

## The plight of COVID-19 Pandemic Effect on Educational Abilities and Attitude of Faculty Members

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### Abstract

The plight is a difficult and sad situation, that's hard to get out as represented in Covid 19 pandemic. The coronavirus pandemic, commonly referred to as COVID-19, is the severe acute respiratory syndrome-related coronavirus disease pandemic of 2019. **Aim:** Identify the plight of COVID-19 pandemic effect on educational abilities and attitude of faculty members **Design:** Descriptive exploratory. **Setting:** Vision Colleges for Nursing and dentistry in Reiyed and Jeddah in Kingdom of Saudi Arabia. **The study sample:** 200 faculty members. **Tools:** Two tools were used **Tool (I): Online assessment questionnaire:** This tool consisted of three parts. **Part I:** Faculty member's characteristics. **Part II:** Faculty members and technological programs that can be used in distance learning. **Part III:** Distance education technology, faculty members and the support staff. **Tool II:** Online experience of faculty members pre, during and post Covid-19 pandemic, questionnaire. **Results:** Upon the onset of the COVID-19 epidemic, 35.5% of academic staff members finished an online teaching professional development course, 17% requested peer mentoring from fellow faculty members, and 30% reported completing both initiatives. After the COVID-19 epidemic, most faculty members reported that their ability to teach online had improved "much" (55.5%) or "much" (31.0 percent ). **Conclusion:** The result of this study revealed that suspending classes without stopping education has been implemented effectively and that administrative work has continued to run smoothly. Also the findings determined that dentists and nursing academic staff are resourceful, adaptive, and willing to use both novel and existing resources and methodologies to meet their teaching goals. **Recommendations:** Replication of the study on large probability sampling added in different faculty.

**Key words:** Plight, Covid-19 pandemic, Faculty members, Educational Abilities, Attitude

## Introduction

The plight is a difficult and sad situation, that's hard to get out of, information overload, rumors and misinformation can make your life feel out of control and make it unclear what to do, this was done during the COVID-19 pandemic. <sup>(1)</sup>

Acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is the cause of the worldwide coronavirus disease 2019 pandemic, also known as the COVID-19 pandemic or the coronavirus pandemic <sup>(2)</sup>

Globally, the epidemic severely disrupted social and economic life, resulting in the greatest recession. Supply chain interruptions and panic buying led to widespread shortages of several commodities, including food. Pollution dropped to an unprecedented level as a result of less human activity. In many places, public spaces and educational institutions were closed entirely or in part, and activities were canceled or rescheduled for 2020 and 2021. A lot of white-collar employees started working from home. Political tensions increased as false information spread via social media and traditional media. The epidemic brought up concerns about health fairness, discrimination based on race and geography, and striking a balance between individual rights and public health requirements <sup>(4)</sup>

Global educational institutions responded to the pandemic by going online very soon. Students soon made the switch from going to actual places that provided them with much-needed social connections to spending hours every day in front of screens. Academic institutions that already had digital learning platforms and the resources needed to employ them in place were the main drivers of this change <sup>(5)</sup>. The act of imparting or acquiring general knowledge, honing reasoning and judgment skills, and generally preparing oneself or others

intellectually for a mature life is called education. It also refers to the act of imparting or acquiring specific knowledge or skills, such as those needed for a profession <sup>(6)</sup>. Being physically present within the four walls of the classroom is no longer the only way to study; the Internet has completely changed the idea of traditional education. The idea of online education originated from the fact that high-quality education is now accessible to anyone with internet access <sup>(7)</sup>

In a short amount of time, the pandemic drove educational institutions—teachers and students alike—to transition to remote learning, without giving anybody time to prepare for such a sudden and significant shift in the way that education is provided. However, this modification allowed for the verification of the teaching staff's preparedness for remote learning in terms of both technical and digital skills as well as teaching abilities.

The evaluation of academic staff needs and student satisfaction in the context of remote learning will also, enable the identification of future directions for staff development in this domain and the definition of initiatives targeted at raising staff and student satisfaction levels with the learning process <sup>(8)</sup>.

Attitude refers to a psychological construct that reflects an individual's evaluation, beliefs, and feelings towards a person, object, idea, or situation. It represents a person's predisposition to respond consistently in a positive, negative, or neutral manner. <sup>(9)</sup>

Improves There are opportunities for collaboration and communication between academic staff and administrators at educational institutions. With the use of technology, educators can design interactive

classes, administer online tests and quizzes, and provide students immediate feedback to help them remain on course and perform better. One essential instrument for training teachers for the future is technology. Technology have a big impact on the fast changing workforce. Academic staff members must possess the abilities necessary to thrive in the digital age <sup>(10)</sup> Educators may foster several essential qualities through the use of technology, such as problem-solving, critical thinking, and teamwork. Furthermore, it provides kids with exposure to a variety of digital tools and platforms, helping them grow into capable and confident users <sup>(11)</sup>.

### **Significant of the study:**

Inconceivable disruptions to the world were caused by the COVID-19 epidemic. Upon reflection on the last two years and the severe consequences of the epidemic that persist to this day, it is evident that the education sector was among the most affected. Additionally, machine learning will contribute to the personalization of the learning process, increasing its efficacy and efficiency. It has facilitated personalized learning, enhanced communication and teamwork, created new opportunities for creativity and innovation, and equipped students for the future.. So it was important to identify the plight of Covid -19 Pandemic effect on educational abilities and attitude of faculty members and studying its effect.

### **Aim**

Identify the plight of COVID-19 Pandemic Effect on Educational Abilities and Attitude of Faculty Members.

### **Research questions:**

-How the plight of Covid-19 pandemic affect in faculty members abilities in education?

### **Subject and methods**

#### **Research design:**

Descriptive exploratory research design was used to achieve the aim of this study.

#### **Setting:**

The present study was conducted at Vision Colleges for Nursing and dentistry in Reiyed and Jeddah in Kingdom of Saudi Arabia.

#### **Subjects:**

The study sample consisted of all available academic members (N= 200).

#### **Tools for data collection:**

**Tools: Two tools were used to conduct the study**

**Tool (1): Online assessment structured questionnaire.**

This tool was developed by the researchers after reviewing the related literatures **Sadiku, et al ( 2018)**<sup>(12)</sup>. This tool consisted of three parts as the following:

**Part I:** Faculty members characteristics e.g., Gender, department, academic degree, years of teaching experience and Years of teaching experience in Vision colleges.

**Part II:** Faculty members and technological programs that can be used in distance learning, the obstacles that faced while used this programs, sources of support their skills, activities used in programs of remote communication, it consisted of 11 questionnaires, e.g, the name of the program that used, the sources of support skills used in technological programs in teaching and learning,

methods of communication remotely

**Part III:** Consisted of 4 items, related to the impact of the use of distance education technology on the faculty and the support staff on, enhance their communication skills, increase efficiency among other faculty members, give teachers the opportunity to become learning facilitators rather than information providers and relieve stress from preparing the lecture for the trainer.

**Tool II: Online experience of faculty members, pre, during and post Covid-19 pandemic, questionnaire.**

This tool was developed by the researchers after reviewing the related literatures **Sadiku, et al (2018)<sup>(12)</sup>**. This tool consisted of four parts as the following:

- **Online Skill, Experience and Training before Covid-19 pandemic**, learning to teach online during covid-19 period, teaching effectiveness, and perspective on teaching online in the future.
- **Online Experience and Training before covid-19 pandemic** as, before covid-19 pandemic, how many online courses had you introduced by online Before the COVID-19 pandemic, did you finish the online teacher training course that your colleges offered? Before the COVID-19 outbreak, have you finished an online teaching training course offered by a third party?
- **Learning to Teach Online during Covid-19 pandemic** as, how did you improve your online teaching during the Covid-19 pandemic, or how did you become an excellent online course instructor? List as many as you feel is suitable. Choose amongst my collages' training programs, those offered by other faculty members, outside training programs, and none of them.
- **Teaching Effectiveness.** What adjustments have you made to your online teaching style in the months since the Covid-19 outbreak began? What effect has the epidemic had on your capacity to instruct effectively?
- **Attitude Regarding Online Course Instruction.** To what degree has the COVID-19 outbreak affected your

perspective of volunteering to teach online courses in the future?

**Methods:**

Online Google Forms survey created specifically for the project to gather data early in August 2020, following consent from the college deans. The study team sent out an email inviting faculty members to willingly take part in the study; the email promised confidentiality and contained a link to the survey. An email follow-up was sent out four weeks later.

1. A formal correspondence outlining the study's objectives was sent to college deans..

**2- Ethical considerations:**

- An ethical committee's clearance was granted at Vision Colleges for nursing and dentistry in Reiyed and Jeddah, Kingdom of Saudi Arabia. (Code; 21-6/3)
- The participants' informed consent was acquired once they were aware of the study's purpose.
- The participants received assurances on the privacy of their data.
- A faculty member's anonymity was guaranteed.
- Honoring

**3- Validity of tools:**

The content validity of the tools was examined by a panel of five medical surgical professionals. Psychiatric Nursing, Nursing Administration, Dentist academic staff and Information IT, accordingly needed modifications were done, it was calculated and found to be 98%.

**4- Reliability of the tools:**

Coronbach's alpha test was used to determine the reliability of study tool I, yielding a result of 0.875, and Coronbach's alpha test yielded a result of 0.895 for study tool II.

5- Prior to starting the actual study, a pilot was conducted on 10% of the study participants to determine the suitability and the study tool's clarity as well as to pinpoint any roadblocks during data collection.

#### **6- The actual study:**

The COVID-19 pandemic began in the first half of March 2020, at which point Vision Colleges in the Kingdom of Saudi Arabia closed their nursing and dentistry programs in Reiyed and Jeddah. In addition, all scheduled activities were canceled, and for the balance of the semester, all instruction was moved online. Beginning in August 2020, the colleges reopened and classes started, with some restrictions requiring greater spacing between students in order to stop the COVID-19 virus from spreading (such as smaller class sizes and the requirement to wear face masks inside of buildings). The 2020 semester Carrey out a range of delivery methods for courses, including in-person and fully online instruction.

Online Google Forms survey created specifically for the project to gather data early in August 2020, following consent from the college deans. The study team issued an email to faculty members requesting their voluntary participation; the email emphasized that replied data would be confidential and included a link to the survey. Four weeks later, a follow-up email was issued. The survey instrument comprised the following: staff and distance learning statements, faculty members, knowledge of technical programs that can be utilized in distance learning.

- Sociodemographic data, and characteristics of academic staff. Prior to the Covid-19 epidemic, faculty members were divided into three parts based on their expertise teaching online: a) No prior experience

teaching online; b) One to three online course teaching experiences; and c) Four or more online course teaching experiences.

- The study population was divided into four groups according to the online teaching activities they participated in during the COVID-19 pandemic: A. asked other faculty members for mentoring; B. finished an online teaching training program or workshop; C. pursued mentorship and completed an online teaching program. D. did not engage in an online teacher training program or pursue mentoring..
- Academic members with different levels of online teaching expertise compared activities to learn how to teach during the COVID-19 pandemic. Lastly, as a result of prior online teaching experience and training/mentoring sought during the COVID-19 pandemic, changes in the capacity to teach online, the pandemic's impact on faculty members' effectiveness as teachers, and A shift in perspective on future online course instruction was looked at. The tools of study were developed in Google form and send to all the participants by their E-mails through link:

[https://docs.google.com/forms/d/e/1FAIpQLSeFQx0kLXIWQaWS-8ejM-COFjrGURivzH4Z0IYBZ7ZBdA536Q/view\\_form?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSeFQx0kLXIWQaWS-8ejM-COFjrGURivzH4Z0IYBZ7ZBdA536Q/view_form?usp=sf_link)

#### **Statistical analysis:**

Statistical Package for the Social Sciences, version 26, SPSS Inc., Chicago, IL, USA) was used to organize, tabulate, and statistically analyze the collected data. We calculated the standard deviation and range mean for the quantity data. The parametric data means of two groups from independent samples were compared using the t-test.

When comparing more than two means of parametric data, the F value of the ANOVA test was calculated. To evaluate the correlation between the variables, Pearson's correlation coefficient was employed (r). Highly significant results were interpreted at  $P < 0.001$  for significance tests, whereas significant results from tests of significance were interpreted at  $P < 0.05$  <sup>(13)</sup>

## Results

**Table (1)** Displays characteristics of faculty members, it appears that most of faculty members (81.5%) are male, and 67.5% are dentists. Regarding academic degree 38.0% are assistant teacher. As regarding to years of teaching experience, it was observed that 42.5% less than 3 years, while 24.5 were 3 years and less than 5 years.

**Table (2)** Shows distribution of the studied faculty members, according to technological programs that can be used in distance learning. Regarding, the technological programs that can be used in distance learning, more than fifty (57.0%) of faculty members select all programs. Moreover, the table illustrate that more than two third 71.0% were used online. As regarding the areas in which they used this programs, most of academic members (81.0%) were select communication with students in the college. In relation to obstacles that they faced while, around one half of members 43.0% select lack of time. Also the table emphasize that 32.5% supporting their skill in using technological programs by videos of the college staff. Furthermore, the table shows more than two third 70.5% of faculty members their participated in committees, workshops or councils using technological programs for remote communication. As regarding the benefit from these activities compared to the traditional attendance at the venue around half 47.5% reported less

benefit. Regarding the benefits of using technology programs in the teaching and learning process, 40.0% described reducing the chances of infection with diseases especially respiratory diseases.

**Table 3:** Shows online teaching experience and training before the Covid-19 pandemic period. At beginning of covid-19 pandemic, A professional development training program on online teaching was completed by 35.5% of academic staff, while 17% requested peer mentorship from other academic staff members and 30% reported completing both. Of the participants, 17.5 percent did not report any activity.

**Table 4: Provides changing the faculty member's abilities to teach online Classes.** Thirty percent of faculty members reported completing a training program and seeking peer mentoring during the Covid-19 pandemic period semester, whereas thirty percent finished an online teaching professional development course. 17.5 percent of participants did not report any activities. Of the individuals who finished online training course, a greater percentage (55.5%) took part in one offered by their colleges rather than one from outside organizations (31.5 percent ). Participation in these online teaching training courses differed considerably depending on prior experience with online instruction ( $p < 0.001^*$ ). After the COVID-19 pandemic semester, the majority of faculty members reported that their ability to teach online had improved "much" (55.5%) or "much" (31.0 percent ).

**Table 5** illustrates how this perspective changed in relation to prior online teaching experience as well as actions aimed at teaching online. A strong correlation was seen between prior online teaching experience and perceptions of improvement, as indicated by the Chi Square analysis (X2

= 94.290,  $p < 0.001^*$ ). Faculty members with less experience reported higher levels of improvement. Furthermore, 30% of professors who had never taught online claimed to be "much improved," and this number decreased for those with greater online teaching experience.

Prior to the COVID-19 pandemic, thirty percent of participants ( $n =$  sixty) had never taught online, twenty-five percent ( $n =$  forty-five) had taught one to three online courses, and forty-five percent ( $n =$  ninety-five) had taught four or more.

**Table 5: Shows, Impact of the COVID-19 Pandemic on teaching efficacy.** The COVID-19 epidemic had "somewhat negatively affected" the efficacy of teachers, according to over half of respondents (48 percent), with the remaining respondents roughly splitting between "not badly affected" (27.5 percent) and "greatly negatively affected" (24.5 percent). These opinions were found to be substantially correlated with plans to acquire or enhance online teaching abilities during the epidemic ( $2= 65.284^*$   $p < 0.001^*$ ) and previous online teaching experience ( $2= 87.290^*$   $p < 0.001^*$ ). Table 6 shows that the perceived detrimental effect of the pandemic on the efficacy of instruction reduced with prior experience with online instruction. Furthermore, academic staff members who did not pursue mentorship or enroll in an online teaching course during the Covid-19 outbreak were likely to report that the pandemic had a significant negative impact on their ability to teach (42.8 percent ). In contrast, faculty members who participated in training programs, sought out outside mentorship, or pursued both training and

mentoring had less of an influence from the epidemic on their ability to teach. These groups' replies were comparable.

**Table 6: Reflects attitude of academic staff toward teaching online courses in the future:**

Due to their experiences with online instruction during the pandemic, roughly 45% of polled instructors said in the future, they would be more inclined to willingly instruct an online course. About one in five (21.7%) said they were less likely to do so, while 36% said they had no change in opinion. When attitudinal responses were compared, there was a significant difference by prior online teaching experience ( $X^2 = 97.286^*$ ,  $p < 0.001^*$ ) and pandemic-related online teaching tactics ( $X^2 = 96.296^*$ ,  $p < 0.001^*$ ). Table 4 demonstrates that a greater proportion of faculty members who had never taught online before (28.3%) had a lower likelihood of wanting to teach online willingly in the future. In contrast, more than half (55.6%) of those who had instructed one to three online courses before the pandemic expressed a higher likelihood of doing so going forward. When asked if their attitude has changed after teaching four or more online courses, faculty members said this most frequently. In terms of their plans to learn how to teach during the pandemic, instructors who completed a training program (52.1%) or pursued formal training and mentoring (45 percent) were more likely to say they would be interested in teaching online in the future than those who pursued only mentoring (38.2 percent) or neither formal training nor mentoring (34.3 percent).

**Table (1): Characteristics of faculty members.**

<b>Subject Characteristics</b>	<b>No.</b>	<b>%</b>
Gender		
Male	163	81.5
Female	37	18.5
Department		
Dentists	135	67.5
Nursing	65	32.5
Academic Degree		
Lecturer	57	28.5
Assistant teacher	76	38.0
Teacher	30	15.0
Assistant Professor	27	13.5
Associated Professor	10	5.0
Years of teaching experience		
Less than 3 years	67	33.5
3 years to less than 5 years.	29	14.5
5 years to less than 10 years.	58	29.0
10 years to less than 15 years.	20	10.0
15 years and more	26	13.0
Years of teaching experience in Vision colleges		
Less than 3 years	85	42.5
3 years to less than 5 years.	49	24.5
5 years to less than 10 years.	66	33.0



**Table (2): Percentage distribution of the studied faculty members, according to technological programs that can be used in distance learning. (n = 200)**

	<b>Faculty members and technological programs</b>	<b>No.</b>	<b>%</b>
<b>1</b>	<b>Technological programs that can be used in distance learning.</b>		
	Online.	67	33.5
	Web conference	19	9.5
	All of above	114	57.0
<b>3</b>	<b>The name of the program used.</b>		
	Audio conference.	18	9.0
	Multimedia.	20	10.0
	Online.	142	71.0
	Web conference.	20	10.0
<b>4</b>	<b>The areas used this program.</b>		
	Communicate with students in the college	162	81.0
	The scientific research to collect data	21	10.5
	Communicating with supervisors.	17	8.5
<b>5</b>	<b>The obstacles faced while using this program.</b>		
	The lack of time to include technology in educational activities.	86	43.0
	The limited financial means to provide programs and technological devices.	49	24.5
	Lack of training.	65	32.5
<b>6</b>	<b>Post emergence of the Corona epidemic, sources of supporting teachers' skills in using technological programs in teaching and learning.</b>		
	Videos of the college staff.	65	32.5
	Videos of the college's IT unit.	22	11.0
	Videos from YouTube	64	32.0
	Videos sent by the organizer of a specific workshop or conference from outside the college's	49	24.5
	<b>Faculty members and technological programs (Continue)</b>		
<b>7</b>	<b>After the appearance of the Corona epidemic, participated in committees, workshops or councils, using technological programs for remote communication.</b>		
	Yes	141	70.5
	No	59	29.5
<b>8</b>	<b>After the appearance of the Corona epidemic, did you give a workshop or give a research at a conference using technological programs (methods of communication) remotely.</b>		
	Yes	94	47.0
	No	106	53.0
<b>9</b>	<b>After the appearance of the Corona epidemic, did you participate in the presence of one of the following activities using the programs of remote communication.</b>		
	Conference inside the Kingdom of Saudi Arabia.	69	34.5
	A workshop inside the Kingdom of Saudi Arabia.	31	15.5
	A conference from outside the Kingdom of Saudi Arabia.	32	16.0
	Workshop from outside the Kingdom of Saudi Arabia.	68	34.0

10	<b>The benefit from these activities compared to the traditional attendance at the venue.</b>		
	Greater benefit	76	38.0
	Equal benefit	29	14.5
	Less benefit	95	47.5
11	<b>The benefits of using technology programs in the teaching and learning process.</b>		
	Reducing the chances of infection with diseases, especially respiratory diseases	80	40.0
	Providing the travel effort for the student and the teacher.	51	25.5
	Defer the travel costs for the student and the teacher	37	18.5
	Provide time for the student and the teacher.	32	16.0

Table 3. Online teaching experience and training before Covid-19 pandemic.

Online teaching experience before Covid-19	n %	Neither mentoring nor training n (%)	Mentoring only n (%)	Training program only n (%)	Mentoring and training program n (%)
No previous online teaching experience	60 (30%)	11 (18.3%)	14 (23.3%)	15 (25 %)	20 (33.3 %)
Had taught online courses	45 (22.5%)	6 (13.3%)	5 (11.1%)	16 (35.5%)	18 (40 %)
Had taught 4 or more online courses	95 (47.5%)	18 (18.9 %)	15 (15.7%)	40 (42.1%)	22 (23.1 %)
<b>Total</b>	200 (100%)	35 (17.5 %)	34 (17%)	71 (35.5 %)	60 (30 %)

Table 4: Changing the faculty member's abilities to teach online Classes

Online teaching experience before Covid-19 pandemic	n (%)	Unchanged n (%)	Somewhat improved n (%)	Much improved n %	Test Sig	P
-No online teaching experience	60 (30%)	3 (5%)	35 (58.3%)	22 (36.6 %)		
-Had taught 1-3 online classes	45 (22.5%)	4 (8.8 %)	26 (57.7 %)	15 (33.3%)		
-Had taught 4 or more online classes	95 (47.5 %)	20 (21.0%)	50 (52.6%)	25 (26.3 %)	$X^2=94.290$	0.001
<b>Strategies used to learn and teach online during the covid-19 semesters</b>						
Neither mentoring nor training	35 (17.5 %)	9 (25.7%)	17 (48.5%)	9 (25.7 %)		
Mentoring only	34 (17 %)	4 (11.7%)	20 (58.8 %)	10 (29.4%)		
Training program only	71 (35.5 %)	6 (8.4%)	45 (63.3%)	20 (28.1%)	$X^2=68.290^*$	0.001*
Mentoring and training program	60 (30 %)	5 (8.3%)	40 (66.6%)	15 (25 %)	$X^2=94.098^*$	0.001*
<b>Total</b>	200 (100 %)	27 (13.5 %)	111 (55.5 %)	62 (31.0 %)		

**Table 5: Impact of the COVID-19 Pandemic on education efficacy**

Online teaching experience before Covid-19 pandemic period.	n (%)	Not negatively affect n (%)	Somewhat improved affected n (%)	Greatly negatively affected n %	Test Sig	P
-No online teaching experience	60 (30%)	8 (13.3%)	35 (58.3%)	17 (28.3%)		
-Had taught 1-3 online classes	45 (22.5%)	10 (22.2 %)	23(51.1%)	12 (26.7%)	$\chi^2 = 93.298^*$	0.001*
-Had taught 4 or more online classes	95 (47.5 %)	37 (38.9 %)	38(40%)	20 (21.0%)	$\chi^2 = 87.290^*$	0.001*
<b>Strategies used to learn to teach online during the Spring 2020 semester</b>						
Neither mentoring nor training	35 (17.5 %)	4 (11.4%)	16 (45.7%)	15(42.8%)		
Mentoring only	34 (17 %)	9 (26.4 %)	17(47.0%)	8(23.5%)	$\chi^2 = 85.294^*$	0.001*
Training program only	71 (35.5 %)	25 (35.2%)	35(49.3%)	11(15.5%)	$\chi^2 = 95.299^*$	0.001*
Mentoring and training program	60 (30 %)	20 (33.3%)	30 (50%)	10 (16.7%)	$\chi^2 = 65.284^*$	0.001*
Total	200 (100%)	55 (27.5%)	96 (48%)	49 (24.5%)		

$\chi^2$ : Chi square test      \*: Statistically significant at  $p \leq 0.05$

**Table 6. Attitude of academic staff toward teaching Online Courses in the Future**

1- Online teaching experience before Covid-19 pandemic period.	n (%)	Less likely n (%)	Unchanged n (%)	More likely n %	Test Sig $\chi^2 =$	P
-No online teaching experience	60 (30%)	17(28.3%)	13(21.7%)	30(50%)		
-Had taught 1-3 online classes	45 (22.5%)	9(20%)	11(24.4%)	25(55.6%)	68.098*	<0.001*
-Had taught 4 or more online classes	95 (47.5%)	12 (12.6%)	48 (50.5%)	35(36.8%)	68.098*	<0.001*
<b>2-Plans used to learn to teach online during the cobid-19 pandemic.</b>						
Neither mentoring nor training	35 (17.5 %)	10 (28.6%)	15(42.9%)	12 (34.3%)	96.296*	<0.001*
Mentoring only	34 (17 %)	11(32.4%)	10 (29.4%)	13(38.2%)		
Training program only	71 (35.5 %)	14(19.7%)	20 (28.2%)	37(52.1%)		
Mentoring and training program	60 (30 %)	12(20.0%)	21(35%)	27(45%)	97.286*	<0.001*
Total	200 (100%)	38 (19%)	72 (36%)	90 (45%)		

$\chi^2$ : Chi square test      \*: Statistically significant at  $p \leq 0.05$

## Discussion

The Covid-19 pandemic management efforts resulted in the introduction of novel tools and technologies that altered the conventional educational landscape by bringing new approaches and forms. Web conferences, webinars, and online training are just a few of the venues that many colleges are actively using to offer synchronous learning. A growing number of learning portals are being used to host e-learning courses across several disciplines **Hassan, (2021)<sup>(14)</sup>** World planet is changing quickly. The half-life of abilities in industries is decreasing exponentially due to the speed of change, particularly with reference to new technology. Particularly in the higher education sector, this shift necessitates adaptation to account for the reality that skills that will be in high demand in the future may differ greatly from what was previously taught **Richter & Idleman, (2017)<sup>(15)</sup>**

As regards demographic and academic data, the result of this study, showed that the majority of academic staff was male more than three quarters. This result was parallel with the study done by **Vital L et al (2022)<sup>(16)</sup>** emphasized stated.

The current study results revealed that the obstacles that faced the faculty members, while using this programs to communicate remotely, more than two third of academic member reported that the obstacles as lack of training or lack of time in new technology in educational activities, internet. The performance of the teachers in these remote settings was significantly impacted by internet connection, as there have been instances of network saturation caused by multiple users connecting at once, which results in a drop in speed. These findings support earlier research **Onyema, (2019)<sup>(17)</sup>**. Their study validates the disastrous effects of the COVID-19 pandemic on education, in addition to the various barriers that keep educators and learners from engaging in online learning for ongoing education while the COVID-19 lockdown is in effect. **Abuhammad, (2020)<sup>(18)</sup>**; **Clay, (2020)<sup>(19)</sup>**

It has been stated that while a lack of training is one of the biggest obstacles preventing academic staff from participating in distant learning, training makes them feel more positive and self-assured about the new opportunities for teaching and learning. Consequently, faculty members' application with remote learning may rise with the implementation of online teaching training. Other studies have highlighted the drawbacks of online learning and teaching, such as the lack of an adequate infrastructure for online instruction, teachers' limited exposure to it, the information gap, the unsuitability of family homes as learning environments, and the need for academic excellence and equity in high education. It has also been suggested by authors that various pedagogical approaches need to be modified for use with various material and themes. While the body of research in this area is growing, a number of writers have pointed out the advantages and disadvantages of online learning in comparison to in-person instruction **Wilson et al, (2021)<sup>(20)</sup>**

Result of the current study indicated that the technology programs that can be used by faculty members in distance learning slightly over half. This result agrees with **Culp-Roche et al., (2021)<sup>(21)</sup>** & **Johnson et al., (2020)<sup>(22)</sup>** in their reported that Prior studies have demonstrated that a significant number of faculty members required support in order to manage the shift to an online learning environment during the Spring 2020 semester. These members' main areas of need included advice on how to make the transition quickly, best practices for online teaching, and help with technology and online student support. Research based on interviews shows that some academic members looked to their institutions for seminars and training programs as their primary source of professional development to enhance their abilities as online teachers (**Howe et al., (2021)<sup>(23)</sup>** & **Rupnow et al., (2020)<sup>(24)</sup>**).

Furthermore, it was noticed by **Hebert et al. (2022)<sup>(25)</sup>** that faculty members who had never taught online before were more likely to look for

mentorship than faculty members with more expertise, whereas the latter group was more likely to finish a training course. Additionally, they noticed that the results of this study support their findings, suggesting that there may be a greater need for junior faculty members to look for mentorship from more seasoned colleagues and for senior faculty members to look for professional development opportunities to further their careers.

Covid-19 pandemic and applications of new technology on education, at the start of the March 2020, faculty members reported the obstacles that faced while using program to communicate remotely may related to lack of time to include technology in educational activities or lack of training. This is in line with **Roy & Covelli's, (2020)<sup>(1)</sup>** findings that the pandemic had a detrimental impact on faculty members' ability to teach, with more than one quadrant suggesting a "greatly" unfavorable impact. After six months of emergency remote teaching, most respondents—more than three quadrants—mentioned that their capacity to teach online had improved "much" or "significantly." Both results are in line with earlier studies. According to earlier research, between 50 and 70 percent of college instructors believed the pandemic had a negative influence on their instruction **Aubry et al.,(2021)<sup>(26)</sup>** ; **Colclasure et al., (2021)<sup>(27)</sup>** , moreover, over half of them mentioned that they felt uneasy teaching online during the spring 2020 semester **Roy & Covelli, (2020)<sup>(1)</sup>**.

However, earlier studies have demonstrated that online teaching experience is a significant predictor of online teaching efficacy **Culp-Roche et al., (2021)<sup>(21)</sup>**, and that it is significantly correlated with both comfort level when teaching online during the pandemic **Roy & Covelli, (2020)<sup>(1)</sup>** and online teaching readiness **Cutri et al., (2020)<sup>(28)</sup>**. Additionally, studies have repeatedly demonstrated that the pandemic had an impact on academic staff members' experiences with emergency distant learning. Current results corroborate this data. It was discovered that prior experience teaching

online had an impact on teaching efficacy and online teaching advancement.

More over, the results indicated the extent to which faculty members needed to improve their proficiency in using technology in the classroom, the benefits of doing so, the sources of support provided by the IT group for using technological programs in teaching and learning, and the critical role that information technology and instructional design support play in nursing education. Faculty members expressed satisfaction with their schools' assistance for instructional design, as well as with the online education modules and course management systems they used to teach. When instructional designers assist with content organization, courses have higher overall quality **Jaschik & Lederman, (2018)<sup>(12)</sup>**. Furthermore, a higher quality online course is produced when the faculty member's content understanding and the instructional designer's experience are merged **Halupa, (2019)<sup>(29)</sup>**.

These findings concur with research done by **Winter et al. (2021)<sup>(30)</sup>** The authors discovered that possessing the abilities, know-how, and competences necessary for online instruction is essential for success in higher education.

Many faculty members departed with more favorable views regarding digital learning in spite of the challenges. When asked to contrast their opinions on online learning as a practical teaching approach between before and after COVID, almost half of the faculty mentioned that their perception had improved overall. These findings are consistent with earlier research showing the value of training programs in educating academic staff members about online teaching **Borup & Evmenova, (2019)<sup>(31)</sup>**. It also demonstrates that academic staff at colleges that have instructional designers on staff had the best attitudes toward online learning during the pandemic **Fox et al., (2020)<sup>(32)</sup>** & **O'Keefe et al., (2020)<sup>(33)</sup>** More than half of faculty members, their organization provided the most beneficial support throughout the transition to working online. More than half of the faculty, however, also mentioned that a digital tool or content provider was

a useful source of assistance, offering advice to help with the shift in addition to free or heavily discounted access to services. This highlights the crucial role that the faculty support community played as dependable allies and resources: in their efforts to adapt their courses and implement the right tools, numerous instructors resorted to one or more support categories. Moreover, current data show that faculty members were more inclined to seek out mentoring and training during the pandemic if they had received training before it started. Owing to their experiences and improved skills, these faculty members also seem more optimistic about their future prospects in online education.

Moreover more than one-third of the participants had never instructed a course online prior to the COVID-19 epidemic, and roughly two thirds had finished an online teaching training program, indicating that many had some knowledge of and experience with online pedagogy going into the shift. These results are in line with survey-based research conducted by **Stahlander & Sickel (2021)**<sup>(34)</sup> on faculty during the pandemic, which found that almost half of academic staff had not taught online before.

When the COVID-19 epidemic first broke out, more than three quadrants of academic staff members said it had a detrimental impact on their ability to teach, with one quadrant saying it had a "greatly" negative impact. Nonetheless, the majority of academic staff members stated that their experience teaching online has "slightly" or "much" increased their abilities to do so. About half also of the academic staff report that they are more inclined to willingly teach an online course in the future. The study's final conclusion measured the attitude toward future virtual education, precisely how it may have altered during the COVID-19 epidemic. According to **Fox et al. (2020)**<sup>(32)</sup> in their extensive survey-based study, faculty members' opinions of online teaching improved because of their experience during the epidemic. Additionally, our research revealed that academic staff who had completed a training program were

more likely to have seen an improvement in their attitude toward online teaching than those who merely sought out mentorship or neither mentoring nor training in online pedagogy. These findings are consistent with earlier research showing the value of such training programs in modifying the attitudes of academic staff toward online teaching **Borup & Evmenova, (2019)**<sup>(31)</sup>, and that the IT departments of universities with instructional design staff had the best attitudes toward online learning during the pandemic **Fox et al., (2020)**<sup>(32)</sup>.

### Conclusions.

The result of this study revealed that suspending classes without stopping education has been implemented effectively and that administrative work has continued to run smoothly. Also the findings determined that dentists and nursing academic staff are resourceful, adaptive, and willing to use both novel and existing resources and methodologies to meet their teaching goals.

### Recommendations.

- Replication of the study on large probability sampling added in different faculty.
- On line training program for faculty members to upgrade their abilities for online teaching.
- Future research should focus on evaluating levels of student satisfaction in the online environment during the outbreak and preventive measures.

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