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Assessment Of Knowledge Attitude & Practice Of Online Classes Among Second Year MBBS Students During Covid 19 Pandemic In Andhra Medical College Visakhapatnam

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Abstract
Background: COVID 19 pandemic *challenged the medical colleges to cease face to face classes and switched over to online courses or e-learning. E-learning constitutes electronic devices to disseminate the contents from a teacher to the student. The present study's objectives were to assess knowledge, attitude, and practice towards online classes among second-year MBBS medical students during COVID 19 pandemic in Andhra Medical College.*
Methods: A cross-sectional observational study was conducted on 120 second year MBBS students of Andhra Medical College, Visakhapatnam, in December 2020. A pre-validated/ semi-structured questionnaire was administered to assess the knowledge attitude and practices. Students' responses in knowledge and attitude were collected and rated on a 5-point Likert scale. Results are displayed in frequencies and proportions. A p-value of <0.05 is considered statistically significant.
Results: A total of 120 undergraduate medical students were included; 72(59.2%) were males, 48(40.8%) were females. Nearly 83.3% of students used smartphones for e-learning. 89.2% of the participants acknowledged that online classes helped to build skills and knowledge. (99%) agreed that online teaching would improve their interaction level, academic performance, & exam preparation.
Conclusion: The majority of the students felt that online classes could be a helpful tool in enhancing the learning experience.
Keywords: *Attitude, Online classes, Knowledge, Practice, 2nd-year MBBS students, Visakhapatnam*

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I. Introduction:

Novel Coronavirus disease (COVID-19) is one of the worst infectious disease outbreak caused by a newly discovered coronavirus. China notified the coronavirus disease outbreak to WHO on December 31, 2019.WHO declared the novel coronavirus or COVID 19 disease as a contagious pandemic on March 11, 2020.[1]

The COVID 19 disease is a great challenge to the medical education system. The disease impact made the medical institutions cease face to face classes and switch on to online or e-learning, or distance learning methods.[2]

Online classes refer to teaching methods in which

a. The teacher remains at a distance from the student
b. Students access the learning materials through electronic media like laptops or desktops, mobile/ smartphone, public internet facility, or colleagues.
c. Students are provided support through online learning.[3]

Knowledge is to acquire, retain and use the information for skill. Attitude is to react and interpret events. A good practice is the progress of knowledge and technology executed ethically.[4]

II. Materials And Methods:

A cross-sectional observational study was done among second-year medical students of Andhra Medical College, Visakhapatnam, Andhra Pradesh, in December 2020. A total of 120 second-year MBBS students took part in the study. Informed consent was taken before the study. Each student was given a prevalidated questionnaire and circulated through google forms after a brief introduction of the study to the students. The questionnaire was provided to obtain the details regarding demographic data, students' knowledge regarding software applications and internet browsing for e-learning, attitude towards e-learning using a 5-point

Likert scale from 1=strongly disagree to 5=strongly agree. Data entry was analyzed in Microsoft Excel sheet 2010, and analysis was done using SPSS version 25. A P-value of <0.05 was considered statistically significant.

III. Results:

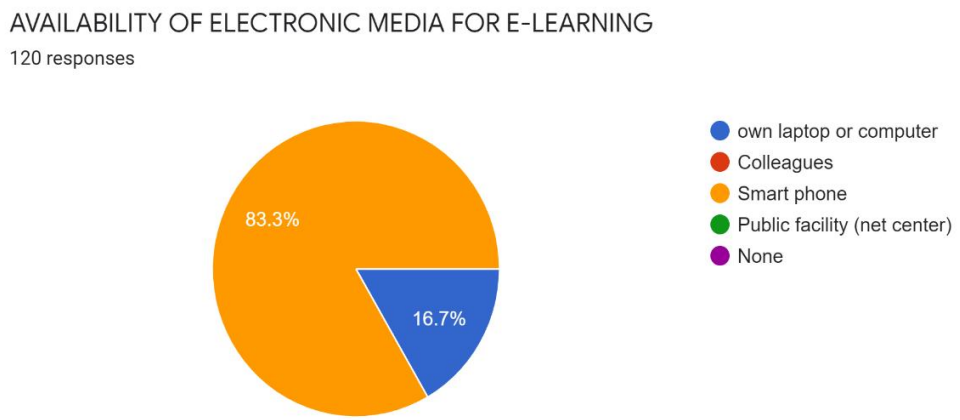
A total of 120 second year mbbs students participated in the study. Out of them, 72(59.2%) were males, 48(40.8%) were females belonging to the age group 19 to 28 years with a mean age of 20.17years.
Out of total students, 73(60.8%) were hostelers, 47(39.2%) were day scholars by residence, as shown in Table 1.

Table 1: Demographic Characteristics Of Study Participants (n=120).

VARIABLE	FREQUENCY(N)	PERCENTAGE(%)
Age (years)		
≤ 20	**90**	**75.3**
>20	**30**	**24.7**
Gender		
Males	**72**	**59.2**
Females	**48**	**40.8**
Residence		
Hostellers	**73**	**60.8**
Day-scholars	**47**	**39.2**

Regarding the Availability of electronic media for eLearning, 100(83.3 %) owned smartphones, and 20(16.7%) were having own laptop or computer, as shown in Figure 1.
This shows there is an increase in the utilization of mobile phones for the purpose of e-learning.

FIGURE 1:



While understanding the knowledge towards online classes on 5 point Likert scale, 52(43.3%) were moderately effective, 48(40%) were slightly effective, 13(10.8%) were not at all effective, 5(3.9%%) were very effective, 2 (2%) were extremely effective.

While understanding the attitude towards online classes on 5 point Likert scale, on adding the students' responses (effective and not effective), 111(92.5%) found effective with the balance between theoretical and practical knowledge provided by the online classes,119(99%) found effective with the interaction level during online class, 119(99%) found effective in academic performance, 119(99%) found effective in exam preparation with online classes as shown in Table 2.

KNOWLEDGE/ ATTITUDE	NOT AT ALL EFFECTIVE	SLIGHTLY EFFECTIVE	MODERATELY EFFECTIVE	VERY EFFECTIVE	EXTREMELY EFFECTIVE
ONLINE CLASSES BUILDING SKILLS AND KNOWLEDGE	13	48	52	5	2
SATISFACTION WITH THE BALANCE OF PRACTICAL AND THEORETICAL KNOWLEDGE PROVIDED BY THE CLASSES	9	31	70	6	4
INTERACTION LEVEL DURING ONLINE CLASS	1	70	26	21	2
E-LEARNING IS USEFUL IN MY ACADEMIC PERFORMANCE	1	27	61	27	4
I FIND E-LEARNING USEFUL IN EXAM PREPARATION	1	14	41	60	4

Students' utilization of different modes of e-learning is shown in figure 2.
Online videos, text material appeared to be the most popular aspects of e-learning to acquire clinical skills among students.

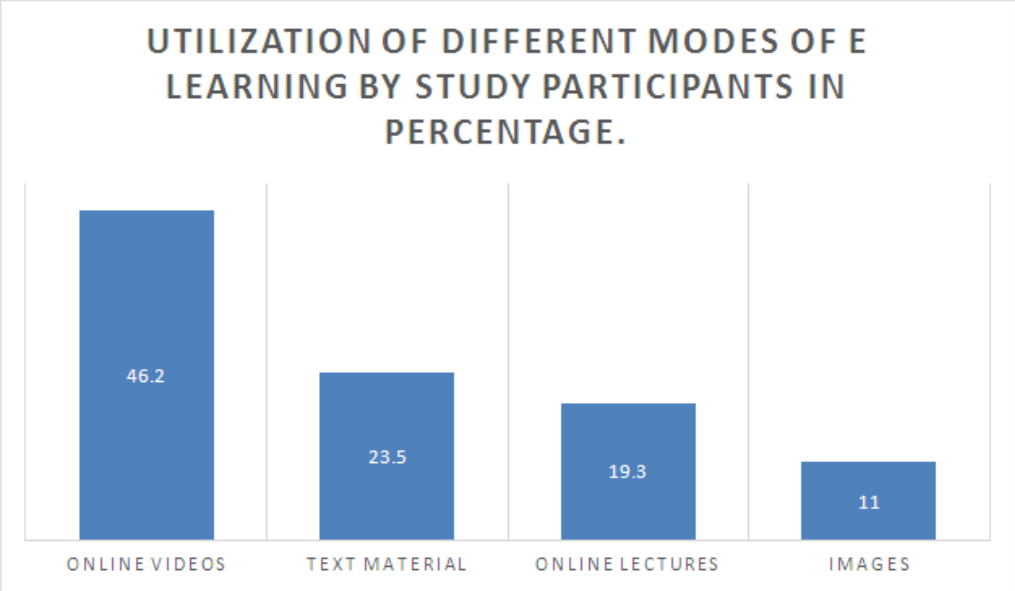


FIGURE 2

The time spent by the students for the purpose of learning online in hours per day ranged from 0-10 with a mean duration of 5hrs.
Out of 120 students, 92(76.7%) spent an average time of 1-3 hrs per day online, as shown in figure 3.

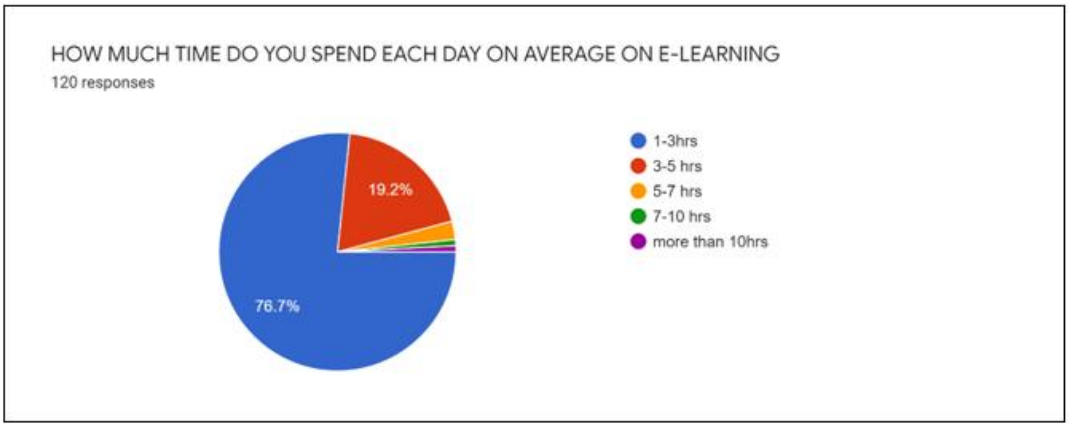


FIGURE 3

IV. Discussion:

This year as COVID-19 became a pandemic and lockdown started worldwide, most of the academic facilities converted to use online learning as an alternative during this period to ensure the safety of staff and students.[6]

COVID 19 pandemic made a vast impact worldwide on the day to day activities. Therefore, many rules had been changed to overcome this disease; online classes were started to ensure the progress of medical education, and new platforms were innovated, making online study much easier like cisco Webex meeting, zoom meeting, and google meet.[5]

As we experienced a massive transition to online learning, it was imperative to study the effects of online learning using several medical students' parameters.

In the present study, among 120 second year mbbs students,71(59.2%) were females, 49(40.8%) were males. 38.7% of students had no change, and 26.1% found it relaxed in a state of mind during the Covid-19 pandemic. About 83.3% of students had access to their smartphones, and 16.7% had access to laptops or computers for e-learning. This indicates the increase in the role of mobile phones in internet-based learning.

In previous studies like Yapa et al., Thomas et al., Silva et al., Visalam et al., Kumar et al. regarding attitude towards online classes among medical students, most students had access to their personal computers. They had better internet facilities compared to the students in this study. [9,12]

In the present study, nearly 89.2% of the participants acknowledged that online classes helped build skills and knowledge.

Among the various aspects of e-learning in this study majority of students opted that they learn more by online videos and text materials. This finding is similar to Yapa et al. study.[9, 11]

Regarding attitude towards e-learning, most participants (99%) agreed that online teaching would improve their interaction level, academic performance, & exam preparation. Similarly in a study done by Amer Sindiani et al., who focused on an e-learning activity, reported that e-learning improved the students to understand the subject better and also their ability to answer questions in assessments.[5]

About 52.1%of students felt moderately satisfied in overall aspects of e-learning. The present study showed that most students perceived that e-learning is equivocal to other traditional methods for acquiring clinical skills, similar to Gormley et al. study. and Warnecke et al. among medical students.[8,10]

V. Conclusion:

The present study showed that online classes could be a useful tool in enhancing the learning experience. The world is always changing and progressing, whether intentional or by circumstances against our will. Hence we should always move forward and try to develop our vision and tools. However, it is essential to investigate and alter our deficiencies to deliver the maximum teaching quality. Also, we should set up a well-established infrastructure to integrate online teaching accurately.

References

[1]. World Health Organization. WHO | Novel Coronavirus – China (WHO, 2020).
[2]. https://link.springer.com/article/10.1007/s11125-020-09464-3.ris
Prospects (2020) 49:91–96 https://doi.org/10.1007/s11125-020-09464-3
[3]. Rapanta C, Botturi L, Goodyear P, Guàrdia L, Koole M. Online University Teaching During and After the Covid-19 Crisis: Refocusing Teacher Presence and Learning Activity. Postdigit Sci Educ. 2020 Jul 7:1–23. doi: 10.1007/s42438-020-00155-y. Epub ahead of print. PMCID: PMC7339092.
[4]. A Study on Evaluation of Knowledge, Attitude and Practice of Pharmacology in Second MBBS Students Vijayarani Kannaiyan1 , Deepa Shanmugam2 , K.Jaiganesh3

[5]. Citation DataAnnals of Medicine and Surgery, ISSN: 2049-0801, Vol: 59, Page: 186-194 Publication Year2020
[6]. P. Sandhu, M. de Wolf **The impact of COVID-19 on the undergraduate medical curriculum** Med. Educ. Online, 25 (1) (2020), p. 1764740, 10.1080/10872981.2020.1764740
[7]. Coronavirus communications **Hms.harvard.edu** https://hms.harvard.edu/coronavirus/coronavirus-communications, Accessed June 25 2020 Published 2020
[8]. Warnecke, E, and S Pearson. "Medical students' perceptions of using e-learning to enhance the acquisition of consulting skills." *The Australasian medical journal* vol. 4,6 (2011): 300-7. doi:10.4066/AMJ.2011.736
[9]. Yapa YMMM, Dilan MMNS, Karunaratne WCD, Widisinghe CC, Hewapathirana R, et al. Computer literacy and attitudes towards elearning among Sri Lankan medical students. Sri Lanka J Bio-Med Informatics. 2012;3(3):82-96
[10]. Gormley GJ, Collins K, Boohan M, Bickle IC, Stevenson M. Is there a place for e-learning in clinical skills? Asurvey of undergraduate medical students' experiences and attitudes, Medical Teacher. 2009;31:1.
[11]. Vadlamani S, Kandipudi LP, Bhimarisetty DM. Assessment of knowledge, attitude and practice towards e-learning among undergraduate medical students, Andhra Medical College, Visakhapatnam. Int J Community Med Public Health 2019;6:5235-40.
[12]. Visalam, Kumar AP, Prakash AO, Padmavathi R. Knowledge, attitude and practice towards e-learning among medical undergraduate students. IOSR J Appl Physics. 2015;(7):1-4.

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