Reasons of medical students' poor engagement (Surgical department) in online education during corona virus pandemic

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ABSTRACT: The lockdown policies adopted to contain the spread of Covid 19 has impaired all sectors of life globally. Kufa medical college also instructed all the educational departments to shut down. One month into the lockdown, all the medical colleges in Kufa started online classes to keep pace with the academic calendar. This preliminary survey is aiming to examine the reasons for low students' engagement in online classes.This survey used questionnaire forms that been sent to the students using their emails. Each form consists of two sections.A total of 162 students responded to the survey. More than half (58.6%) of the students felt not engaged in online lectures. The primary reported cause for non-engagement was lack of discussion (90.7 %). The second higher reason was poor activities at (87 %). Another two significant reasons were presentation design and stress at 86.4% and 72.2%.Medical students did not feel that they are engaged in the online sessions mainly due to No active discussion, no activities during the online session, the Presentation style of the session and design, Stress, and tension. By identifying these problems, we are on the first step towards engaging our students in online education.

KEYWORDS: COVID-19; online education; student engagement

I. INTRODUCTION

The coronavirus pandemic and the various actions used to slow its spread dramatically affect day-to-day activities and work-life like economy, travel, and, of course, education. Higher education students have found themselves away from their colleges, leaving them in a unique situation that they have no experience to face.
The COVID-19 has resulted in higher education shut across the world. Globally, medical students have to complete their requirements using online materials. This includes online lectures, courses and pre-recorded sessions. For this, medical education has changed significantly, with the phenomenal rise of e-learning. Medical learners start to use remote and on digital platforms and online lectures.

Medical educators and lecturers start to use different styles of online lectures to the medical students aiming to have acceptable learning outcomes. Online teaching has several advantages like ease to organize, accessibility for everyone, flexibility, and requires less funding. On the other hand, Online teaching can have serious Cons like a distraction, difficulty in controlling teaching groups, low level of participation, and low level of engagement (Khadijah Mukhtar, 2020). As students' engagement is the main rule for a successful education, this initiates another concern of how to engage medical students in online lectures and educational activities. Kufa medical college start to use online education for the medical students at the final stages to maintain their progression aiming for graduation.Online education-related studies and models have been promoted for years. Before the COVID-19 pandemic, most of these studies were focused on colleges, while educators and students in remained inexperienced in emergency remote education. For example, Taiwan has promoted digital course certification at the university level for many years, and universities have also supported teachers in recording e-learning materials. Educators notice a remarkable number of non-engaging students (Wu, 2021). Our survey is aiming to investigate the main reasons for the unsatisfactory level of engagement of medical students. The aim of our survey is in two folds. The first one is to know the main preferences of the medical students and their engagement level in online sessions. The second one is to understand the main reasons of the non-engagement in the online education.

II. METHOD

We designed the survey that consisted of a questionnaire regarding the engagement of students in virtual teaching during the covid time. We have sent the questionnaire to students in the medical college. The survey was conducted in Kufa medical college from April to End of December 2020. A set of self-administered

questionnaires was designed to evaluate the knowledge, current and experience, and level of satisfaction and engagement regarding attending online teaching. We included students of the last three years as they were involved the most in online education during this period. The questionnaire paper was sent to the respondents by using emails. The questionnaire consists of two parts. The first one was a cover letter contains the name and the aim of the study. Also, we included information regarding the method of the survey. We included an acceptance letter to be signed for legal reasons. We also provided the respondents with general information about virtual teaching and its use as an alternative for face-to-face lectures. The second part contained open and closed questions regarding students' engagement in online education. Those questions aimed to evaluate the level of engagement of the medical students in the online education and the assess students preferences to online education. We are aimed to assess the main reasons for poor engagement of students. We also provided the students with a list of reasons for poor educations that can help them to answer the survey and widen their horizons. We included open questions to let the students express their main causes of being poorly engaged in online lectures. We also offer the students that have questions regarding the study to send us emails or can call us directly for more explanation and discussion. After a period of three months, we received a satisfactory number of responses that allow us to proceed to the analysis stage.

III. RESULTS

A total of162 individuals responded and filled the questionnaire: We sent 250 survey forms. We received only 170 back, and only 162 were completed. So, we Excluded eight forms as they were uncompleted. The response rate was 68%. This is displayed in figure1. Of the respondents, 71(44%) were females 91(56%) were males. This is displayed in figure 2.
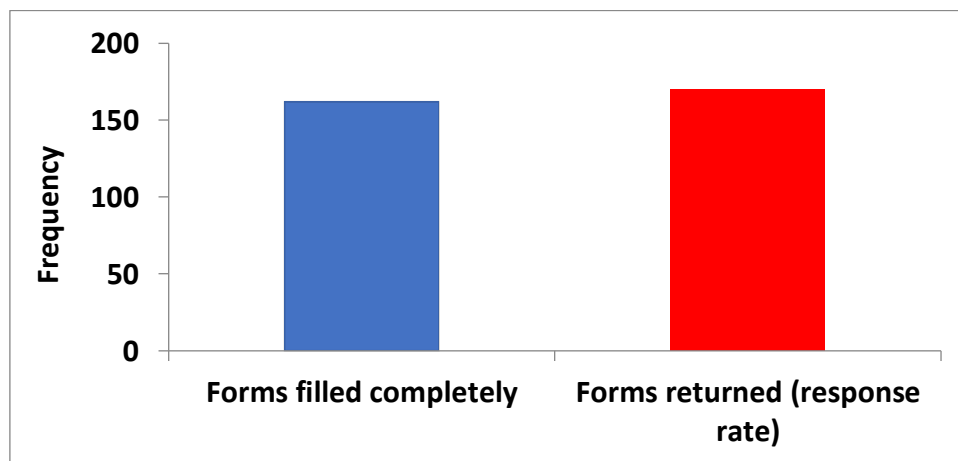

Figure 1: shows the details of the distributed forms
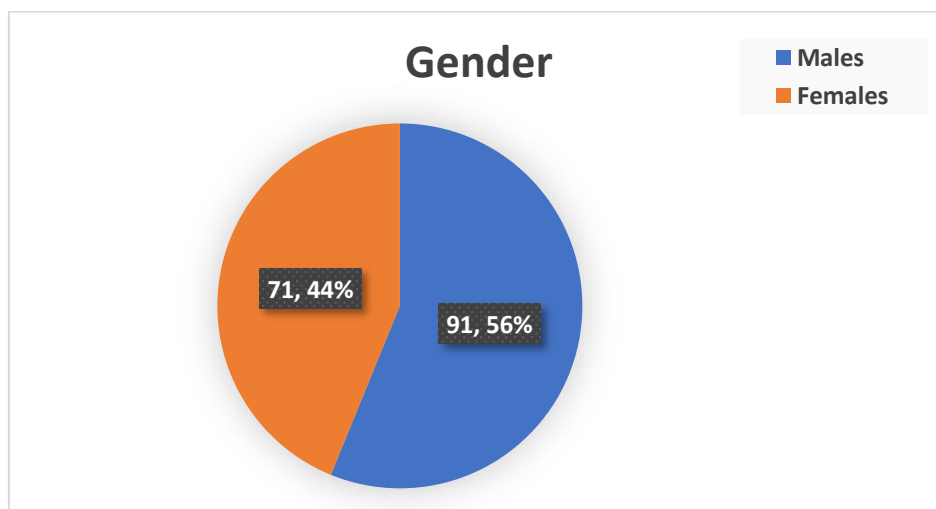

Figure 2: Shows the Gender distribution of the respondents

Among the respondents, 129(79.6%) preferred Combined Online or virtual and face-to-face teaching, 92(56.7%) preferred Online Teaching only., and only 25 66(40.7%) recommended Traditional face-to-face teaching only. This is shown in figure 3.
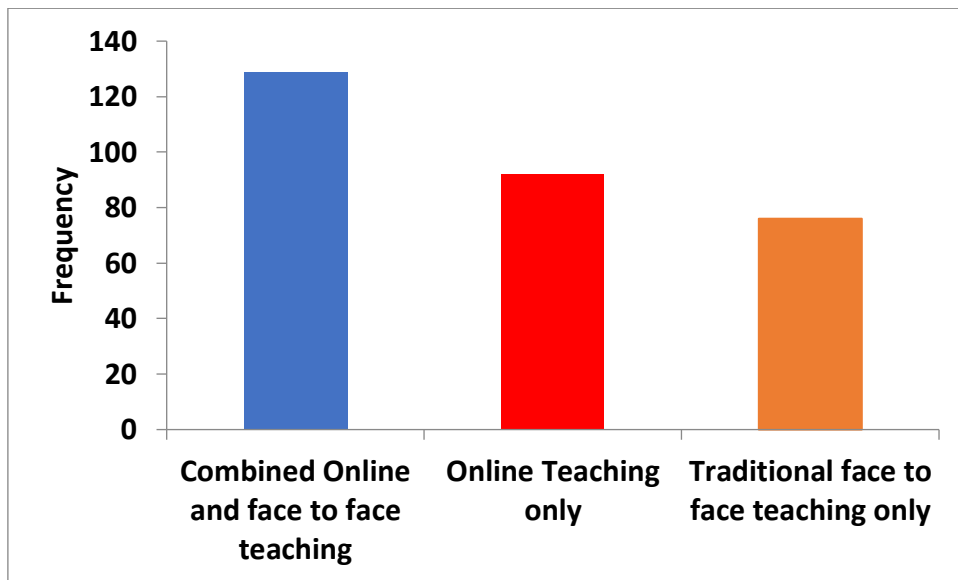

Figure 3: Teaching/learning style preferences

In figure 4, we can see that 95(58.6) of the respondents felt that they were engaged in the online session during the Covid time, while only 67(41.4) said that they engaged during the same time.
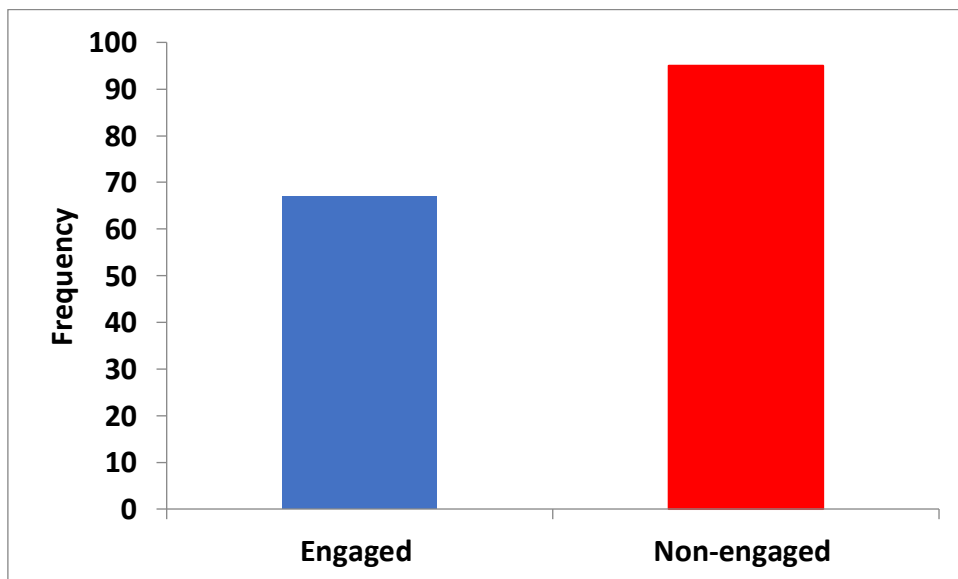

Figure 4: showed the percentage of engagement in online teaching

In figure 5, We explored the possible reasons for the non-engagement of the students engaging in online education during the COVID-19 pandemic at this institution. We found that 101(62.3%) reported internet connection problems, 98(60.4%) said having technology problems like laptop settings or using old version windows, 104(64.2%) mentioned having problems at managing their time, 141(87%) reporters claim that lack of activities is one the leading causes of the non-engagement, 82(50.6%) report that they have difficulty to get the teaching goals of their teaching sessions. 147(90.7%) of the respondents put the lack of active discussion during the online session and lectures as the main reasons for their poor engagement, this is followed by 140(86.4%)

who reported that they were not engaged due to online lecture design and presentation style, 117(72.2%) put the stress and tension another critical reason, and lastly, 37(22.8%) answered with others.
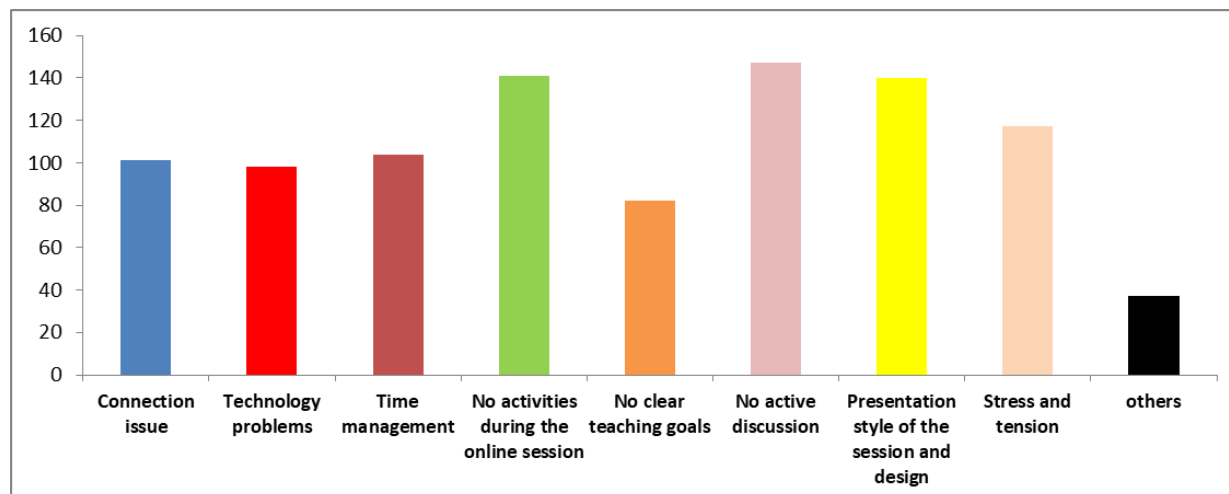
Figure 5: Showed the reasons of non-engagement as reported by responders.

IV.   DISCUSSION

We are currently going through a ground-breaking academic crisis. COVID-19 has changed the foundation and style of living of our communities. Medical Universities and colleges around the globe have been closed in response to Covid restrictions rules, and virtual learning has become an academic standard. Under these circumstances, educators, lecturers, and higher education students face an unprecedented transition to online education with little or no experience. Based on previous occasions, experts have predicted that it might take 5-10 years to recover from this pandemic (Huh, 2020). A reasonable number of medical students and specialty respondents and of both genders to our survey during the Covid crisis. They aimed to help in the further development of the future of online teaching in our institution. The medical students are keener to be part of the decision-making process regarding their future and matters related to their education (Mohammad H Rajab, 2020). Thus, it is vital to engage medical students in the process of shaping the future of education for an unusual time like covid.Most of the responders preferred to have online teaching either alone or combined with face-to-face teaching. About two-thirds of the respondents in this survey favored combining virtual with face-to-face learning. More than half of the responders were happy to have online teaching only. Similarly, previous studies have reported that online learning is becoming widely used in education because it combines "the best of both worlds" (Nehls, 2014). However, the effectiveness of hybrid learning depends on several factors, mainly adequate faculty training and institutional support. The college support for its educators in the form of courses and preparation has its positive effects on enhancing the outcomes of the online education (Comas-Quinn, 2011).

More than half of respondents reported that they felt non-engaged during the online sessions. Engagement is a particularly important element of successful teaching. Student engagement is frequently defined as "depict students' willingness to participate in routine school activities, such as attending class, submitting required work, and following teachers' directions in class." (Weller, 2016).Engaging learners facilitates learning, improves education outcomes, and creates an interactive and teaching environment. Engagement in education helps in building and shaping future professionals. Engaged students are more enthusiastic, optimistic, curious, active, and interest than those who did not engage in their learning process (Skinner, 1993).In the present study, the primary reason for non-engagement in online education, as reported by the respondents, was related to a lack of active discussion between peers and educators. Medical learners have learned over time that clear and concise feedback from peers and educators is vital when switching over to a virtual environment during a healthcare crisis. This opportunity to improve communication between faculty and students during COVID-19 could improve the active discussion in traditional face-to-face courses. Group discussion helps learners pool knowledge and share information to get the maximum benefits from teaching sessions (Fry, ,Evaluating courses and Teaching, 2009).Active discussion creates a learning environment and will help reach constructivism in the learning process, and this will assist in getting the required learning outcomes (Biggs, 2011).

Another notable cause was related to the absence of activities during the online sessions. Learners can only concentrate for the first 20 minutes as active learners. So those learners need to be involved in activities to improve their engagement (Fry, Lecturing to large groups , 2009).The other important factor defined by the responders was that learners were unhappy or unfamiliar with the presentation style or design. The presentation style is a vital way to get students involved in the online lecture as it will keep students attention and concentration high. Online lecturers and their tone, humor, and see their body language helps to make the information accurate for the students. Some of the participants report that they felt as if the introductory video gave them a sense of being in class and provided them a familiar feeling of communicating face-to-face (Sugar, 2010).The rest of the reasons for poor engagement of medical students in online sessions were Connection issues, Technology problems, Time management, Design of the online session, No clear teaching goals, and Stress.With our short experience with it. Online lectures may improve learners' comprehension of the content of the materials better due to hearing their teacher voice, managing their time, and ability to repeat the lecture at any time when recorded. Three factors can influence students' engagement. The first one is to increase participating and persevering. The second one is encouraging learners to pay attention and pushing themselves past their expectations, and the last one is the general experience of learning (Wang, 2019). The modern use of online educational method (also called e-learning) enhances online learning and independent learning by the progressive use of information and communications technology replacing old content delivery and method of education by postal correspondence.

Instruction can be synchronous and asynchronous online interactive learning environment or virtual communities, in lieu of a physical classroom. "The focus is shifted to the education transaction in the form of a virtual community of learners sustainable across time" (Norman D. Vaughan, 2011). One of the most notable issues noticed in the correspondence model of online education is the transactional distance, which results from the lack of appropriate communication and interacion between learner and educators. This gap has been noticed to become bigger if there is no face to face communication between the learners and thier teachers. This factor has direct implications on the educational process and future endeavors in online education. Distance education providers began to produce different strategies, methodstechniques, and procedures to increase the amount of interaction between learners and teachers. These measures e.g. more frequent face-to-face discussion, increased use of information and communication technologies including teleconferencing and the discusionplaformsthat were designed to close the gap in transactional distance.The disruptive effect of Corona virus pandemic and the widely use of digital technologies has supported the online education for many students at multiple educational level. This also helped and gave opportunity for the transformation of higher education in many educational institutions around he globe. We are all involved in a digital and electronic world, and the phenomenon of online education is exist for long time before Covid-19. Online education has got relevance and ensured its continuance even after the Covid-19 pandemic. This transition to online learning was fast and forced by circumstances.

However, the various actors in the educational processes (students, educators, universities) have several barriers and problems in adapting to the online learning. Educational institutions have to be aware of these barriers and problems, they ahve to use their resources to overcome encountered problems and bariers in the short term. Universities should pay special attention to the digitalization of learning processes. This can be acheived by offering specific digital training to educators, and students. We do not yet know what the change to online learning will cause for the future of higher education at a wider level, but it is clear in the current time that universities should develop an advance and a sophisticated combination of face-to-face and online education to control the potential of the technological tools available to meet students' expectations and enhance their learning outcomes (Víctor J. García-Morales, 2021). The study explains the reasons for poor engagement in online teaching. However, the Kufa medical college did not have previous experience in online education and this factor can lead to poor engagement. In the future, this piece of research can help to boost the engagement rate of students in their online teaching. This also will increase the outcome of learning and create an online teaching environment. Further evaluation and research are needed to evaluate the engagement of higher education students in online teaching.

V.   CONCLUSION

Covid 19 force us to produce online teaching despite the lack of experience of students and faculty. As a first step to improving online education, we like to involve and engage as many students as possible to get maximum benefits. No active discussion, no activities during the online session, the Presentation style of the session and design, Stress and tension due to Covid-19, net Connection issue, Technology problems, Time management, and No clear teaching goals cause low students engagement. Despite these challenges, the experience respondents

have had during the first few weeks of the pandemic has increased their confidence in the effectiveness of online medical education. Although the covid pandemics have historically created difficulties in education, identifying this problem is the first step in converting them into positive outcomes. By placing this causative problem, we are working toward tackling them to improve learners' engagements. One of the chief benefits of this study is to engage medical students in transforming the current pandemic virtual medical education into an evidence-based program.

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