

Satisfactory level of online classes among Physiotherapy students

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Abstract: Background: In this COVID-19 pandemic, online education became a pedagogical shift from traditional method to modern approach of teaching-learning. Physiotherapy is a field which deals with patients, and syllabus is practical oriented, these online classes during this pandemic are in need of evaluation. So the Aim of the study is to evaluate the online classes and satisfactory level of the online classes among Physiotherapy students.

Materials and Methodology: We conducted classes from July, 2020 to September, 2020 using the Google Meet. A questionnaire was created with Google forms to evaluate the perception of online classes among Physiotherapy students and then circulated among Undergraduate students through the class coordinators. A total of 144 responses were collected and descriptive statistics were used to analyze the data.

Results: The percentage of the satisfactory level of online classes among the physiotherapy students were 52% (Satisfied), 38% (Somewhat Satisfied), 6% (Somewhat Dissatisfied) and 4% (Dissatisfied). The overall responses about online classes were 3% (Excellent), 69% (Good), 24% (Fair) and 4% (Poor).

Conclusion: This study concluded online classes are considered as a useful approach among the Physiotherapy students in this pandemic situation and most of the students were satisfied with those classes.

IndexTerms: Online Classes, Physiotherapy students, satisfactory level

I. INTRODUCTION

Learning is a process of acquiring knowledge, enhancing the skills, helps in improvement of their career [1]. In the era of knowledge economy, the new focus of education should be on developing effective innovative abilities, as well as abilities in question solving, judgement and information or technology application [2]. Traditional Face-to-face learning typically occurs in a teacher-directed environment with interpersonal interaction in a live synchronous environment [3]. On the other hand, the electronic learning (e-learning) environment that have grown and expanded dramatically as new technologies have expanded the possibilities for communication, interaction and multimedia input. Although the e-learning may increase access flexibility and improve cost effectiveness, it suffers from a lack of social interaction between learners and instructors [4].

E-learning is an essential trend in education for 21st century. As COVID-19 pandemic spreads, there has been an increasing move towards teaching online because of shutting down of schools, colleges and universities for an indefinite time as the only option left [5]. Therefore, this is the time to gravely rethink, revamp and redesign our educational system in much demanding need of unprecedented current situation [6]. Because of this COVID-19 crisis, online education became a pedagogical shift from traditional method to modern approach of teaching-learning from Classroom to Online platforms, from Personal to Virtual and from Seminar to Webinars. To ensure that students do not miss out on their studies, all the institutions are forwarded to the e-learning environment, which forces students to attend lectures via their gadgets.

Teaching staffs of all background and ages have had to prepare and deliver their classes from home, with all the practical and technical challenges this entails and often without proper technical support [7, 8]. The rapid closing off of face-to-face educational work, in response to COVID-19 pandemic, gave teachers a strong sense of difference between online teaching and their modes of operation [9].

In making the most of opportunities afforded by online learning environment, instructional design and organization play an essential role [10]. India's apex regulatory body of higher education, UGC, has taken the present educational scenario very seriously and put some efforts proactively to resolve the deadlock of completing courses and examinations in on-going semesters as well as issued circular regarding the academic calendar after the recommendations of one of the committees constituted by UGC itself. It has also become mandatory for all universities in India to complete the 25% syllabus through online teaching mode and 75% face to face interaction (UGC, 2020) [11].

Since Physiotherapy is a field which deals with patients, and syllabus is practical oriented, these online classes during this pandemic are in need of evaluation. So the Aim of the study is to evaluate the satisfactory level of the online classes among Physiotherapy students.

II. MATERIALS AND METHODS

This study was approved by the Institutional ethical committee, KG Hospital, Coimbatore. Study was designed to be descriptive study which involves Physiotherapy collegiate students who are attending the classes through Online. In this study, we conducted classes from July, 2020 to September, 2020 using the Google Meet as our e-learning platform, and study materials in the form of PPT's, Word Documents, PDF's and as well as Video links to ensure better understanding of the subjects were shared in Google

Classroom. The questionnaire which we used to evaluate the perception of online classes among Physiotherapy students has got three parts, first part includes general demographic data, the second part general information about the online classes and the third part includes 8 questions about the satisfactory level of online classes in Likert scale. Prior to the study consent was obtained from the institution head and a brief explanation was given to the participants. The Questionnaire was created with Google Forms and then circulated among Undergraduate students through the class coordinators. After completing, the participants were asked to submit the Google forms and a thank you note was given to them. A total of 144 responses were collected and taken for analyses. Analyses were done by an evaluator who is also not involved in the study. Descriptive statistics was used to analyze the data which are collected.

III. RESULTS

The collected data were analyzed using descriptive statistics using SPSS 20.1.

Table 1 Demographic variables

S.No	Characteristics	Criteria	No. of responses	Percentage (%)
1	Age	17	3	2.1
		18	23	15.9
		19	29	20.1
		20	37	25.7
		21	42	29.2
		22	10	7
2	Gender	Male	49	34
		Female	95	66
3	Locality	Urban	77	53.5
		Rural	67	46.5
4	Academic Year	I	37	25.7
		II	30	20.9
		III	38	26.3
		IV	39	27.1

Table 2 General Information

S.N	Questions	No. of responses	Percentage (%)	
1	What do you think about online classes?			
	a.	Effective method all time	115	79.9
	b.	Effective method for the current scenario	5	3.4
	c.	Supplement to the traditional form	18	12.6
	d.	Not interested in online classes at all	6	4.1
2	How did you access those online classes?			
	a.	Through mobile	138	95.8
	b.	Through PC	1	0.7
	c.	Through laptop	5	3.5
	d.	Through tab	0	-
3	How about the internet connectivity required for the classes?			
	a.	Readily available for me	41	28.5
	b.	May be difficult at times to locate	97	67.4
	c.	Not readily available to me	6	4.1
4	How familiar you can able to use the online class platform effectively, for your learning?			
	a.	Not at all familiar	12	8.3
	b.	Slightly familiar	55	38.2
	c.	Moderately familiar	71	49.3
	d.	Very familiar	6	4.2
5	Presentation form of topic which you are interested with?			
	a.	PPT alone	3	2.1
	b.	PPT + explanation of content in video	141	97.9
6	Which session do you personally feel satisfied to learn through online classes?			

	a.	Forenoon	117	81.3
	b.	Afternoon	19	13.2
	c.	Evening	8	5.5
7	Which of the following time duration, you would prefer for a session?			
	a.	45 mins	84	58.3
	b.	1 hour	59	41
	c.	1 hour 30 mins	1	0.7
	d.	2 hours	0	0
8	Do you think that online classes are conducted in continuity with previous sessions?			
	a.	Yes	77	53.5
	b.	No	18	12.5
	c.	May be	49	34

Table 3 Satisfactory Level

S. N	Questions	Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Dissatisfied
1	Online interaction you had with the faculty	82	55	5	2
2	During the online session, the faculty's accessibility to answer questions or give feedback	103	39	2	2
3	Time taken for the faculty to complete the session	93	44	3	4
4	Requirements for completion of topic were clearly outlined by the faculty	84	49	8	3
5	Online classes used by you were attractive and customizable	47	78	11	8
6	Online classes meet your individual learning needs	44	74	14	12
7	Interval between each sessions	66	46	19	13
	Overall response	Excellent	Good	Fair	Poor
8	Overall, how would you rate your online classes?	5	99	34	6

Fig 1 Satisfactory level in percentage

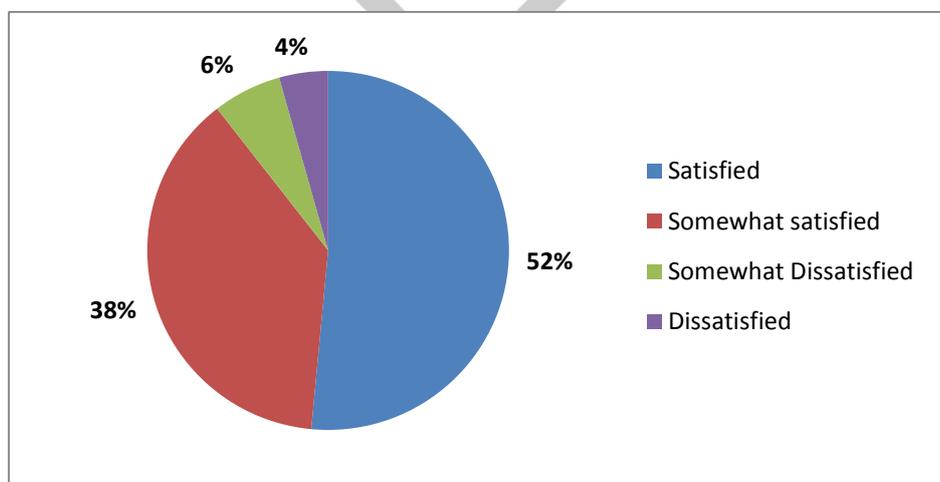
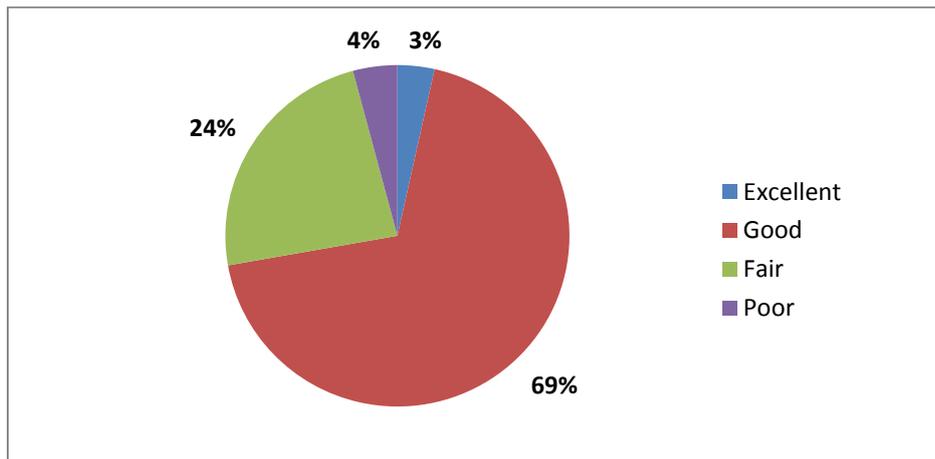


Fig 2 Overall responses in percentage



IV. DISCUSSION

Even though the application of e-learning at universities has increased rapidly, little is known about students' expectations and experiences. Until recently, research focussed on students' experiences with specific aspects of e-learning courses, e.g. the interaction with an instructor, learning with specific learning management system or certain characteristics of course [12 – 14]. In e-learning pedagogy, theoretical concepts are carried over through various application tools which make the students more convenient. But it lacks in practical teaching. Since Physiotherapy is a field which deals with more of practical approaches, the satisfactory level of online classes are doubtful among physiotherapy students.

The results of this study contribute to an understanding of the online classes among Physiotherapy students and their learning behaviours that are important for their achievements and satisfaction. Figure 1, shows the percentage of the satisfactory level of online classes among the physiotherapy students were 52% (Satisfied), 38% (Somewhat Satisfied), 6% (Somewhat Dissatisfied) and 4% (Dissatisfied). Figure 2, shows the overall responses about online classes were 3% (Excellent), 69% (Good), 24% (Fair) and 4% (Poor).

The moderate to high level of satisfactory level and overall responses about the online classes shows that students are utilizing the technology and they are making use of this opportunity to engage them in learning activities. The main reason for e-learning is that the students can learn at their comfort, requirement and active participation. Some studies on e-learning success also support that the more satisfied the students are the more they will use e-learning systems [15 – 18]. If e-learner's usage perception is aligned with their needs, students can accomplish their tasks in a more effective way. The more students use e-learning systems, the more they perceive positive individual impacts. Also studies on e-learning success report that user satisfaction has a significant impact on value [19] and positive impact on individual performance [20].

E-learning readiness is the ability of individuals to utilize the quality of learning. It is seen that the e-learning readiness comprises of elements such as self-efficacy, internet self-efficacy, online-communication self-efficacy, self-directed learning, learner's control and motivation towards e-learning [21 – 23]. In student's perception, Instructor's support in learning, and interaction between instructor and students, strongly contribute to learning achievement and course satisfaction. Instructors should therefore influence motivation and goals by adapting instruction accordingly, eg., by making learning objectives transparent and by providing opportunities for students to seek challenges, arousing their curiosity or allowing them choices in activities.

The low levels of satisfaction on online classes may be because of network issues. Since E-learning is always depending on a strong internet connection with high band. It is not succeeded always because of lack of connectivity and an acute power shortage. E-learning is even worse in rural areas compared to urban due to lack of infrastructure that online courses require and thus fail to attend with their virtual classes. Other possible reason may be lack of familiarity on the usage of online learning platforms. Scarborough and Zimmer (2000) addressed that introduction of information technology has 3 stages: Substitution, adaptation and revolution. When the substitution stage approaches its end, users are familiar with using those platforms in later stages [24].

Satisfaction factors identified by Frankola (2001), explained the low rates of satisfaction with the e-learning are students do not have enough time, there is failure in supervision/ management of e-learning structure, the lack of motivation, problems with the technology chosen, erratic support to the student, preference for traditional learning, poor graphic design adopted by the platform and instructor deficiency (lack of knowledge and/ or ability to deliver) [25].

Research suggests adding prompts to reduce sitting time while on the computer may have a positive influence on health. The results of adding prompts in a worksite situation to remind individuals to take a 1-minute break from sitting every 30 minutes reduced the number of and time spent in, prolonged uninterrupted sitting periods [26]. So that the Functional health of the student's can be maintained and thus a sedentary lifestyle can be prevented. As a result of these compelling reasons, feelings and emotions are added to the core human to measure their impact on students' decision to accept e-learning. This occurs as a result of fatigue related to e-learning acceptance. The students with high outcome expectations and high perceptions of the users (usefulness) are most liable to have positive attitudes towards e-learning. The results suggest that a positive peer, social influence factors, positive attitudes and high perception of the usefulness of e-learning must be sustained for an increase in the rate of e-learning acceptance and satisfaction by students.

V. CONCLUSION

This study concluded online classes are considered as a useful approach among the Physiotherapy students in this pandemic situation and most of the students were satisfied with those classes, yet innovations has to be made from the instructor side in order to deliver practical knowledge about the course and engage the students more actively in online classes.

VI. RECOMMENDATIONS

We recommend avoiding continuous classes without sufficient breaks, so that students can get some time to relax themselves and attentive in further classes. Because of prolonged usage of gadgets, students are more prone for physical issues like irritation of eyes, neck or back pain. Keeping this in mind classes can be scheduled. Since we discussed about the satisfactory level of online classes, we are in need of understanding the students learning capacity. Further studies can include a Mock test, in order to evaluate the learning capacity.

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