LETTER TO THE EDITOR

SWOT ANALYSIS OF USE IN REMOTE MEDICAL EDUCATION PARAMEDIC DURING PANDEMIC COVID-19

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ABSTRACT

During the COVID-19 pandemic, academic education has assumed a different nature of work with a student. As medical teachers, we are obliged to look for new tools for working with academic youth who expect new ways of working remotely. Their advantage should be that they will be willingly used by the student and at the same time will be a measurable instrument for lifelong learning. This work presents new possibilities of using the SWOT analysis as a tool for working in academic conditions.

KEY WORDS: online education, medical education, COVID-19, paramedic

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In times of dynamic change, ever-present digitization, big data analysis and the development of artificial intelligence, some classical analytical tools have been forgotten or have been intentionally abandoned for strategic analysis. The COVID-19 pandemic has driven the fastest changes to higher education across the globe, necessitated by social distancing measures preventing face-to-face teaching [1, 2]. During the COVID-19 pandemic, we have suspended face-to-face curriculum-based classes with the students.

In order to adapt education to the current difficult situation, we had to launch all available knowledge for the proposed methods to be used in practice and to use the element of strategic planning and preparation of future medical staff for work in another crisis situation, e.g., a pandemic or a natural disaster. Besides, every academic teacher conducting

teaching at the emergency medicine faculty, bachelor's degrees (N-76), (6th semester) was required to prepare a creative education plan for the period from March 15 to May 15, 2020. One of the solutions proposed by academic teachers was the use of the SWOT analysis, a popular heuristic technique for organizing and analyzing information [2–5]. The approach was taken that the SWOT analysis gives a valuable analytical result when taking each of the three mentioned approaches, provided that it is used consistently and consciously. The topic was: A patient with COVID-19 + in a life-threatening condition and a therapeutic team at the Hospital Emergency Department (SOR). The students received a link to the website (https://ptpaio.pl/?id=58) where the materials on COVID-19 were available. The hospital on whose example they were supposed to conduct an analysis was known due to previous

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seminars and practical training in which they underwent 240 contact hours under the supervision of a medical teacher and nurse teacher, nurse and paramedic instructor.

Strategic information included in the SWOT analysis, sorted into four groups, then stored in a four-fold strategic matrix, in which the left half contains two categories of positive factors, and the right half — two categories of negative factors, gives a valuable analytical result [2, 3, 5]. This allowed the teachers to assess the student's use of the available literature, familiarity with the ED, and the knowledge of the content planned in the syllabus, as well as the implementation of the intended learning outcomes in terms of knowledge, skills and social competences. Statistical analysis showed that 98%, 96% and 67% of the assumed learning outcomes were achieved respectively. Moreover, the assumed learning objectives for the analyzed form of education were achieved in 100%. The SWOT analysis is a popular heuristic technique about making discoveries, dealing with studying the laws that govern creative thinking, and the formation of the methods that facilitate and systematize this type of action.

Conflicts of interest: None declared.

REFERENCES

1. Longhurst GJ, Stone DM, Dulohery K, et al. Strength, Weakness, Opportunity, Threat (SWOT) Analysis of the Adaptations to Anatomical Education in the United Kingdom and Republic of Ireland in Response to the Covid-19 Pandemic. Anat Sci Educ. 2020; 13(3): 301–311, doi: 10.1002/ase.1967, indexed in Pubmed: 32306550.

2. Tinga AM, de Back TT, Louwerse MM. Non-invasive Neurophysiology in Learning and Training: Mechanisms and a SWOT Analysis. Front Neurosci. 2020; 14: 589, doi: 10.3389/fnins.2020.00589, indexed in Pubmed: 32581700.

3. Wang J, Wang Z. Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis of China's Prevention and Control Strategy for the COVID-19 Epidemic. Int J Environ Res Public Health. 2020; 17(7), doi: 10.3390/ijerph17072235, indexed in Pubmed: 32225019.

4. Eizaga Rebollar R, García Palacios MV, Fernández Mangas MD, et al. Strengths-Weaknesses-Opportunities-Threats Analysis for a Pediatric Anesthesia Program. Pediatr Qual Saf. 2020; 5(1): e254, doi: 10.1097/pq9.0000000000000254, indexed in Pubmed: 32190799.

5. GÜREL E. SWOT ANALYSIS: A THEORETICAL REVIEW. Journal of International Social Research. 2017; 10(51): 994–1006, doi: 10.17719/jisr.2017.1832.