Opinion of medical students on online classes during covid 19 pandemic

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\textbf{A B S T R A C T}

\textbf{Background:} COVID-19 is referred as pandemic due to its severity and fierceness also as the greatest global health crisis since after centuries in human civilization. This made many schools and colleges to remain shut down for an indefinite time as the only option left to prevent transmission of virus in the institutions. At the same time, teaching concepts have changed with a similar speed than the evolution of the Internet, social media and digital technology. In these circumstances online teaching has become the only option left to fulfill the academic necessities of the students.

\textbf{Objectives:} This study will help to find out the students' opinion and attitude towards online classes during COVID – 19 Pandemic.

\textbf{Methodology:} An Anonymous Cross sectional study is conducted among undergraduate medical students of various colleges affiliated to DRNTRUHS, AP regarding their opinion and attitude towards online teaching classes conducted during Covid 19 pandemic period by sharing the link for Google document.

\textbf{Results:} 432 under graduate medical students were participated in the study. 313 participants (72.41%) opined that online teaching is helpful. Majority of participants opined that online teaching is helpful (72.41%); comfortable (61.63%); they are able to interact (73.7%). 68.74% of participants have troubles to attend online classes. Very less participants (13.79%) showed their preference for online classes after this period. All the participants strongly mentioned that their practical skills will be affected badly due to this type of teaching.

\textbf{Conclusions:} The deadly and infectious disease Covid-19 has deeply affected the educational system globally. In our present study majority of students strongly opined that online teaching is helpful; they are also comfortable and able to interact with their faculty also. When COVID 19 resolves, transformative changes are expected in medical education through the use of emergent technology.

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1. \textbf{Introduction}

COVID-19 is referred as pandemic due to its severity and fierceness also as the greatest global health crisis since after centuries in human civilization.\textsuperscript{1} Any vagary accident that happens in the world will always leave its impact on education. And so the pandemic of COVID 19 has its footprints on education.\textsuperscript{2} This tragedy has shaken up the education sector, and this fear is likely to resonate across the education sector globally. In India, the government has announced lockdown and closure of educational institutions as a logical solution to enforce social distancing within communities.\textsuperscript{3} This made many schools and colleges to remain shut down for an indefinite time as the only option left to prevent transmission of virus in the institutions. As per the assessment of the researchers, it became uncertain to get back to normal teaching anytime soon. As social distancing is preeminent at this stage,
educational institutions are struggling to find out options to deal with this challenging situation. This became an urgent need to protect and save our students, faculty, academic staff, communities, societies, and the nation as a whole. Fortunately, there is a range of modern tools available to face the challenge of distance learning imposed by the COVID-19 pandemic. At the same time, teaching concepts have changed with a similar speed than the evolution of the Internet, social media and digital technology. In these circumstances online teaching has become the only option left to fulfill the academic necessities of the students though student awareness of the cognitive challenges presented by the smartphone is unclear.

1.1. Significance and objectives of the study

This study will help to find out the students’ opinion and attitude towards online classes during COVID – 19 Pandemic. It can also lead to introduce a new pattern in medical institutions to enhance the students’ knowledge and skills through digital technologies.

2. Methodology

An Anonymous Cross sectional study is conducted among undergraduate medical students of various colleges affiliated to DRNTRUHS, AP regarding their opinion and attitude towards online teaching classes conducted during Covid 19 pandemic period by sharing the link for google document having 15 questions (5 close ended and 10 open ended) and explained them the importance of this study in November 2020. After obtaining the filled forms the data was analyzed by preparing pai charts and Excel sheets.

3. Results

432 Under graduate medical students were participated in the study.

313 participants (72.41%) opined that online teaching is helpful especially at times like this. Majority of participants opined that online teaching is helpful (72.41%); comfortable (61.63%); they are able to interact (73.7%).

68.74% of participants have troubles to attend online classes due to network issues. Very less participants (13.79%) showed their preference for online classes after this period. All the participants strongly mentioned that their practical skills will be affected badly due to this type of teaching.

Although the percentage of satisfied participants is more, percent of unsatisfied participants is not in ignorable values. 79.8% of participants has mentioned that there is no other option other than online teaching and some of them mentioned other options as shown in Table 3.

59.7% of Participants mentioned that online classes have no impact on their health and rest of the participants opined that these online classes affect their health physically and mentally also.

4. Discussion

E Learning is used increasingly in health care to support the delivery of learning in outcome-based education. Broadly speaking, eLearning is considered to be the application and integration of educational technology to the learning process where as traditional learning is any learning activity undertaken in the traditional classroom environment; it is co-located, face-to-face instruction and practical work. In
contrast, a full or complete eLearning approach is defined as
learning with no face-to-face component that relies entirely
on the use of eLearning technology and techniques for its
delivery. Full eLearning can be distributed geographically
and/or temporally, and communication between student and
teacher is handled electronically.8

The most important asset of modern e-learning is
the fact that it allows the individual users to tailor the
learning experience to their personal educational needs
in a practical manner with significant flexibility to their
time availability; time is the largest deficit of the busy
clinicians of modern medicine. In that sense, a simple,
comprehensive and consistent environment is required for
the provision of high standards and, at the same time, a
cost and time-effective educational experience.9 Already
some of the academic leaders have implemented formal
training programs, ranging from seminars and workshops
to fellowships and advanced degree programs.10

It is also observed that teaching concepts have changed
with a similar speed with the evolution of the Internet, social
media and digital technology.6

Several areas are affected worldwide and there is a fear
of losing this whole ongoing semester or even more in the
coming future. The education sector was one of the first
to react and respond to the pandemic by shutting down
institutions to ensure the safety of the students. Various
schools, colleges, and universities have discontinued in-
person teaching. Several arguments are associated with
e-learning. Accessibility, affordability, flexibility, learning
pedagogy, life-long learning, and policy are some of the
arguments related to online pedagogy. It is said that online
mode of learning is easily accessible and can even reach to
rural and remote areas. It is considered to be a relatively
cheaper mode of education in terms of the lower cost
of transportation, accommodation, and the overall cost of
institution-based learning. Flexibility is another interesting
aspect of online learning; a learner can schedule or plan
their time for completion of courses available online.
Combining face-to-face lectures with technology gives rise
to blended learning and flipped classrooms; this type of
learning environment can increase the learning potential
of the students. Students can learn anytime and anywhere,
thereby developing new skills in the process leading to life-
long learning.

The government also recognizes the increasing
importance of online learning in this dynamic world.
The severe explosion of Corona Virus disease can make
us add one more argument in terms of online learning,
that is, online learning serves as a panacea in the time
of crisis.11 Online teaching is a relatively new concept in
developing countries such as India.3

In our present study majority of students strongly opined
that online teaching is helpful; they are also comfortable and
able to interact with their faculty also. At the same time they
have mentioned that they have faced troubles in attending
online classes (31.46%) as there are certain network issues
and also issues with their electronic devices especially in
rural areas. If these are improved online teaching can be
strengthen somewhat. Majority of participants mentioned
that they will not prefer online teaching (86.81%) even
after this pandemic situation. This represents that they are
interested in traditional teaching as this gives them friends,
sharing, bonding with institution etc. all the participants
strongly mentioned that on line teaching affects their
practical skills badly (100%). Being medical students it is
not enough to learn theoretical aspects of the subject. These
students should know how to elicit signs and other practical
skills to become good clinicians. The clinical component of
medical education has to be focused on patient examination
and include direct experience in the diagnostic and dis-
ease therapeutic treatment.12 This happens with hands on
training and by practicing only, which becomes a big task
for medical students.

In our present study the participants satisfaction levels
towards online teaching is an average (2–4). It is opined that
this may be multifactorial like – internet issues, missing
institution premises, friends, not able to develop their
clinical skills etc.

Though majority of participants opined that there is no
option other than online classes especially at times like this,
but some of them mentioned that local resources can be
utilized to teach them practical skills by permitting them to
attend near by hospitals both in public as well as private
sectors, which may result in not only in enhancing man
power in health care system but also their practical skills
can be improved at same time.

In this study more than half of the participants opined
that there will be no impact of online classes on their
health, some of the participants mentioned that it may affect
physical, mental health or even both as they are supposed to
be with electronic devices for long time and also it effects
on their communication skills.

Even though the online classes are helping the students
to cover their syllabus in this pandemic situation, if the
same continues for longer period its effective ness may
be questionable as the effectiveness of online learning is
influenced by many factors which create barriers for online
learning, such as administrative issues, social interaction,
academic skills, technical skills, learner motivation, time
and support for studies, technical problems, cost and access
to the internet.13

Even the online classes have proven to be useful, but
these may not be completely replacing the traditional
teaching methodology especially in medical education as
practical skills are to be demonstrated and are to be
practiced on hands. Therefore, this is the time to gravely
rethink, re- vamp and redesign our education system in
much demanding need of unprecedented current situation.
These circumstances make us realize that scenario planning is an urgent need for medical institutions. Newly introduced, outcome-based, competency-based medical curriculum in India advocates e-learning as a tool for self-directed learning in students. This crisis has given us opportunity to divulge into unexplored areas of technology based medical education. When COVID 19 resolves, transformative changes are expected in medical education through the use of emergent technology.\(^\text{14}\) As there is uncertainty about duration of this pandemic and social distancing measures are needed for long, hence, education of future doctors requires intense and prompt attention.\(^\text{15}\)

To strengthen online teaching at all levels it requires the efforts from government, education institutions, parents and also from students.

As this pandemic spreads, there has been an increasing move towards teaching online because of shutting down of schools, colleges and universities.

5. Conclusions

The deadly and infectious disease Corona Virus also known as Covid-19 has deeply affected the educational system globally. In our present study majority of students strongly opined that online teaching is helpful; they are also comfortable and able to interact with their faculty also. When COVID 19 resolves, transformative changes are expected in medical education through the use of emergent technology.

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7. Conflicts of Interest

Nil.

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