

Journal of Muhammad Medical College

Website: jmmc.mmc.edu.pk



1: Assistant Professor; Department of Medical Education. Muhammad Medical College.

- 2: Student of Final Year (MBBS) Muhammad Medical College, Mirpurkhas Sindh.
- 3: Student of Final Year (MBBS) Muhammad Medical College, Mirpurkhas Sindh.

This paper has been partially presented as power point presentation in 17th annual symposium of Muhammad Medical College held from 24th to 26th September 2019.

*=corresponding author

Students' perspective for online teaching program "Survive" during period of Covid-19.

Syed Razi Muhammad¹, Huriza Saleem^{*, 2}, Ayesha Shakeel ³.

Abstract

Introduction: During panacea of Covid-19; educational institutes started online teaching program. This was first experience for almost all faculty members and the students. As we all are familiar with face-to-face learning; it is imperative to get feedback from the students regarding their experience of online academic activities.

Objective: To document the students' perspective regarding online teaching program of Muhammad Medical College Mirpurkhas named as "SURVIVE"

Methodology: After approval from Research and Ethical Committee of Muhammad Medical College this questionnaire-based study conducted during month of July 2020. This self-constructed questionnaire has 6 components: Organization and Structure, Teaching and learning, Teaching staff and other students, Assessment, Attribute development and Unit performance as a whole. Each component had 3-4 questions and students had to rate their satisfaction level on Likert scale.

Results: Each component of the questionnaire was examined. Among participants; female students (n=103) outnumber male students (n=22). The highest number of students were from 4^{th} year MBBS (n=47; 37.6%) followed by 1^{st} year BDS (n=26;20.8%) and final year MBBS (n=25; 20%). Overall, 106 (86%) students rated Survive as satisfactory.

Conclusion: Being first experience, yet survive was found nearly in all aspect as satisfactory way of leaning during pandemic of Covid-19.

Keywords: Covid-19, Online teaching, Lockdown.

Introduction:

At the beginning of this academic year, students and faculty member had witnessed face to face (F2F) programme during first 3 months. On 2nd March 2020; due to pandemic of Covid-19, Government of Pakistan announced complete lock down. This was the most difficult time for students of professional colleges particularly for final year students. As period of lock down was very ambiguous; expected to continue for months; Academic council of Muhammad Medical & Dental College in a meeting decided to developed online teaching program for all students of M.B.B.S and B.D.S. Using Moodle as platform, online teaching program developed named as "SURVIVE". Faculty participated

actively for online teaching; both faculty and students provided with login ID and passwords. Survive consists of online lecture, tutorial, OSCE and submission of assignment by the students. Keeping pace with period of lock down Survive continued in phases from 16 March 2020 to 15 January 2021; depending upon the condition of lock down.

Survive the Beginning.
Survive the Revision.
Survive Again.
Survive Hybrid.
Survive the Revision again.

Total subjects for MBBS and BDS covered were 21 for 550 students including 50 students of BDS. Using Moodle and Zoom as medium weekly lectures of every subject were delivered online with a total of approximately 3814 lectures delivered including Survive Hybrid. Weekly online test conducted for each subject, followed by posttest discussion. Assignment submitted by students of MBBS and BDS during Survive may be summarize as follows.

Survive the Beginning.

Survive the Revision.

Survive Again.

Survive Hybrid.

Survive the Revision again

Posttest discussion

32 assignments

70 assignments

32 assignments

40 assignment

Total assignments submitted by students= 2164,800.

All assignments after checking for originality, relevance and content; were graded accordingly. Students were informed that the results of SURVIVE will be taken into consideration as "internal assessment" during their final annual examination. It is a well-known fact that input of end user decides the quality delivered and therefore feedback from students was very important. Keeping in view the overall conditions of Covid-19 pandemic in Pakistan, Govt decided to open all economical activities gradually and finally educational institutes were also open from October 2020 allowing face-to-face teaching with strict adherence to Standard operating Protocol. Taking advantage of this we decided to get feedback from students regarding their experience of "Survive" during period of lock down and at the same a short audit of the program was also performed.

Methodology:

After approval from Research and Ethical Committee of Muhammad Medical College this questionnaire-based study conducted during month of July 2020. This self-constructed questionnaire has 6 components: Organization and Structure, Teaching and learning, Teaching staff and other students, Assessment, Attribute development and Unit performance. Each component had 3-4 questions and students had to rate their satisfaction level on Likert scale.

Organization & Structure of the Survive:

- How much you are satisfied with connectivity during Online Teaching?
- How much you being able to learn without regular face to face contact?
- Do you think that during online teaching students were always organized with responsible attitude?

Teaching & Learning:

- Content of online lecture being given and/or pointed to current material
- Content relating what is learnt to issue in the wider world
- having work that help connections

Teaching staff and other students

- Interacting online with teaching staff
- Interacting online with other students
- Interacting with other staff

Assessment

- Completing online tests
- Submitting assignments online
- Receiving feedback online
- Clear expectations to get good marks

Attribute development

- Having the opportunity to develop online technical skills
- Learning to judge quality of online information
- Having ability to communicate knowledge online

Unit Performance

Overall rating

How satisfied have you been with survive being online

Although participation, in Survive, from students of MBBS (all years inclusive) and 1st year BDS (N=615) was highly satisfactory however for this study; students selected through simple random sampling for a sample size of 125. The questionnaire sent to 125 selected students of MBBS and BDS, however 2 questionnaires were found incomplete and therefore not considered for data calculation. Response of 123 students was entered into SPSS. Mean and Standard deviation calculated; Chi Square and t test for calculating p value. A value of 0.05 was considered as significant.

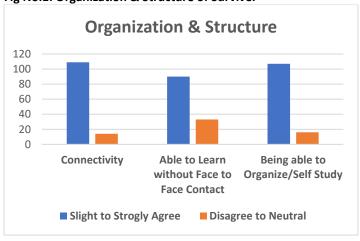
Results:

Each component of the questionnaire was examined. Among participants; female students (n=103) outnumber male students (n=22). The highest number of students were from 4^{th} year MBBS (n= 47; 37.6%) followed by 1^{st} year BDS (n=26;20.8%) and final year MBBS (n=25; 20%). Lowest among all were students of 2^{nd} year MBBS (n=8; 6.4%) as shown in table no 1.

Table No.1: Study population

Year of Study	n	%
1 st year BDS	26	20.8
2 nd year MBBS	10	8.0
2 nd year MBBS	8	6.4
3 rd year MBBS	9	7.2
4 th year MBBS	47	37.6
Final year MBBS	25	20.0
Total	125	100.0

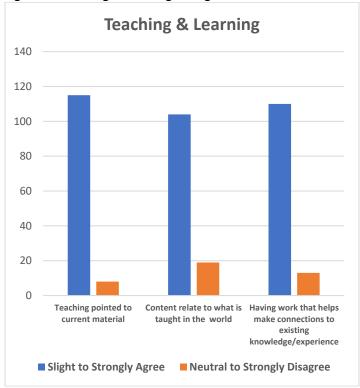
Fig No.1: Organization & Structure of Survive.



Although majority of the students (n=109; 88.6%) were slight to strongly agree that they do not have any problem of connectivity, yet only 89 students (72.35%) were able to learn adequately without face-to-face contact. When asked whether they find themselves organize and responsible for own/self-study during distance learning, 107 (87%) students were slight to strongly agree with the statement as shown in Fig No 1.

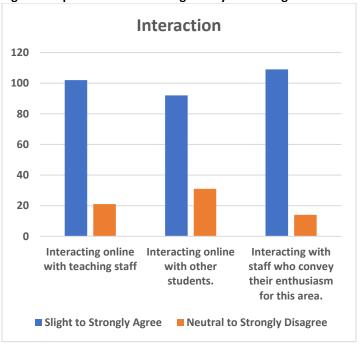
Another important segment of questionnaire was about teaching and learning. Among 123 participants, 115 (93%) were highly satisfied with "Survive" with respect that the contents of the program are latest and current. Content provided during survive found relating to the wider world by 104 (84%) students. 110 (88%) students were satisfied that lecture having strong connection to their existing knowledge as shown in Fig No 2.

Fig No. 2: Teaching & Learning during Survive.



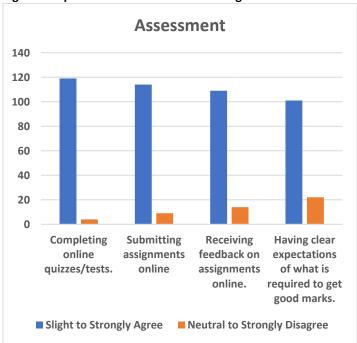
As all students were highly tamed with face-to-face interaction during their academic education, when asked about their interaction with teaching faculty members during "Survive", 102 students (82%) found satisfied. Interaction among students also plays a role; when asked same during Survive, 104 (84%) were satisfied; this figure was more adequate n=110 (88%) with respect to interaction with non-teaching staff assigned to facilitate the "Survive" program as shown in Fig No 3.

Fig No.3: Opinion about Teaching faculty and Collogues



Formative assessment was routinely performed during survive. Enthusiasm of students for survive was evident from the fact that 96% (n=119) of students participated in online quizzes; while 92% (n=114) timely submitted their assignments. 88% (n=109) were satisfied with feedback over assignment they received; while 101 (82%) students get the same grade what they expected before submitting assignment.

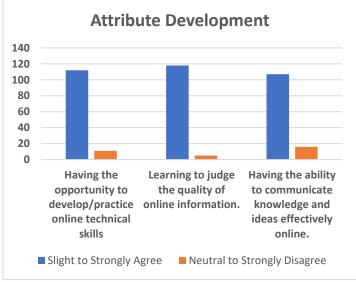
Fig No.4: Opinion about Assessment during Survive



As online teaching was new for the students, we asked about the change that may be attributed to Survive. Survive found by

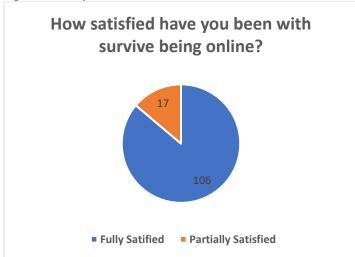
majority of the students (n=112; 91%) as an opportunity to develop online skills. At the same due to Survive; they were able to judge the quality of online information better than before (n=118; 95%). Similarly, most students (n=107; 86%) develops ability to communicate online due to survive.

Fig No.5: Attributes development during Survive.



Finally, we asked how you rate "Survive" overall as a unit; 106 (86%) were fully satisfied with Survive in contrast to 14% who were not satisfied.

Fig No.6: Unit performance of Survive.



Discussion:

Difficult new situations and challenges are regular features of our modern life. It is therefore desirable to stay prepared to face these challenges. There are 3 types of learning.

- Traditional Face to Face (F2F) learning
- E- learning) and
- Hybrid (Blended) learning.

We are familiar and tamed with F2F learning as it is the conventional method across all educational institutes of the

country. E-learning is defined as learning that makes use of Information and Communication Technologies (ICTs). Various learning tools as resources are available for effective e learning. E= learning may be synchronous or asynchronous. When "live" interaction between students and teacher is possible it is known as Synchronous E- Learning; for example, audioconferencing, videoconferencing and web chats. When interaction between students and teacher is significantly delayed it is known as asynchronous E-learning; for example, recorded video lectures, discussion forums, submission of assignment for grade. Blended learning frequently known as hybrid learning where there is blend, in variable percentage of face-to-face learning with online learning.

The viral infection named as Covid-19 started in December 2019 in Wuhan China. Within very short period of time, it become epidemic and soon emerged as pandemic. The preventive policy focuses on hand washing, social distancing and avoiding crowded places. On larger canvas, this resulted in enforcement of lockdown as preventive strategy. This affected economic, financial, social and academic life throughout the world. In Pakistan lockdown announced on 21th March 2019. This was the time when academic activities in all institutes from school to Universities are usually at its peak; on the other hand, period of lock down although formally announced but prevailing conditions throughout world dictate that alternate teaching strategy should be developed and implemented as early as possible so that learning would not be disrupted,3 if complete collapse of the education system is to be avoided. The positive fact that emerged from pandemic of Covid-19 is emergence of distance learning (DL) or E-learning (EL). For DL/EL various web-based software are available, including free resources, to manage teaching material over the internet4.

The results of this study showed that only 72.35% were able to learn adequately through survive during period of lock down; a finding consistent with published studies⁵⁻⁷ that report learning between 70% to 78%. E-learning created a sense of self responsibility and self-study as 87% students find themselves well organized during survive. It is a remarkable finding as these students were previously have never been taught online. In other words, if Covid-19 crisis is over; blended program of teaching throughout the academic year may be useful for our students. Developing quality content for any e-learning program is a real challenge⁸; which become more difficult during panacea of Covid-19. Yet faculty and administration with support of the I.T personnel develop survive successfully. This is reflected by the fact that 93% students find the content of online program current with appropriate connection to their existing knowledge. During e-learning, to develop good interaction between facilitator and the learner; and among learners has been emphasized previously in published studies.^{9,10} In contrast to face-to-face learning, during e-learning it is difficult to have satisfactory interaction particularly when there is no previous experience of e-learning. The result of this study showed that during Survive; interaction

between faculty and students, between students and interaction with I.T personnel was remarkably good as 82%, 84% and 88% respectively responded it as satisfactory to highly satisfactory. Assessment serve as a major drive for learning and formative 6. assessment is necessary during e-learning as well. 11 The results showed that 96% students submitted their assignments during survive; well in time except for overall 4% late submission. When assignment cheeked and graded, 82% students received expected 7. grade while 88% students found satisfied with the feedback provided after checking the assignment. Results showed that Survive found useful beyond academic scope as well. Few qualities students develop, that be attributed to survive, includes development of different online skills (n=112; 91%), improved judgement (n=118; 95%) for the quality of information available online and ways to communicate online (n=107; 86%) with the colleagues and fellows.

Conclusion:

The lock-down has significantly affected the lives of people in both negative and positive way. Concerns for loved ones and social restrictions being the major causes of stress while getting more time for family interactions and to oneself being the major reason of relief. Financial instability was also pointed out to be the cause of stress and its security should be assured by authorities and government to be its probable solution.

Acknowledgment: Authors would like to thank Prof Syed Razi Muhammad for his step to step guidance and extended cooperation during this study.

We are also thankful to I.T personnel Mr. Zubair, Mr. Owais and Mr. Fiasal for providing data of Moodle & Zoom during this study.

Competing Interest: Authors declare no conflict of interest.

Funding: None.

References:

- Soltanimehr E, Bahrampour E, Imani MM, et al. Effect of virtual versus traditional education on theoretical knowledge and reporting skills of dental students in radiographic interpretation of bony lesions of the jaw. BMC Med Educ. 2019;19:233. https://doi.org/10.1186/s12909-019-1649-0.
- Singh, V., Thurman, A. How many ways can we define online learning? A systematic literature review of definitions of online learning (1988-2018). American Journal of Distance Education, 2019; 33(4), 289–306.
- Kumar SC. Awareness, benefits and challenges of e-learning among the students of Kurukshetra University Kurukshetra: A study. Int J Inf Dissemination Tech. 2019;8(4):227-230. doi: 10.5958/2249-5576.2018.00048.1
- Keis O, Grab C, Schneider A, Ochsner W. Online or face-toface instruction? A qualitative study on the electrocardiogram course at the University of Ulm to examine why students choose a particular format. BMC Med Educ. 2017;17(1):194. doi: 10.1186/s12909-017-1053-6.
- Kavadella A, Tsiklakis K, Vougiouklakis G, Lionarakis A. Evaluation of a blended learning course for teaching oral

- radiology to undergraduate dental students. Eur J Dent Educ. 2012;16(1):e88–95. https://doi.org/10.1111/ j.1600-0579.2011.00680.x.
- Jeganathan S, Fleming PS. Blended learning as an adjunct to tutor-led seminars in undergraduate orthodontics: a randomised controlled trial. Br Dent J. 2020;228(5):371–5. https://doi.org/10.1038/s41415-020-1332-1.
- Soltanimehr E, Bahrampour E, Imani MM, et al. Effect of virtual versus traditional education on theoretical knowledge and reporting skills of dental students in radiographic interpretation of bony lesions of the jaw. BMC Med Educ. 2019; 19:233. https://doi.org/10.1186/s12909-019-1649-0.
- 8. Kebritchi, M., Lipschuetz, A., & Santiague, L. (2017). Issues and challenges for teaching successful online courses in higher education. Journal of Educational Technology Systems, 46(1), 4–29.
- 9. Bernard RM, Abrami PC, Borokhovski E, Wade CA, Tamim RM, Surkes MA, et al. A meta-analysis of three types of interaction treatments in distance education. Rev Educ Res. 2009;79(3):1243-1289. doi: 10.3102/0034654309333844
- Kruger J, Dunning D. Unskilled and unaware of it: how difficulties in recognizing one's own incompetence lead to inflated self-assessments. J Pers Soc Psychol. 1999;77(6):1121.
- 11. Oliver R, Herrington J. Teaching and learning online: A beginner's guide to e-learning and e-teaching in higher education. 2001. https://ro.ecu.edu.au/ecuworks/6832