Arabian applied medical undergraduate students. According to findings, pupils have a solid understanding of the covid-19 and have a positive attitude toward it. Many people perceive COVID-19 as the significant health risk due to its high transmission rate and potential for severe illness and mortality ([Sirat, Sahrai, Rahimi, Asady & Wasiq, 2023](#)). Pupils confirmed excellent habits in terms of caring Covid-19. When it came to knowledge, attitudes and behaviours around covid-19, there was no significant difference between male and female students.

[Kumar, Pinky, and Nurudden \(2021\)](#) discovered that 49.78 percent of Bangladeshi students had a higher level of knowledge about Covid-19 guidelines, while majority of students, 64.27 percent, had a very positive attitude toward the guidelines, and 0.22 percent of students had practised the guidelines for the safety of Covid-19 guidelines, which was a concerning situation ([McIntosh, Hirsch, & Bloom, 2020](#)). The study also discovered that longer a student studies, the more they use the internet, their family's money, and their guardian's or parents' education, the greater their understanding, attitude, and practises of COVID-19 standards are. [Ladiwala, Dhillon, Zahid, Irfan, Khan, Awan and Khan \(2021\)](#) discovered that Pakistani students had sufficient knowledge of the Covid-19, a favourable attitude, and a good perspective ([Rehman, Jawed, Ali, Noreen, Baig & Baig, 2021](#)). However, significant disparities in the knowledge and

perception were found between students and employees in the healthcare and non-healthcare divisions, as well as across demographic variables such as age, gender, and education (Kumar, Pinky, & Nurudden, 2021). There is recognition of the importance of public health measures, such as wearing masks, practicing hand hygiene, maintaining physical distancing, and getting vaccinated, in reducing the spread of the virus. Higher qualification status and female gender were statistically proven to be more appropriate predictors of the appropriate knowledge and perception.

According to Faisal, Khotib, and Zairina (2021), the majority of the respondents (68%) had an excellent understanding of COVID-19. 90.9 percent of those polled were aware of the signs and symptoms, whereas 83 percent were aware of the covid-19 transmission. Though there were differences in knowledge levels across degree and study areas (Faisal, Khotib, & Zairina, 2021; Sirat, Sahrai, Rahimi, Asady & Wasiq, 2023). More than half of the respondents (53.5%) were happy with the services given by Pakistani government and had optimistic outlook. However, the students' knowledge of the covid-19 was lacking. Noreen, et al. (2021) conducted a study of Pakistani medical students' understanding, attitudes, and practises on the growing threat of covid-19. Males made up 39.1% of the participants, while females made up the remaining 60.1 percent. In this connection, the medical students were found to have the sufficient knowledge, favourable attitudes, and appropriate practises with the critical covid-19 (Ajaj, Shahin, Moda & Ahmed, 2023). Medical students frequently considered that COVID-19's eruption had had a significant impact upon their social, mental, and psychological well-being. Due to the epidemic, 26 percent of students got more religious, 40 percent of students realised the worth of life, and 77 percent of the students became more reckless (Kumar, Pinky, & Nurudden, 2021). Female students, on other hand, were more likely than male students to have good attitudes and superior habits.

According to Rehman, Jawed, Ali, Noreen, Baig and Baig (2021), 86.7 percent of respondents sought information from social media and television, as well as having sufficient knowledge of covid-19. The vast majority of the responders, 95 percent, had the good habits and 89.9% had favourable views. Those students and persons in the younger age groups had more favourable sentiments toward covid-19 than others. Majority of the citizens did not follow the SOPs due to which the cases of virus increased on daily basis (Rehman, Jawed, Ali, Noreen, Baig & Baig, 2021). Ultimately, like other countries of world, Pakistan also started vaccination due to which situation became under control. The use of face masks or coverings in the public spaces is a common action taken to reduce the spread of the COVID-19 by preventing respiratory droplets from being released into the air (Sirat, Sahrai, Rahimi, Asady & Wasiq, 2023). Maintaining a safe distance of at least 1 meter (3 feet) from others, particularly in the crowded areas, is the recommended action to minimize the risk of COVID-19 transmission. In comparison to other groups, highly educated and competent people were found to have the decent practices (Ajaj, Shahin, Moda & Ahmed, 2023). According to statistical findings, having a private work was negatively connected to having satisfactory knowledge, whereas having a large monthly salary was positively related to having the satisfactory knowledge. Older adults were associated with unfavourable attitudes, but the graduate degree holders were linked to positive practises in the covid-19.

## RESEARCH DESIGN

The study research design was based on quantitative research. Quantitative research is defined as systematic investigation of phenomena using numerical data and statistical, mathematical,

or computational approaches. Quantitative research is based on positivism paradigm, which advocates for statistical approaches include inferential statistics, hypothesis testing, mathematical exposition, experimental and quasi-experimental design randomization, blinding, structured protocols, and questionnaires with a limited number of predetermined answers (Lee, as cited in Slevitch, 2011). Furthermore, the type of research was exploratory as well as explanatory to elucidate the theme of the topic under the study. The quantitative approaches were used to explore the knowledge, attitude and practices of graduate students towards covid-19 in district Kech.

**Sampling Procedure**

The study used stratified proportionate sample technique for its sampling. A stratified sample guarantees that subgroups (strata) of a given community are sufficiently represented within a research study's overall sample population. So, in the present study University of Turbat, Govt Girls Degree College Turbat, and Govt Boys Degree College Turbat were used as subgroup or strata for study. Researchers got the total enrolment of students from principle offices of both colleges and admission section of UoT. Raosoft sample size calculator for sample size was used and hence got 191 sample size out of 6252. In order to allocate and distribute responses, scholars applied stratified proportionate sample technique for the distribution of respondents and further allocation was done by using the convenience sampling technique and details of the distribution are;

**Table 1**  
*Population & Sample*

Institutions	Population	Sample
Govt Girls College Turbat	1609	49.15531 (49)
Govt Boys College Turbat	1793	54.77655 (55)
University of Turbat	2850	87.06814 (87)
Total	6252	191

**Data Collection Tool**

In this research project the researchers used a structured questionnaire as a tool to collect the data. The questionnaire of survey was consisted upon matrix questions, open ended questions and close ended questions. Researchers' team translated the questionnaires in Balochi Language as target population consisted on Balochi speaking who could easily be communicated in their native language.

**Instruments**

Research instrument was a questionnaire. There were two parts of questionnaire. The first part consisted on demographic questions. And the second part consisted upon scales. Three scales were generated to measure knowledge, attitude and practices and these were five-point Likert Scales. Each scale ranged from the Strongly Agree to Strongly Disagree. The reliability of these scales was tested by using Cronch Alpha test which ranged above 0.5 and thus considered to be reliable.

**Analysis & Interpretation**

The data were interpreted and analyzed via SPSS 26.0 (Statistical Package for Social Science). In SPSS, results were interpreted by using various tables. The researchers generated univariate

and bivariate tables to evaluate and analysis the data. For bivariate tables, Chi-square test of independence was utilized for initial assessment of the hypotheses' correlations and afterwards for in-depth analysis; different tests employed to elaborate students' knowledge, attitudes, and practises as study variables.

**FINDINGS OF STUDY**

The aim and objective of the study was to check knowledge, attitude and practices of covid-19 among undergraduate students of Turbat, Kech. The universe of the research was district Kech, and sampling units were taken from Government Girls Degree College Turbat, Government Boys Degree College, Turbat and University of Turbat. The findings and result of the sample data shows that mean age of the respondents was 19.42. Gender of the respondents were i.e. female 55% and male 45%. The qualification of the participants were 58.1% were the students of BS level and 41.9% were the students of intermediate level. As mentioned in the above table that the study was conducted in University of Turbat and Girls Degree College along with Boys Degree College of Turbat, most of the participants involved in the study were from University of Turbat (45.5 %) while 28.7 percent were from Girls College and 25.6 percent were from boys college.

**Table 2**  
*Findings of Sample Tables*

	Minimum	Maximum	Mean	Std. Deviation
Age	15	39	19.42	2.778
		Frequency	Percentage	Cumulative %
Gender	Male	86	45.0	45.0
	Female	105	55.0	100.0
Qualification	Intermediate	80	41.9	41.9
	BS	111	58.1	100.0
Name of Institutions	Boys College	49	25.7	25.7
	Girls College	55	28.8	54.5
	University of Turbat	87	45.5	100.0
Residential	Rural	58	30.4	30.4
Background	Urban	133	69.6	100.0

**Table 2a**  
*Findings of Sample Tables*

	Minimum	Maximum	Mean	Std. Deviation
Family Income (Pkr)	20,000-30,000	92	48.2	48.2
	30,001-40,000	35	18.3	66.5
	40,001-50,000	30	15.7	82.2
	50,001+	34	17.8	100.0
Usage of Internet	Yes	173	90.6	90.6
	No	18	9.4	100.0
If yes than duration of usage of internet	1 Hour	26	15.0	15.0
	2 hours	50	28.9	43.9
	3 hours	40	23.1	67.0
	4 hours	36	20.9	87.9

	More than 5 hours	21	12.1	100
Watching News	Yes	88	46.1	46.1
	No	103	53.9	100.0
If yes duration of watching news	1 Hour	57	64.8	64.8
	2 hours	24	27.3	92.1
	3 hours	1	1.1	93.2
	4 hours	2	2.3	95.5
	More than 5 hours	4	4.5	100

**Table 2b**  
*Findings of Sample Tables*

	Minimum	Maximum	Mean	Std. Deviation
Reading Newspapers	Yes	89	46.6	46.6
	No	102	53.4	100
If Yes than duration of reading newspapers	Regularly	16	18.0	18.0
	Sometimes	60	67.4	85.4
	Often	11	12.4	97.8
	Never	2	2.2	100
Level of Knowledge	Low	39	20.4	20.4
	Moderate	67	35.1	55.5
	High	85	44.5	100.0
Level of Attitude	Low	42	22.0	22.0
	Moderate	70	36.6	58.6
	High	79	41.4	100.0
Level of Practices	Low	46	24.1	24.1
	Moderate	72	37.7	61.8
	High	73	38.2	100.0

Among the overall 191 respondents only 30.4 percent were rural residents while the all other 69.6 percent were the urban residents. Beside this, most of theirs (48.2%) family income ranged from 20,000 to 30,000. There were only 17.8 percent participants whose family had above than 50,000 income. As mentioned above, 90 percent participants used internet and among them the majority (26.2%) used internet for two hours and the lesser participants (11.0%) used for more than five hours. On the other hand, 20.9 percent respondents used internet for three hours and those who used for only one hour were 13.6 percent. In fact, the study also involved 9.4 percent respondents who even did not use internet. The current study showed that 53.9 percent respondents (majority) did not watch news. There were 46.1 percent who had positive response toward watching news. Among them 29.8 percent watched news for one hour while 12.6 percent watched for two hours. There was only one respondent who watched for 3 hours. Beside this, 2.1 percent of participants were concerned with watching news for more than five hours.

Despite these, researchers also found that there were 53.4 percent participants included in the study who were not engaged with reading newspapers. There were only 46.6 percent who read newspaper and among those only 8.8% read newspaper regularly while other 31.4 percent read sometimes and 5.7 percent often read. However, after computations of variables, knowledge, attitude and practices. The researchers found that majority of participants i.e. 44.5% had high

level of knowledge regarding covid-19, 35.1% had moderate level of knowledge and 20.4% had low level of knowledge. Whereas, 41.4% of respondents had high level of attitude towards the covid-19, 36.6% of the participants had moderate level of attitude and 22.0% had low level of attitude. Majority of respondents i.e.38.2% had high level of practices towards covid-19, 37.7% had moderate level of practices and 24.1% had low practices towards covid-19 guidelines and procedures.

**DISCUSSION**

Table No.2 shows that chi-square test of independence was performed to examine the relation between gender and knowledge of COVID-19. Relation between these variables was significant,  $X^2(2, N = 191) = 9.0558, p = .010803$ . The result is significant at  $p < .05$ . There is relationship between gender and knowledge of COVID-19. Female students had higher knowledge than the males. This finding was supported by the [Al\\_Hanawi et al \(2020\)](#) whom found that the females had a higher level of knowledge. Since females are more concerned for their health and they are therefore more engaged with any informational platform. They had a higher knowledge as they are connected to media than males. Males mostly have busy schedule and are highly concerned to earning by which they are less engaged with social media, print media or broadcast media. Thus, the males are not as much knowledgeable like females due to their less engagement with media.

**Table 2**

*Contingency Table Showing Relationship between Gender and Knowledge*

Gender	Knowledge			Totals
	Low	Moderate	High	
Male	21 (17.56) [0.67]	37 (30.17) [1.55]	28 (38.27) [2.76]	86
Female	18 (21.44) [0.55]	30 (36.83) [1.27]	57 (46.73) [2.26]	105
Totals	39	67	85	191

Table No.3 shows that a chi-square test of independence was performed to examine relation between gender and attitude towards the COVID-19. The relation between these variables was significant,  $X^2(2, N = 191) = 9.7472, p = .007646$ . The result is significant at  $p < .05$ . There is relationship between gender and attitudes towards COVID-19. The female have more positive attitude about COVID-9 which is a health issue. Female by naturally have fear perception then compare of men due to which their attitude was build more than men's. Females attitude was more toward covid 19 because of not being connected with social gathering their behaviour was multidimension. Female attitude was mostly developed or build by false news. In this regard, according to V Galasso.2020 women are more likely to perceive covid-19 as a very serious health problem.

**Table 3**

*Contingency Table Showing Relationship between Gender and Attitude*

Gender	Attitude			Totals
	Low	Moderate	High	
Male	23 (18.91) [0.88]	38 (31.52) [1.33]	25 (35.57) [3.14]	86
Female	19 (23.09) [0.72]	32 (38.48) [1.09]	54 (43.43) [2.57]	105
Totals	42	70	79	191



Table No.4 shows that chi-square test of independence was performed to examine the relation between gender and the practices towards the COVID-19. The relation between these variables was significant,  $X^2(2, N = 191) = 17.4109, p = .000166$ . Result is significant at  $p < .05$ . There is relationship between gender and practices towards COVID-19. Females are more focused about their health so that covid 19 was a health issue so female had more practices towards covid 19. Female clean up houses, cooking tools and they were mostly inside their houses during this pandemic. Female practice to avoid their children to go out and not to touch unclean things. Females are very sensitive to take care of their house and family to be protected by covid 19. Jia et al. (2021) conducted online cross-sectional questioner about health literacy and disparities in knowledge, attitudes and practices regarding COVID-19 in college students during outbreak in China. In that they mentioned that Female had most of knowledge of using measures to prevent the Pandemic and they had more knowledge, attitudes and practices regarding COVID-19 then males.

**Table 4**  
*Contingency Table Showing Relationship between Gender and Practices*

Gender	Practices			Totals
	Low	Moderate	High	
Male	25 (20.71) [0.89]	42 (32.42) [2.83]	19 (32.87) [5.85]	86
Female	21 (25.29) [0.73]	30 (39.58) [2.32]	54 (40.13) [4.79]	105
Totals	46	72	73	191

Table No.5 shows that chi-square test of independence was performed to examine the relation between qualification and knowledge of the COVID-19. Relation between these variables was significant,  $X^2(2, N = 191) = 8.1551, p = .016949$ . The result is significant at  $p < .05$ . There is relationship between qualification and knowledge of the COVID-19. According of our research respondents BS students have more knowledge then compare of intermediate students about covid 19. The BS students are more connected with educational institutions they have more experience knowledge about covid 19 phenomena to understand what covid 19 is. Students of BS are knowledgeable to have information about something according to their experiences. BS students have more information about global issues which is major part of their study. Thus, in the manner of S Getawa.2020 86% of BS students have high level of knowledge towards covid-19.

**Table 5**  
*Contingency Table Showing Relationship between Qualification and Knowledge*

Qualification	Knowledge			Totals
	Low	Moderate	High	
Intermediate	19 (16.34) [0.43]	35 (28.06) [1.71]	26 (35.60) [2.59]	80
BS	20 (22.66) [0.31]	32 (38.94) [1.24]	59 (49.40) [1.87]	111
Totals	39	67	85	191

Table No.6 shows that chi-square test of independence was performed to examine the relation between qualification and attitude towards the COVID-19. Relation between these variables was significant,  $X^2(2, N = 191) = 7.9521, p = .018759$ . The result is significant at  $p < .05$ . There is relationship between qualification and attitude towards COVID-19. The BS students had high level of attitudes regarding Covid -19. Their education qualification was high in that case ware

having highest score of attitudes about pandemic. Intermediate students have less knowledge about pandemic that's why they have less attitude about covid-19. YA Aynalem.2020 justified that BS students are allied with social scientific knowledge due to which they have a positive level of attitude towards covid 19.

**Table 6**

*Contingency Table Showing Relationship between Qualification and Attitude*

Qualification	Attitude			Totals
	Low	Moderate	High	
Intermediate	23 (17.59) [1.66]	33 (29.32) [0.46]	24 (33.09) [2.50]	80
BS	19 (24.41) [1.20]	37 (40.68) [0.33]	55 (45.91) [1.80]	111
Totals	42	70	79	191

Table No.7 shows that a chi-square test of independence was performed to examine the relation between qualification and practices towards the COVID-19. The relation between these variables was significant,  $X^2(2, N = 191) = 32.2414, p = .00001$ . The result is significant at  $p < .05$ . There is relationship between qualification and practices towards the COVID-19. The BS students had higher practices toward the preventive measures of COVID-19. They were more adhered as they had a higher level of knowledge. Since excess information regarding the virus, it's symptoms, causes, modes of spreading, preventions and ways of its reduction lead to its more practices. Because they will have awareness for its various impacts and thus, they adopt the precautions. Sakr et al. (2021) narrated in their research paper that mostly the university student had knowledge, attitudes and practicing measures and were optimistic towards the pandemic.

**Table 7**

*Contingency Table Showing Relationship between Qualification and Practices*

Qualification	Practices			Totals
	Low	Moderate	High	
Intermediate	29 (19.27) [4.92]	39 (30.16) [2.59]	12 (30.58) [11.29]	80
BS	17 (26.73) [3.54]	33 (41.84) [1.87]	61 (42.42) [8.13]	111
Totals	46	72	73	191

Table No.8 shows that a chi-square test of independence was performed to examine relation between residential background and knowledge of the COVID-19. The relation between these variables was significant,  $X^2(2, N = 191) = 47.0985, p = .00001$ . The result is significant at  $p < .05$ . There is relationship between residential background and knowledge of the COVID-19. The urban participants had a higher knowledge than rural respondents. However, Aynalem et al (2021) and Naseef et al (2021) also found similar findings that the knowledge of urban residents was greater than of rural residents. Moreover, the urban participants were more knowledgeable as they are more facilitated. They have the sources to gain knowledge and get engaged with every new information while the rural residents don't have much access. Due to backwardness, they are unconscious of many new information and thus they don't have a high knowledge.

**Table 8**

*Contingency Table Showing Relationship between Residential Background and Knowledge*

Residential	Knowledge			Totals
Background	Low	Moderate	High	
Rural	29 (11.84) [24.86]	17 (20.35) [0.55]	12 (25.81) [7.39]	58
Urban	10 (27.16) [10.84]	50 (46.65) [0.24]	73 (59.19) [3.22]	133
Totals	39	67	85	191

Table No.9 shows that a chi-square test of independence was performed to examine relation between residential background and attitude towards the COVID-19. The relation between these variables was significant,  $X^2(2, N = 191) = 24.4834, p = .00001$ . The result is significant at  $p < .05$ . There is relationship between residential background and attitude toward COVID-19. Urban people are more connected with source of information then compare of rural area peoples. Rural area people perception is low about any kind of disease they never take serious to any kind of issues. Urban people are more connected with social media and global issue so they have more knowledge about covid-19. Urban people try to secure their health issues so they have knowledge about those disease which affect them. Urban people are more focus over modernization so they have more knowledge about such problems. S Yue.2020 stated that according to their survey showed that result of urban residents had a positive attitude towards covid-19.

**Table 9**

*Contingency Table Showing Relationship between Residential Background and Attitude*

Residential	Attitude			Totals
Background	Low	Moderate	High	
Rural	23 (12.75) [8.23]	25 (21.26) [0.66]	10 (23.99) [8.16]	58
Urban	19 (29.25) [3.59]	45 (48.74) [0.29]	69 (55.01) [3.56]	133
Totals	42	70	79	191

Table No.10 shows that a chi-square test of independence was performed to examine relation between residential background and practices towards the COVID-19. Relation between these variables was significant,  $X^2(2, N = 191) = 10.8273, p = .004455$ . The result is significant at  $p < .05$ . There is relationship between residential background and practices towards COVID-19. The urban residential participants had high score in practices because they are mostly engaged with modernity and they have more information and facilities. Mostly they are very serious about health condition and they do a lot of practices to prevent these pandemics. Rural resident participants had less practices because they had less knowledge and less facilities in villages. Zheng et al. (2020) referred to in their studies article that the more than one linear regression analysis proven that city residents have better preventive practices, which can be related to the truth that city residents have a excessive level of fitness literacy and are uncovered to a high degree of fitness exposure. Abdelhafiz et al. (2020) proved that agricultural citizens typically have a low level of training, fitness offerings are lagging at the back of, and fitness exposure is rarely executed, so it is miles essential to enhance the prevention and control efforts of rural areas.

**Table 10***Contingency Table Showing Relationship between Residential Background and Practices*

Residential Background	Practices			Totals
	Low	Moderate	High	
Group 1	21 (13.97) [3.54]	24 (21.86) [0.21]	13 (22.17) [3.79]	58
Group 2	25 (32.03) [1.54]	48 (50.14) [0.09]	60 (50.83) [1.65]	133
Totals	46	72	73	191

Table No.11 shows that a chi-square test of independence was performed to examine relation between knowledge and attitude towards the COVID-19. Relation between these variables was significant,  $X^2(4, N = 191) = 15.7706, p = .003343$ . The result is significant at  $p < .05$ . There is relationship between knowledge and attitude towards the COVID-19. The respondents who are more knowledgeable had a positive attitude toward the COVID\_19 pandemic. Since they were conscious about anything related to the epidemic. However, [Adam et al. \(2021\)](#) found that the Saudi Arabian applied medical undergraduate students had a solid understanding regarding epidemic and they had a positive attitude. The study was also supported by [Abu et al. \(2020\)](#). Since they found that respondents had positive attitude along with the high score of knowledge. Beside this, [Hussein et al \(2020\)](#) examined that more knowledgeable respondents had positive attitudes.

**Table 11***Contingency Table Showing Relationship between Knowledge and Attitude*

Attitude	Knowledge			Totals
	Low	Moderate	High	
Low	11 (8.58) [0.69]	11 (14.29) [0.76]	17 (16.13) [0.05]	39
Moderate	10 (14.73) [1.52]	37 (24.55) [6.31]	20 (27.71) [2.15]	67
High	21 (18.69) [0.29]	22 (31.15) [2.69]	42 (35.16) [1.33]	85
Totals	42	70	79	191

Table No.12 shows that a chi-square test of independence was performed to examine relation between knowledge and practices towards the COVID-19. The relation between these variables was significant,  $X^2(4, N = 191) = 10.8477, p = .02833$ . The result is significant at  $p < .05$ . There is relationship between knowledge and practices towards the COVID-19. The respondents who had a higher level of the knowledge were more practicing the preventions. Because they were aware about the pandemic's harmful impacts on the health and its modes of spreading. Thus, more information leading to more practices. Infact, [Hussein et al \(2020\)](#) discovered that the respondents who were consequently found to have good practices were considered to be more knowledgeable.

**Table 12***Contingency Table Showing Relationship between Knowledge and Practices*

Practices	Knowledge			Totals
	Low	Moderate	High	
Low	9 (9.39) [0.02]	16 (14.70) [0.11]	14 (14.91) [0.06]	39
Moderate	17 (16.14) [0.05]	33 (25.26) [2.37]	17 (25.61) [2.89]	67
High	20 (20.47) [0.01]	23 (32.04) [2.55]	42 (32.49) [2.79]	85
Totals	46	72	73	191

## CONCLUSION

To sum up, the research founded that COVID-19 was considered to be a risky and dangerous virus across the globe and affected the world in aspect likewise socially, economically, politically, religiously. This virus also took millions of lives of people and pushed the structure of the world toward disorganization and breakdown in many aspects. This study aimed to analyse knowledge, attitude and practices of graduate level students at district Kech. However, the study explored that the graduate level of students had high level of knowledge, attitude and practices towards COVID-19 in district Kech. Moreover, the study found that gender, qualification and residential areas of students were found to have positively significant relationships with the knowledge, attitude and practices. And knowledge itself had significant relationship with the attitude and practices toward COVID-19 in students of district Kech. Researchers found a new phenomenon that female belonging to the Baloch society are living under a patriarchal, socio-cultural set up had more knowledge than male. Though the social exposure of males is wider than the females. But this is quite new for the researchers. Though it was also found that students belonging to rural areas were more conscious than the students of urban areas. This can be researched by other researchers in future to know real consequences and impacts of gender and residential areas.

## Policy Implications

Based on findings, it is recommended through this project that the knowledge, behavior and protective measures of graduate level students were high because of social media, electronic media and print media but still government and social institutions of the society like, family, educational institutions, religious institutions, economical institutions & political institutions must work further to enhance their awareness, behavior and protective measurements towards the COVID-19 in society. Furthermore, it is also recommended that government and societal institutions concerns with the health and betterment of society must implement the guidelines and SoPs of COVID-19 in rural areas of district Kech and as well as implementation mechanism be strong gender wise as male were found to be irresponsible in the behavior and practices of COVID-19. Since time and budget for this study were constraint, this examine could not take a larger sample size or appoint extra applicable empirical strategies. as a result, the findings of this paper may not constitute real state of affairs of District Kech college students. therefore, a further in-depth observe in this issue are cautioned to carry out except for these boundaries is wanted.

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