FACULTY PERCEPTIONS OF ONLINE TEACHING PROGRAMME DURING COVID-19: AN ONLINE SURVEY

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Abstract

Outbreak of Coronavirus disease 19 (COVID-19) has devastated the world's educational system, but at the same time has presented both opportunities and challenges on institutions of higher education. Online education system was welcomed at this pandemic to continue the teaching learning process. This study assesses the faculty perceptions of online teaching programme during Covid-19. The main objective of the study was to assess the faculty perceptions of online teaching programme and to assess the effectiveness of online teaching programme. A cros-sectional study was conducted on 100 faculty members of various nursing educational institutions through online survey to assess their perceptions of online teaching programme. Faculty perception was assessed by a self structured instrument validated by experts and named as online teaching perception scale. Sociodemographic details were also obtained from the patient by using a semi structured Sociodemographic proforma. 93% faculties were found in favor of online classes during the Covid-19 pandemic. Majority of faculties were found they had developed effective communication with students and had delivered course materials online. Majority of teachers had assessed their student's performance online and faced difficulty in assessing actual performance of the students. Faculty experienced many difficulties and challenges in the online education setting. Uncertainty defines faculty's perception of online education during pandemic. They are said to shift to a new normal or non-traditional mode as outbreaks delivery of instructions.

Keywords: Faculty perceptions, online teaching program, Covid 19

INTRODUCTION

Outbreak of Coronavirus disease 19 (COVID-19) has devastated the world's educational system, but at the same time has presented both opportunities and challenges on institutions of higher education.[1] Higher education Institutions around the country and the world must respond definitively to the disruption caused by epidemic. In March 2020, COVID-19 has resulted to closure of educational institutions in the country. As a result, it underwent a radical change in education gives rise to online education, which makes the teaching virtually run digital platform. Understanding the views of faculty toward online education is necessary so that their concerns may be properly addressed. The voices of faculty are needed in the acceptance of new educational technology, and that will eventually contribute to the success of learning systems in academic institutions.[2]

Online education programs in nursing are on the rise increased number.[3,4] With the increasing number of online education program in Nursing, Faculty must be competent and possess skills specific to the online learning environment. Effective learning strategies promote student learning,

satisfaction and achievement of outcomes.[5,6,7] A literature review research uncovered on effective online learning strategies several recurring themes of collaborative activities such as discussion boards, instructor attendance, and using a variety of instructional methods.[8] In an online nursing education survey it is found that there are many important factors to create a sense of social presence and care. These factors include the ability to provide respectful, encouraging, timely and positive faculty messages whereas, concurrently, allows caring interactions between faculty and students, establishing mutual respect, and exploring meaning in faculty-student relationship.[9,10] The researchers on e-learning experiences involving faculty and students recommend a need for additional research. The aim of this descriptive qualitative study was to:

examine the nursing faculty's perceptions of what makes up indicators of teaching effectiveness and quality in an online learning environment and to determine whether faculty perceptions align with current best practices for online education. Despite developments in computer technology and the exponential growth of technological applications paving the way for online education worldwide in the recent years.[11] Few scholars have studied faculty readiness for online teaching.[12] There is also limited information on how online courses are perceived by faculty and there is scarcity of published research available on faculty perception toward online education in the local setting.[13]

MATERIAL AND METHODS

A quantitative non-experimental, descriptive, cross-sectional study design was followed. The study was conducted between April 2021 to July 2021 as an online survey through google form. Population of the study was faculty members who were working as tutor/ lecturer/ assistant professor/ professor in College/ School of Nursing. The study was an online survey for which tools were prepared in google form and shared with faculty members of different colleges and school of nursing. Nonprobability, purposive sampling techniques was used for selection of the samples. Faculties who carried out online teaching sessions during Covid – 19, having RN/RM registration and agreed to participate in the study by taking informed consent were included as subjects in the study. A 2-part questionnaire was used to gather data. The first part asked about the demographic and work-related profile of the participants and their general internet patterns. Name of the participant, age group, gender, qualification, designation, perceived computer competency, received any training for online teaching, stability of internet connection, source of data network and in favor or against of online education during the COVID-19 pandemic only were recorded in predesigned demographic form. The second part measured the perception of faculty toward online education. Online Teaching Perception Scale (OTPS) was used as second part of questionnaire to assess the faculty perceptions and effectiveness of online teaching programme. Total 24 items, 4 in each domain were adopted from the work of Lee, March and Peters (2015) on faculty attitudes toward online education.[14] The OTPS had a Cronbach's alpha .841. All items were answerable in a 5-point Likert scale format ranging from "0" never to "4" very often. The following scale was used to interpret that data:

0 - never
1 - almost never
2 - sometimes
3 - fairly often
4 - very often

The data was collected from 100 participants through online using Google Forms in the last week of April 2021 during the COVID-19 pandemic as the College prepares to implement flexible learning as COVID-19 pandemic hits the system in response to changes in the education system to the new normal. To ensure ethical conduct of the study, the participants were instructed that upon proceeding with the online survey, they grant consent to participate in the research voluntarily. Nominal data were described and expressed in frequency and percentage. Both descriptive and inferential statistics was used to analyze data. The data gathered were analyzed using SPSS version 23. Frequency count, percentages and mean were used to describe the data while Mann-Whitney U test and Kruskal Wallis test were performed to test for differences grouped according to certain categories. Level of significance was set at .05 alpha.

STRENGTH AND LIMITATIONS
The specified population assessed in this research study and the use of validated tools by experts were the strength of the study. The limitations of the study were small sample size, the exhaustive set of variables that might have been associated with faculty perception and the effectiveness of online teaching programme had not been examined.

RESULTS
During the study period, 100 faculties were enrolled in the study based on inclusion criteria. Table 1 depicts that majority of subjects were in age group of 21-30 years (45%). A total of 100 faculties 35 male and 65 females were undergone survey in this study. Majority were Master's degree holder (58%) and working as Clinical Instructor/ Nursing Tutor. Most of the faculties had 1 to 5 years of teaching experience (54%). Majority also had intermediate computer competency level (74%) and had no any training received in online teaching (70%). Few had a stable internet connection (18%) while majority had somewhat stable internet connection (79%) and more than half spend an average of 1 to 3 hours on the online classes daily (76%). Smart or mobile phone (75%) and laptop (20%) were the common devices used to connect on the Internet. 93% faculties were found in favor of online classes during the Covid-19 pandemic.

Table 1: Frequency & Percentage distribution of Socio Demographic details of faculties (n=100)

Variable	Categories	f	%
Age group (in years)	21-30 years	45	45
	31-40 years	30	30
	41-50 years	18	18
	51 or more	07	07
Gender	Male	35	35
	Female	65	65
Qualification	Doctorate	04	04
	Master's	58	58
	Bachelor's	38	38
Designation	Professor	08	08
	Associate Professor	12	12
	Assistant Professor	22	22
	Clinical Instructor/ Nursing Tutor	58	58
Years of teaching experience	1-5 Years	54	54
	6-10 years	30	30
	More than 10 years	16	16

Perceived computer competency	Expert	16	16
	Intermediate	74	74
	Beginner	10	10
Received any training for online teaching	Yes	30	30
	No	70	70
Stability of internet connection	Very stable	18	18
	Somewhat stable	79	79
	Not stable	03	03
Hours spend on online classes daily	1-3 hours	76	76
	4-6 hours	24	24
	More than 6 hours	00	00
Source of data network	Phone based Wi- Fi Hotspot	80	80
	Personal Broadband network	15	15
	Workplace Wi- Fi Hotspot	05	05
I am in Favor of online education during COVID-19 pandemic only	Yes	93	93
	No	07	07

Table 2 contains four domains and each domain is having 6 items. Table depicts under effective communication with students majority of faculty were very often prepared to communicate relevant information to students (58%). Most of the faculties very often scheduled live sessions for students to interact (62%). Most of the faculties very often allowed their students to interact with them regarding their doubts during college hours (70%). Most of the faculties were very often used more than one platform to communicate with students (68%). Majority of faculty fairly often used written statements to communicate with students (32%). Majority of nursing teachers sometimes shared handwritten notes to make the students understand course content better. Majority of faculty observed that fairly often students respond to them during online class (55%).

Under second domain i.e. putting course materials online majority of faculty observed that very often they shared course content using different applications such as Google Classroom/ Whatsapp / Email etc to the students (54%). Majority of faculty very often shared softcopy of course contents through PPTs, PDFs, Word Files or Excel to the students (44%).

Table: 2 Frequency & percentage distribution of the perception of faculties for online teaching/virtual classes (n=100)

Variable	Categories	f	%
Effective communication with students			
I prepared to communicate relevant information to students	Never	00	00
	Almost Never	04	04
	Sometimes	18	18
	Fairly often	20	20
	Very often	58	58
I scheduled live sessions for students to interact with me	Never	05	05
	Almost Never	08	08
	Sometimes	10	10
	Fairly often	15	15
	Very often	62	62
I allowed my students to interact with me regarding their doubts during college hours	Never	03	03
	Almost Never	03	03
	Sometimes	04	04
	Fairly often	20	20

	Very often	70	70
I used more than one platform to communicate with students	Never	03	03
	Almost Never	02	02
	Sometimes	05	05
	Fairly often	22	22
	Very often	68	68
I majorly used written statements to communicate with students	Never	00	00
	Almost Never	02	02
	Sometimes	06	06
	Fairly often	60	60
	Very often	32	32
Students respond to me during online class	Never	08	08
	Almost Never	12	12
	Sometimes	23	23
	Fairly often	55	55
	Very often	02	02
Putting course materials online			
I shared course content using different applications such as Google Classroom/ Whatsapp / Email etc to the students	Never	00	00
	Almost Never	00	00
	Sometimes	26	26
	Fairly often	20	20
	Very often	54	54
I shared softcopy of course contents through PPTs, PDFs, Word Files or Excel to the students	Never	00	00
	Almost Never	14	14
	Sometimes	18	18
	Fairly often	24	24
	Very often	44	44
I showed/sent pictures, videos, link of videos, YouTube video links to make the students understand course content better	Never	04	04
	Almost Never	06	06
	Sometimes	18	18
	Fairly often	22	22
	Very often	40	40
I shared handwritten notes to make the students understand course content better	Never	05	05
	Almost Never	10	10
	Sometimes	38	38
	Fairly often	27	27
	Very often	20	20
I delivered live sessions to teach the course content	Never	1	02
	Almost Never	4	08
	Sometimes	9	18
	Fairly often	13	26
	Very often	16	46
I demonstrated procedures, whenever required	Never	10	10
	Almost Never	04	04
	Sometimes	16	16
	Fairly often	30	30
	Very often	40	40
Assessing students online			
I used formative assessments to verify that students understand the material	Never	02	02
	Almost Never	04	04
	Sometimes	14	14
	Fairly often	28	28
	Very often	52	52

I collected student's assessment response online	Never	02	02
	Almost Never	04	04
	Sometimes	14	14
	Fairly often	28	28
	Very often	52	52
I used summative assessment in the end of the session to verify that students understand the entire course content	Never	04	04
	Almost Never	06	06
	Sometimes	12	12
	Fairly often	35	35
	Very often	43	43
Majority of students were eligible for proceeding to the next session	Never	00	00
	Almost Never	02	02
	Sometimes	08	08
	Fairly often	12	12
	Very often	88	88
I felt online assessment techniques are better than offline assessment techniques	Never	70	70
	Almost Never	20	20
	Sometimes	08	08
	Fairly often	02	02
	Very often	00	00
I felt network issues like voice cracking, screen freezing, disturbing noises, etc were interrupting the classes	Never	06	06
	Almost Never	08	08
	Sometimes	60	60
	Fairly often	16	16
	Very often	10	10
Difficulties faced			
I felt it was difficult to trace students that exactly they were attending the classes or showing themselves online only and attendance of students during class is kept on fluctuating	Never	02	02
	Almost Never	04	04
	Sometimes	12	12
	Fairly often	15	15
	Very often	69	69
I felt difficulty in teaching procedures/demonstrations/practical portion online	Never	02	02
	Almost Never	04	04
	Sometimes	48	48
	Fairly often	30	30
	Very often	16	16
I felt online classes more like one way communication as student's responses were nominal	Never	03	03
	Almost Never	05	05
	Sometimes	24	24
	Fairly often	32	32
	Very often	36	36
I felt class timings were limited which lead to discontinuation of topic	Never	03	03
	Almost Never	14	14
	Sometimes	18	18
	Fairly often	15	15
	Very often	48	48
I felt it was difficult to keep an eye on the students whether they were cheating during examination or not	Never	02	02
	Almost Never	08	08
	Sometimes	12	12
	Fairly often	28	28
	Very often	50	50

CONCLUSION

Faculty experienced many difficulties and challenges in the online education setting. Uncertainty defines faculty's perception of online education during pandemic. They are said to shift to a new normal or non-traditional mode as outbreaks delivery of instructions. In addition, the notion of faculty towards online learning varies by demographic and work-related factor. In addition, faculty must learn to adopt academic see the challenges brought by the COVID-19 pandemic and online learning and learning as an inviting challenge. The number of online education programs in nursing will continue to grow and expand. To adjust it expansion and development, trainers will be needed which demonstrates teaching effectiveness in an online environment. Several tips to increase instructor knowledge guided by the faculty of teaching effectiveness sharing, feedback from mentors, student and peer evaluations best practices among teachers in established e-college (online) community or forum, and orientation program for trainers transitioning to an online role.

IMPLICATIONS

Nursing faculty are directly associated with teaching learning process so they should be made aware of the new technologies emerged in current practices and its boons & complications. Faculty working in various educational institutions need to identify the various strategies for the promotion and up-gradation of online teaching programme. Faculty should encourage the colleagues and students to use the online platform to continue the teaching learning process and strategies to resolve difficulties faced during online classes that were found to be helpful in such a critical situation like pandemic.

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GLOSSARY OF ABBREVIATIONS

1.	COVID19	Corona virus disease 2019
2.	OTPS	Online Teaching Perception Scale
3.	RN	Registered Nurse
4.	RM	Registered Midwifery

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