IBOM MEDICAL JOURNAL
Vol.17 No.2 | May - August, 2024 | Pages 241 - 245
www.ibommedicaljournal.org

In-Hospital Continuous Medical Education during the COVID-19 Pandemic

Buowari DY

Department of Accident and Emergency, University of Port Harcourt Teaching Hospital, Port Harcourt, Rivers State, Nigeria.

Abstract

Background: The coronavirus disease 2019 (COVID-19) is a highly contagious disease as it is spread by contact with infected surfaces and inhalation of droplets. Several measures have been put in place to prevent the COVID-19 infection one of which is social distancing and physical distancing. Some in-hospital continuous medical education was suspended during the pandemic.
Objective of Study: The objective of the study is to investigate the impact of social distancing on In-hospital continuous professional development during the COVID-19 pandemic.
Research methodology: This is a cross-sectional study conducted among doctors working in Nigeria irrespective of their cadre or location. A self-administered online questionnaire was used to generate data for this study. There was no risk of participating in the study.
Results: The respondents in this study were 62. The majority 51(82.3%) had different in-hospital continuous medical education (CME) activities during the first wave of the COVID-19 pandemic when there was a ban in Nigeria on the gathering of more than 20 persons; the CME activities were via Zoom video conferencing 44 (71%) App. The majority of the respondents however preferred a face-to-face (physical) meeting [40(74.2%)] and also learnt better during a face-to-face meeting [46(74.2%)].
Conclusion: CME is very important in healthcare so COVID-19 did not stop it although it went through a lot of transformation in the mode it was delivered.

Introduction

The coronavirus disease-2019 (COVID-19) which started in Wuhan, China in 2019 was declared a pandemic in March 2020 by the World Health Organization.[1,2] The COVID-19 pandemic affected every sector of the economy globally with a great impact on healthcare systems.[1,3] Medical education is not spared as some of the measures put in place to curb and control the further spread of the disease, such as restriction of movements and travels, and physical and social distancing have affected all forms of formal learning, especially, in developing countries like Nigeria where formal learning is done by the face-to-face approach since virtual learning is still at its rudimentary stage in the country (however now improving). The pandemic was been challenging to healthcare workers including doctors as they have to update their knowledge regularly about the novel virus. Globally, COVID-19 affected healthcare systems and the training of medical professionals[4,5] both at the undergraduate and postgraduate levels. For instance, the federal and most state governments restricted interstate movements and the gathering of people in public places. Other restrictions included the suspension of postgraduate medical fellowship examinations by the two postgraduate medical colleges in Nigeria, suspension of update and refresher courses, closure of universities and suspension of in-hospital continuous professional development (CPD) and continuous medical education (CME) such as clinical meeting/grand round, journal club, morbidity and mortality review,

Corresponding Author:

Dr. Dabota Yvonne Buowari
Department of Accident and Emergency, University of Port Harcourt Teaching Hospital, Port Harcourt, Rivers State, Nigeria.

dabotabuowari@yahoo.com

DOI: 10.61386/imj.v17i2.429

bedside clinical teaching, morning review and morning report. Some of these continuous professional development meetings have led to the increased use of virtual learning through the use of online platforms. Social media and video conferencing apps are now very important as the COVID-19 pandemic ravages the world. New ways are being sought to deliver practical medical skills online.[6] Some hospitals have converted their medical academic meeting to include in-hospital continuous medical education such as clinical meetings/grand rounds, journal clubs, and mortality and morbidity reviews online using social media platforms, web and conferencing apps such as Facebook, Zoom, WhatsApp, Bluejeans, Goto meeting, Slido, WebEx and several others.

Significance of study

The COVID-19 pandemic had a great impact on the education of healthcare professionals.[7] In-hospital continuous medical education such as clinical meetings/grand rounds and journal clubs are important for updating the medical knowledge of healthcare workers, especially physicians. Innovations are made in medicine which requires medical practitioners to continuously update their knowledge. It is necessary that during the COVID-19 pandemic, doctors and other healthcare workers also learn about it. Also, several articles are currently being published about the coronavirus disease-2019 therefore, the journal club which is an in-hospital continuous professional development is necessary as it is an academic activity in which articles are discussed. One of the measures put in place to prevent the coronavirus-2 is the ban on physical gathering of doctors to carry out their learning exercise. The COVID-19 pandemic disrupted the routines in hospitals and this affected physicians' medical education.[4] Most healthcare settings have transformed their academic meetings from face-to-face to online meetings.[6] The COVID-19 pandemic changed the world and there are several ongoing training programmes as everyone tries to adapt to the new way of life caused by the pandemic.

Research methodology

Study Area: This study was conducted among medical doctors and dentists practicing in Nigeria at the time the study was conducted irrespective of their nationality.

Study design: This is a cross-sectional study that was carried out in 2021. A semi-structured questionnaire was designed for the study. The study adhered to the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) guideline of reporting cross-sectional studies.

Study population: The study population comprised medical doctors and dentists practicing in Nigeria.

Study instrument: The study instrument was a web-based semi-structured questionnaire divided into two sections. Section I comprised questions related to socio-demographics, and Section II questions related to academic activities (in-hospital continuous medical education/continuous professional development).

Study procedure/data collection process: Participants in this study were recruited online by posting the study instruments on WhatsApp, and Telegram groups restricted only to doctors and dentists practising in Nigeria. The administrators of the groups were first contacted and it was confirmed the members of such groups are doctors and dentists practicing in Nigeria.

Ethical Consideration: The National Health Research Ethics Committee of Nigeria approved this study with the ethical approval number NHREC/01/01/2007-26/02/2021. Participation in the study was voluntary and participants were free to opt out of the study at any time. Participants gave their consent to participate in the study.

Results

The age of the respondents ranged from 20-69 years. Sixty-two doctors and dentists practicing in Nigeria participated in this study comprising 33.9% (21) men and 66.1% (41) women.

The cadre/rank of the respondents was diverse. Most 77%(47) of the respondents were staff of a hospital accredited for residency training. The majority of the respondents 91.8% (56) preferred an online web-based study instrument.

For online medical activities during the COVID-19 pandemic, video conferencing and social media applications were Zoom 731% (44), and Google Meet 18 (29%). The majority 56.5% (35) of the respondents perceived that the impact of the COVID-19 pandemic on CME was positive while 43.5% (27) perceived that the impact of the CME

Table 1: Cadre/Rank of Respondents and Hospital Ownership Structure

S/N	Cadre/Rank	No	%
1	Senior Registrars	21	33.9
2	Consultants	15	24.2
3	Registrars	11	17.7
4	House Officers	1	1.6
5	Medical Officers	8	12.9
6	Senior Medical Officers	2	3.2
7	Principal Medical Officer	1	1.6
8	Retired	2	3.2
9	Chief Medical Officer	1	1.6
	Hospital Ownership Structure		
1	Government-owned health facility	49	80.3
2	Private hospital	5	8.2
3	Military hospital	4	6.6
4	Police medical service	1	1.6
5	Company hospital	1	1.6
6	University Medical Centre	2	3.3
7	Ministry of Health/MDA	2	3.3
8	Non-governmental association	1	1.6
	Total	62	100
	Respondents working in government-owned hospitals		
1	Federal teaching hospital	35	71.4
2	State teaching hospital	8	16.3
3	State specialist hospital	1	2.0
4	Primary Health Centre	1	2.0
5	Other government establishments	4	8.2

Table 2: in-hospital CME during the COVID-19 pandemic

S/N	In-Hospital Continuous Medical Education	N (%)
1	Grand round/clinical meeting	26(49.9)
2	Early Morning Review/Morning Report	16(30.2)
3	Journal Club	15(28.3)
4	Postgraduate Seminar	6(11.3)
5	Bedside teaching/review	6(11.3)
6	Mortality review	6(11.3)
7	None	3(4.7)
8	In-hospital CME not conducted in the hospital)	1(1.9)
9	Tutorial presentation	1(1.9)
	Total	80

Table 3: Mode of conduct of In-hospital CME during the first wave of COVID-19

S/N	Mode of conduct of in -hospital CME	N (%)
1	Online (virtual)	51(82.3)
2	Face-to-face (physical)	4(6.5)
3	No In-hospital CME is conducted by my department/hospital before and during the COVID -19 pandemic)	6(9.7)
4	No In-hospital CME was conducted by my department/hospital during the first wave of the COVID -19 pandemic but it was done before the COVID -19 pandemic	1(1.6)
	Learning preference during In -hospital CME?	
	Face-to-face (physical)	46(74.2)
	Online/virtual	16(25.8)
	Preference of mode of conduct of CME during the COVID-19 Pandemic	
	I prefer face -to-face (physical) in -hospital CME	40(64.5)
	I prefer online/virtual in -hospital CME	22(35.5)

Table 4: App used for conducting virtual In-hospital CME

S/N	App	N (%)
1	Zoom	44(71)
2	Google meet	18(29)
	Total	62(100)

Table 5: Respondents perception on the impact of the COVID-19 pandemic on In-hospital CME

S/N	Respondents' perception	N (%)
1	Positive	35(56.5)
2	Negative	27(43.5)

during the COVID-19 pandemic was negative. Most of the respondents 96.7% (59) attended a webinar on the COVID-19 pandemic. Most of the respondents in this study 74.2% (46) learn better by the traditional face-to-face teaching method and most of them (40) preferred a physical in-hospital CME, only 33.9% (21) preferred online in-hospital CME 3.2% (2) had no preference on the mode of delivery of content of an in-hospital CME. Since the onset of the pandemic 59(99.2%) of the respondents have attended a webinar on COVID-19.

These meetings were done virtually except for the bedside teaching/review. Some respondents had more than one In-Hospital CME conducted in the hospital where they work.

Discussion

There are both positive and negative impacts of the COVID-19 pandemic on medical training. One of the challenges of the pandemic on virtual in-hospital CME is the high cost of data to use and the erratic internet connectivity which is a major challenge during online meetings. The health facilities where respondents in this study are working made an effort to continue in-hospital medical education during the COVID-19 pandemic. This may have been more expensive but the video conferencing application of Zoom and Google Meet was used for this purpose. Even though most of the respondents preferred learning face-to-face, there was a more positive perception concerning conducting the in-hospital CME during the COVID-19 pandemic.

The use of technology in education through the use of the World Wide Web was used extensively during

the COVID-19 pandemic.[7-9] Especially in the discovery and innovation of video conferencing applications that were very useful in conducting in-hospital CME during the pandemic. The COVID-19 pandemic led to the cancellation and rescheduling of education gatherings such as conferences, CME, and continuous professional development (CPD) courses.[10] Innovations and discoveries occur in consistent medicine therefore healthcare workers including physicians need to update their knowledge to be current with new procedures and techniques.

In this study, ZOOM and Google Meet were the most commonly used Apps. This is similar to a study conducted in Iran where Zoom and Google Meet were the commonly used video conferencing Apps for the delivery of medical education during the COVID-19 pandemic.[11] It is also similar to a study conducted in Saudi Arabia where Blackbeard was the commonly used App followed by Zoom[12]. In this study, the majority of the participants learn better when they are taught face-to-face, this is similar to the study in Saudi Arabia where 56.2% disliked learning virtually whereas 72.5% in the Saudi Arabian study desired to have hybrid educational meetings.[12]

Online learning that was used during the pandemic was new in some parts of the world.[13] The results of this study are also similar to an Egyptian study where Zoom was the most commonly used video conferencing App for medical education during the pandemic.[9] In the Egyptian study, during the COVID-19 pandemic conducted among oncologists, 36.44% attended journal clubs while 36.44% attended Webinars.[9] Since learning is important in medical education, it needs to be developed including training of both the teachers and students on the various forms of educational technology.[14]

Conclusion

The COVID-19 pandemic led to various disruptions in education and medical activities, especially during the first wave of the COVID-19 pandemic when there were several measures taken to control the novel virus including movement restrictions in the form of lockdowns and curfews. CME is necessary in medical practice and this continued during the COVID-19 pandemic even though one of the strategies to control the virus was physical distancing. Zoom and Google Meet were used for in-hospital CME during the first wave of the COVID-19 pandemic.

Declarations: The author has nothing to declare
Funding: None
Conflicts of Interest: None declared
Ethical Approval: The study was approved by the Health Research and Ethics Committee of Nigeria with the ethical approval number NHREC/01/01/2007-26/02/2021.

References

1. White S, Omar M, Mohammad GN. Knowledge, attitude and practice on prevention of airborne and droplet infectious during the outbreak of coronavirus among the college students at the University of Bisha, Saudi Arabia. Inter J Contemp Res Rev. 2020, 10 (04), 20773-20776.
2. Bao-Liang Z, Wei L, Qian - Qian Z, Xiao-Ge L, Wen-Tian L, Yi L. Knowledge, attitudes and practices towards COVID-19 among Chinese residents during the rapid rise period of the COVID-19 outbreak fast: a quick online cross-sectional survey. Inter J Biolog Sci. 2020, 16 (10), 1745-1752.
3. Kanneganti A, Lim KMX, Chan GMF, Choo S, Choolani M, Ismail-Pratt I, et al. Pedagogy in a pandemic-COVID-19 and virtual continuing medical education (VCME) in obstetrics and gynaecology. 2020. ACTA Obst Gynec Scandinavia. 2020,99,692-695. doi.10.111/aags.13885
4. Kanneganti A, Sia C, Ashokka B, Oci SBS. Continuing medical education during a pandemic: an academic institutions experience. Postgrad Med J. 2020. doi.10.1136/postgradmedj.2020-137840
5. Rip J, Peccarado L, Charney D. Attending to the emotional well-being of the health care workforce in a New York health system during the COVID-19 pandemic. Acad Med. doi.10.1097/ACM000000003415
6. Sandhu P, Wolf M. The impact of COVID-19 on the undergraduate medical curriculum. Med Educ Online. 2020, 25, 1764740.

7. Abraham M, Abdelhafiz AS, Mustafa N, Ali A, Elghazanig A, Mesbach, A et al. Virtual educational meetings and activities during the COVID-19 pandemic and beyond, Egyptian oncologist experience. ECancer, 2021, 15;1275. https://doi.org/10.3332/ecancer-2021.9.1275
8. Sabzwari S. Rethinking assessment in medical education in the time of COVID-19. Med Educ Publish. https//doi.org/10.15694/Mep.2020
9. Alorabi M, Abdelhafiz AS, Mustafa N, Ali A, Elghazawu H, Mesbach H, el al. Video educational meetings and activities during the COVID-19 pandemic and beyond, Egyptian oncologist experience. ECancer. 2021,15, 1275 https://doi.org/10.3332/ecancer.2021.1275
10. Ferrel MAL, Ryan JJ. The impact of COVID-19 on medical education. Cureus. 2020.12(3):37492.doi.10.7759 (cureus.7492)
11. Mohammed HK. Students' attitudes toward using distance learning Zoom and Google Meet strategies for developing reading comprehension. Inter J Adv Soc Sci Hum. 2021, 12, 61-78.
12. Samannodi M, Bulkli A, Alwafi H, Bakhari R, Salawali E, Hafiz B, et al. Impact of COVID-19 pandemic on medical education: A cross-sectional study in the western region of Saudi Arabia. Adv Med Educ Pract. 2022, 13, 741-754.
13. Fatani TH. Student satisfaction with video conference teaching quality during the COVID-19 pandemic. BMC Med Educ. 2020-20:296.
14. Raf A, Anwar ML, Younas A, Manzoor S. Paradigm shift in medical education due to the COVID-19 pandemic. Guidelines for developing a blended learning curriculum in medical education. F1001 Research, 2022, 11;27. https://doi.org/10.12688/f/00research.7447791.1.