

Perceptions of Nursing Faculty on Online Teaching during Covid 19 Pandemic in Kerala

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Abstract

The impact of Covid-19 has shaken the world to its core. Disruptions are experienced in all domains of human existence and educational institutions around the world are not spared. The National lockdown caused major interruption in students' learning, both theory and practice, disruptions in internal assessments and the postponement of qualifying university examinations in health science educational institutions. In this study, a descriptive online survey was conducted from 24 to 28 May 2020, which targeted teachers from 123 Nursing Colleges affiliated to Kerala University of Health Sciences (KUHS). A self-structured questionnaire (Online Google form) was used for the data collection procedure. A total of 948 valid responses were collected regarding nursing faculty members, perceptions of online teaching and impact of Covid-19 pandemic on academic activities. The responses were analysed using descriptive statistics. The results of the survey of 948 nursing faculty members indicate that the majority of these teachers support online teaching strategies in order to bridge the learning gap; 47.15 percent found that the online classes are helpful, 52.75 percent identified time and location flexibility as the benefit of online teaching and 56 percent responded positively to continue the online teaching programme. Most of the faculty used WhatsApp (76.1%) for online sharing of video and reading materials, 64.8 percent recorded attendance by noting reporting and feedback from the students and 52.4 percent used online assessment after several classes as assessment strategy. The problems and challenges faced by nursing faculty in switching to online learning serve as a reference for other countries as they implement online teaching programmes.

The Covid-19 has resulted in schools and colleges shut across the world. Globally, over billion children are out of the classroom. As a result, education has changed dramatically, with the distinctive rise of e-learning, whereby teaching is undertaken remotely and on digital platforms (Kurien, 2020). Covid-19 is causing unforeseen damages in the world. India is not spared, but bravely facing it with a long drawn out lock-down. Academics are one of the key areas affected. Students are one of the most affected groups in the present scenario (Wikipedia, 2020).

The sudden outbreak of the Covid-19 resulted in the unexpected long-term closure of colleges and interruption in teaching plans. At this juncture, Kerala University of Health Science recommended all affiliated Nursing Colleges to adopt online teaching strategies in order to bridge the learning gap.

Electronic learning (e-learning) has gained reasonable acceptance from educational institutions at all levels. With the advent of information technology and its growing use in education sector, a transformation is seen in traditional and conventional teaching methods that are used in schools. E-learning poses a challenge

to both faculty and students keeping everyone with computers and smartphone screens. The Covid-19 crisis has resulted in the proliferation of different online teaching learning platforms. Situation necessitates the faculty to learn about the technology and etiquette of online teaching. Many are inexperienced in using the new technologies and interfaces. Despite the potential pitfalls and difficulty, the vast majority of nursing faculty was ready to take online classes.

In this scenario, the KUHS decided to make a real-time assessment of the situation to arrive at specific, targeted conclusions. The main objective was to assess the perceptions of nursing faculty on online teaching during Covid 19 pandemic on the health science education institutions in Kerala.

Material and Method

A descriptive online survey was conducted during 24 to 28 May 2020. The survey targeted faculty members from 123 nursing colleges affiliated to Kerala University of Health Sciences (KUHS) on a random basis. A self-structured questionnaire (Online Google form) was used for the data collection procedure. Final tool included three sections i.e. Section A: Self-structured personal data sheet, Section B: Questions related to perception regarding online classes, Section C: Questions related to impact of Covid-19 pandemic on academic activities.

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A total of 948 valid responses were collected regarding Nursing Faculty Perceptions of Online Teaching and to assess the impact of Covid-19 pandemic on academic activities of nursing colleges in Kerala. The responses were analysed using descriptive statistics.

Results

Among Nursing Faculty members of affiliated institutions under KUHS who participated in the online survey, 90.18 percent were females and 9.82 percent were males (Fig 1). Of them 33.86 percent were Lecturers, 35.54 percent were Assistant Professors, 15.72 percent Associate Professors and 14.88 percent Professors (Fig 2). Among nursing faculty members 87.34 percent belong to private sector, 8.7 percent Government and 4.5 percent were from aided Institutions.

Nursing faculty members, view on effectiveness of online teaching in regular learning

As many as 47.15 percent faculty members found that using existing online education platforms are effective in regular learning and rated three points; 40.71 percent of them rated four points and 4.3 percent rated five points (Fig 3). Faculty members were asked whether online class is effective in bridging the learning gap 44.72 percent faculty rated three for effectiveness of online class in bridging the gap, 33.75 percent rated four points and 6.32 percent rated five points (Fig 4). While discussing with faculty members, what factors affect the acceptability and compliance of online teaching programme by the students, 76.4 percent of faculty members opined that students accept online teaching programme since it is available in their home environment itself, 72 percent accepted because online teaching programme gives space to learn in relaxed manner, 62.4 percent accepted online teaching programme due to freedom in the time schedule, 57.7 percent due to less pressure and 36.9 percent accepted due to creativity in learning.

Other factors affecting the acceptance and compliance of online teaching included user friendliness, recorded materials might be useful for revision, assessment becomes liberal, stress-free learning, teachers

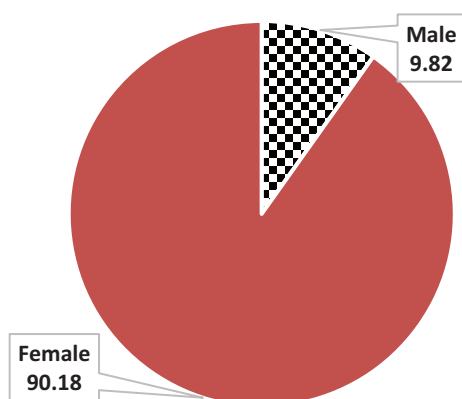


Figure 1: Percentage distribution of faculty based on gender.

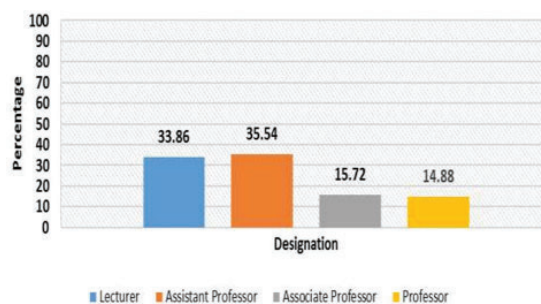


Figure 2: Percentage distribution of Faculty based on designation.

are using novel techniques and methods to get their ideas across, independent in studies, students are more homely at digital world and online class improves imagination.

Nursing faculty member's perception on continuation of online teaching: The questionnaire also explored faculty members' willingness to incorporate and normalise online teaching in their daily teaching practice once the epidemic is over; 56 percent showed willingness and 44 percent were extremely unwilling to do so (Fig 5). Most respondents believed that the online teaching programme was conducive to improving the information literacy of faculty members.

Perceived Advantages of Online Teaching

Among the surveyed faculty members, 47.15 percent responded that online classes are helpful for Health Science Students as well as faculty members, 52.75 percent identified time and location flexibility as the benefit of online teaching, 22.15 percent found it stress-free, 8.43 percent benefited it, to cover the portions without delay (Table 1). Due to the pace at which the online classes are functioning the students can dedicate some time learning even though they are actually not going to the place at which it is taught.

Difficulties of online teaching: Major difficulties noted by faculty member: 42.2 percent face issue of lack of internet connectivity and limitation of data, 14.8 percent lack facility for online classes and 8.3 percent difficulty to assure whether students are attending (Table 2). Comparing face-to-face learning with online learning brings forth significant deficiencies in the online mode such as lack of human connect, absence of opportunities of collaborative learning, teacher supervision and the most glaring being lack of opportunities for hands-on learning in practical oriented subjects. However, it has been observed that the things taught through online mode have a lot many challenges for the educator as well as the learner.

Impact of Covid-19 pandemic on academic activities: When the Nursing Faculty were asked, in what all ways have the Lockdown affected the academic environment, 88.2 percent opined that it affected examinations most, 74.6 percent reported that classes were affected, 70 percent said, it resulted in loss of one-to-one interaction with students, colleagues and

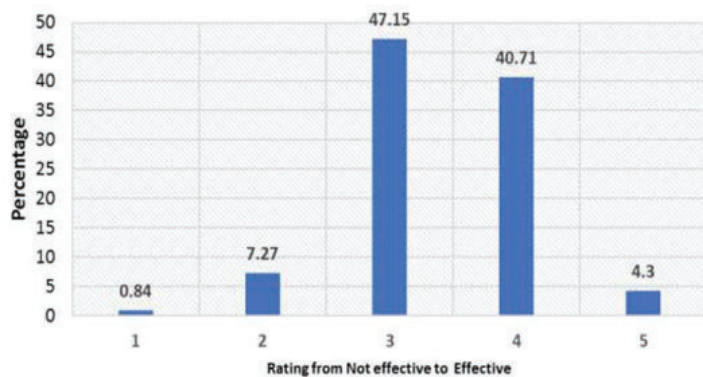


Figure 3: Effectiveness of online teaching learning activity based on the opinion given by nursing faculty.

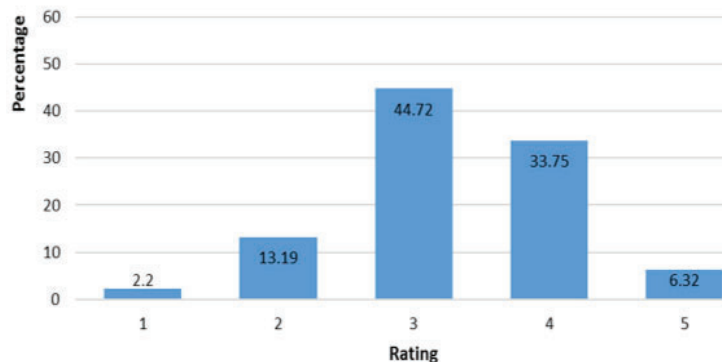


Figure 4: Percentage distribution of faculty based on opinion regarding effectiveness of online teaching in bridging the learning gap.

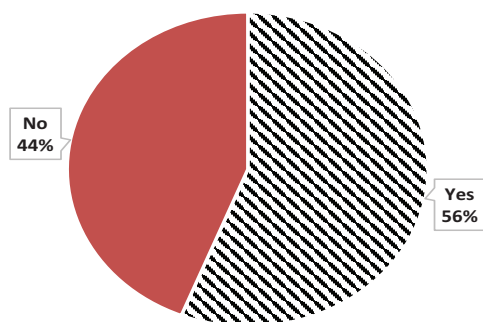


Figure 5: Percentage Distribution of faculty based on willingness for continuation of online classes even after lockdown.

14.6 percent reported that extracurricular activities were affected. Other area affected was clinical posting / practical experience, 361 faculty members mentioned their opinion regarding the loss of clinical hours.

Mode of teaching: Most of the faculty used WhatsApp (76.1%) for online sharing of video, reading materials etc., 41.4 percent used Zoom platform for taking classes and 38.7 percent used Google classroom. Other digital platforms used were; Gmail, PPT Sharing, Canvas instructor, Video Recording, Skype, Google Meet, Google Classroom, Telegram, Go to Webinar, Go to Meeting, Voov, Telephone Group Call, ERP Software, Screenshot, Google Hangout, JITSIMEET, Google Form, Edmodo, Blue jeans, Survey Monkey and Survey Heart, Join me, Class Maker Website, MS Teams, Google Duo, Institutional software, Facebook closed

group/ Live, Quizziz.com, Saynamste, Impartus platform, Office 365, Campus Suite, Google drive sharing, Kinemaster app.

Recording of attendance: Mostly (64.8%) attendance was recorded by noting reporting and feedback from the students, 54.1 percent given attendance based on the submission of assignments, 34.1 percent used digital application to record attendance and 21 percent by physically looking at the screen. To ensure student interaction during online session, 65.6 percent used assignment, 63.6 percent used asking question, 63.1 percent used feedback and 47.3 percent used online tests. Other methods to ensure student interaction by conducting test papers under the supervision of parents, assignments are given beforehand, Using Survey Monkey App to obtain feedback and comments, Encouraging questions via chat option, random checking of notes, asked to write a summary of lesson and send back to the teacher, doubt clearing session and telephonic feedback.

Method of assessment: Faculty members were asked about the assessment methods utilised during online classes, 52.4 percent used online assessment after several classes as assessment strategy 15.1 percent done assessment immediately after the class and 32.7 percent planned to do the assessment after lockdown gets over.

Discussion

The campuses have been shut down, but most of the faculty members were working from home, preparing effective study material for their students so that there isn't any hindrance to the teaching-learning process. Faculty had to make themselves available for students at all times of the day to reduce the hardships and disruption being caused to the students.

The present situation necessitates the stakeholders to move into online teaching, a less tried and tested modality of Teaching-Learning method, in an unprecedented scale. Student assessments might need to go online in varying degrees, which might further the uncertainty for everyone involved.

The results of the survey of 948 nursing faculty indicated that most faculty members support online teaching strategies in order to bridge the learning gap and epidemic prevention and control initiative. However, certain difficulties remain. Facing an unprecedented situation, the problems and challenges encountered by nursing faculty in switching to online learning will serve as a reference for other countries as they explore and implement online teaching programmes. In nursing, online teaching cannot substitute whole learning process; other area affected is clinical posting / practical experience. Lockdown hasn't affected theory classes, whereas, the practicals of every subject is pending.

The present study findings are consistent with

Table 1: Frequency distribution and percentage of faculty based on the perceived advantages of online teaching (n=948)

S.No.	Perceived Advantages	Frequency	Percentage
1	Time and Location flexibility	500	52.75
2	Stress free	210	22.15
3	More teaching opportunities/ advanced teaching technology	33	3.48
4	Better administration and management	4	0.43
5	Finishes the portions without delay	80	8.43
6	More engagement between student and the teacher	15	1.6
7	Can note the student individually in online video call session by maintaining eye contact	21	2.21
8	Timely assessment, feedback increases student learning	5	0.52
9	Keeps updated without losing touch with the topics	70	7.38
10	Easy to find problematic and distracted student	10	1.05
Total		948	100

Table 2: Frequency distribution and percentage of faculty based on the perceived disadvantages of online teaching (n=948)

S.No.	Perceived Disadvantages	Frequency	Percentage
1	Lack of internet connectivity and limitation of data	402	42.2
2	Lack of facility with the student	140	14.8
3	Cannot assure students are attending	90	9.5
4	Difficult to take attendance	80	8.43
5	Difficult to maintain eye contact and eye straining	10	1.05
6	Difficult to conduct group discussions	4	0.45
7	Student can opt whether to respond or not	3	0.35
8	Feedback and assessment may not be genuine	4	0.45
9	Affect face to face interaction; Can't see the real time facial expressions and body language of students	6	0.63
10	Safety consent on online platform	11	1.16
11	Level of understanding cannot be assessed	34	3.6
12	Difficult for faculty members who are technologically weak	6	0.63
13	Learning vary according to the age of the learner	20	2.1
14	No real satisfaction for faculty members	40	4.21
15	Lacks concentration	8	0.84
16	Decrease interest as time progress	20	2.1
17	Cannot carry out practical sessions	70	7.5
Total		948	100

those of a survey of 15,438 Chinese teachers in East China Normal University indicating that 52.12 percent of the teachers “strongly support” the initiative, 34.75 percent “somewhat support” the initiative, 11.02 percent are “somewhat opposed,” and 2.11 percent are

“strongly opposed”. Although online teaching programmes were hastily implemented and fairly makeshift, the majority of teachers appear willing to work alongside their students and school administrators in ensuring a systematic online learning environment, including investing the necessary effort in training and overcoming difficulties. With the support and organization of various departments, teachers were provided with immediate training in online teaching and platforms (Yang, 2020).

Technological advances are here to stay. Consequently, teacher educators need to prepare to understand that online teaching requires its own set of skills, tools, and teaching practices (Karmakar & Wahid, 2000).

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Conclusion

There is need to standardise the online Teaching Learning and Assessment systems. Appropriate low bandwidth platforms must be found out. Good resource materials must be prepared. Faculty members must be constantly motivated to evolve. Sanctity of online examinations must be reiterated and validated.

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