

Repercussions of the COVID-19 Pandemic on Moroccan Medical Students Education

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Abstract:- The covid 19 pandemic had a major impact on medical students education .To evaluate this impact, we conducted a survey among medical students in five morrocan medical universities . 462 students participated in this survey, and the different aspects of training and teaching opted were discussed. We concluded that the COVID-19 pandemic had a negative impact in all aspects on the formation of medical students in morocco.

Keywords:- Pandemic, COVID 19, Training, Online teaching, medical students.

I. INTRODUCTION

In March 2020, the World Health Organization has declared the novel coronavirus (COVID-19) outbreak a pandemic. COVID-19 was first detected in Morocco in March 2020; In order to prevent the spread of COVID-19 in Morocco, the government has imposed a national curfew in March 2020, followed by a declaration of a state of health emergency.

Following this announcement all educational institutions, including medical faculties in Morocco have been closed and all forms of face-to-face education and training have been suspended and converted to online distance education.

Medical students have been more affected by the impact of the pandemic, although every student has a personal story of how COVID-19 has impacted their training, there is no doubt that the impacts of COVID- 19 will be felt at all levels, both psychological and educational, this is due to the more or less long periods of interruption in their training due to the long national confinements and strict measures.

With the aim of determining the impact of the Covid-19 pandemic on the training of medical students in Morocco; we surveyed undergraduate medical students around the world on the overall perceived impact of different FMP Rabat Casa FES Marrakech Oujda

We assessed medical students' perceived opinions of training, their experiences, and changes in teaching methods during the pandemic.

II. MATERIALS AND METHODS

An online survey of medical students was conducted in the spring of 2022. Students were asked about their overall perceived impact of Covid-19 on their education and several exposure variables. Univariate analyzes and adjusted multivariate analyzes were performed to determine the strengths of associations Informed consent was obtained from all participants and recorded electronically at the start of the survey and the survey data was treated confidentially and anonymously. 2022 and April 28, 2022. The survey was conducted in French and lasted approximately 10 minutes.

III. RESULTS

462 undergraduate and graduate medical students responded to this questionnaire. 87% of these students are among those whose internships were either cancelled, suspended or postponed for more or less than three months, which solicited different reactions from the students.

Most universities have opted for distance education and the most used platform is Zoom followed by the Teams platform. Only 9.6% of students reported attending all virtual classes and the top three reasons given by them are:

- Technical problems
- Problem of schedules
- The online course is not important.

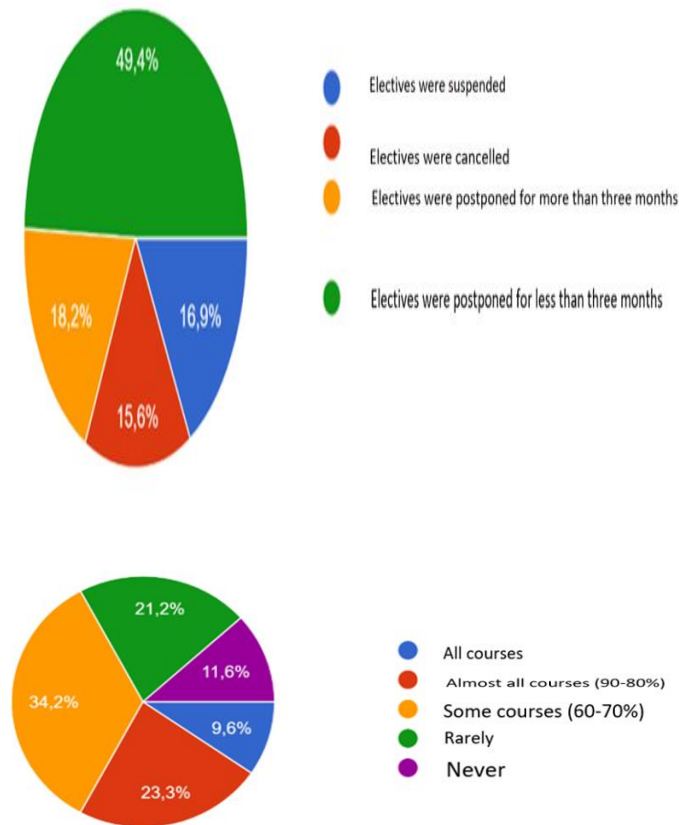
When comparing online and face-to-face learning, most students rated face-to-face learning much better than distance learning in terms of improving theoretical and practical clinical knowledge, although their performance in final exams remained almost the same.

The main advantage of distance education according to 37.6% of students is the possibility of recording a course, on the other hand the major disadvantage according to 33.3% of students is the lack of interaction with patients.

Regarding the return to the face-to-face at the internship sites, it was deemed safe thanks to the development of the vaccine against covid 19 by 53.2% of the students, on the other hand 69.4% of the students judged that they could not benefit from their internship given the reduced duration, regarding the psychological aspect, most students reported having an anxiety level before the

pandemic of 1 and 4 on a scale of 1 to 10, however since the pandemic, the level of anxiety in the majority of students

reached a level 5 and 6.



Percentage of students attending online courses

Fig. 1: Percentage of Students attending Online Courses

IV. DISCUSSION

A previous international survey was conducted in autumn of 2020 and reported that the Covid-19 pandemic had a negative impact on medical students, especially on those who were female and were in their preclinical years or in their first clinical trainings and did not have the opportunity to attend lectures in person and to benefit from ward-based teaching. This impact might be explained by the fact that young medical students rely on pedagogy in the opposite to their older whom education is directed by and ragogy. surprisingly, the increase in clinical responsibilities assumed by medical students was not linked to a negative impact on their training during the pandemic.

While novel virtual teaching methods have been opted worldwide, this study has reported that its efficacy cannot be determined yet and more researches need to be conducted to assess these teaching methods.

Furthermore, this study has highlighted the fact that many medical student’s experience during the pandemic can be related with being a resident of a low- or middle-income country when adopting a virtual teaching due to limited resources, tools and supports being available (1)

We report other studies that have been conducted in low- and middle-income countries confirming the different obstacles encountered to implement virtual medical teaching. In Libya, 2/3 (64,7%) of students, found that e-learning could not be easily opted in their country.(2)In Iran, research has showed that lack of computer skills, anxiety towards using computer and personal discipline are critical to the success of e learning. (3) In Algeria , Dr Nadia gouane reported that major obstacles to virtual teaching in her country during the pandemic was related to teacher non readiness and lack of experiences in E learning as the outbreak of covid 19 gave no time for universities to prepare for changes. The other limitations were linked to lack of tech materials and social status of students.(4)

At the level medical education in different universities in Morocco, Preventive measures aiming to limit this impact were taken early on such as recommending students to return to their clinical training as soon as the covid 19 curve has started to flatten while respecting all barrier measures related to covid19. Hybrid methods of teaching were also early opted and virtual courses that were not assimilated by students were repeated in person like simulated courses of semiology that are generally taught next to the patient.

V. CONCLUSION

Covid 19 is responsible for negative impact with different degrees on the training and education of medical students in Morocco , Moreover , our survey found that online learning was perceived as inferior to in person traching by students. Thus more research in needed to explore medical teaching tools to ensure a productive teaching and training in case of an other wave or an other pandemic.

REFERENCES

- [1.] TMS Collaborative. The perceived impact of the Covid-19 pandemic on medical student education and training – an international survey. *BMC Med Educ* 21, 566 (2021). <https://doi.org/10.1186/s12909-021-02983-3>
- [2.] Alsoufi A, Alsuyihili A, Msherghi A, Elhadi A, Atiyah H, Ashini A, et al. Impact of the COVID-19 pandemic on medical education: medical students' knowledge, attitudes, and practices regarding electronic learning. *PLoS One*. 2020;15(11):e0242905.
- [3.] Barriers in Implementing E-Learning in Hormozgan University of Medical Sciences Parvin Lakbala^{1,2} 1 Health Information Management Research Center, Hormozgan University of Medical Sciences, Bandar Abbas, Iran 2 Department of Health Information Technology, Faculty of Para-Medicine, Hormozgan University of Medical Sciences, Bandar Abbas, Iran Correspondence: Parvin Lakbala, Health Information Management Research Center, Hormozgan University of Medical Sciences, Bandar Abbas, Iran. Tel: 98-763-366-6365. E-mail: Parvin_lakbala@yahoo.com Received: September 29, 2015 Accepted: October 26, 2015 Online Published: November 3, 2015 doi:10.5539/gjhs.v8n7p83
- [4.] Arab World English Journal (AWEJ) 2nd Special Issue on Covid 19 Challenges January 2022 Pp.492-503 DOI: <https://dx.doi.org/10.24093/awej/covid2.33> Learning in the Algerian Context during the Pandemic: Is it online or offline? Received: 12/25/2021 Abstract Nadia Ghounane Department of English Language and Literature Saida University, Algeria.