

OPINION

By Assoc. Prof. Petar Milchev Petrov, MD, PhD, DSc
Medical University "Prof. Dr. Paraskev Stoyanov"-Varna

Member of the scientific jury according to Order N109-508/18.11.2021 r. of the Rector of
Medical University-Varna

on the dissertation for the award of the educational and scientific degree „doctor“

Author: Samuela Georgieva Krasteva, MD

Topic: Digital follow-up of patients with substance use disorders

Scientific advisor: Prof. Hristo Vasilev Kozhuharov, MD, PhD

Brief presentation of the candidate

Dr. Samuela Krasteva was born on July 18, 1992 in Stara Zagora, Bulgaria. In 2017 she graduated from the Medical University "Prof. Dr. Paraskev Stoyanov", Varna. In 2017 she started working as a resident physician in Second Psychiatric Clinic at University Hospital "St. Marina"-Varna. Since February 2018 she has working as a teaching assistant at the Department of Psychiatry and Medical Psychology at the Medical University of Varna, and since July 2018 she has been enrolled as a full-time doctoral student at the same department. Since December 2021 she has been an official associate in the Digital Psychiatry Section of the European Psychiatric Association. Dr. Samuela Krasteva is a member of the BMA, LAMP Consortium and EPA.

Relevance

The topic of the dissertation focuses on two important and relevant issues - relapse in patients with substance use disorders and the use of digital methods in the field of psychiatry. The potential use of electronic means and innovative tools to target diagnostic and therapeutic barriers, such as the undoubted unsatisfactory treatment outcomes of addicted patients, still raises more questions than solutions and requires research efforts. Last but not least, the coincidence of the period of work with the pandemic of COVID-19, which accelerated the digitalization of medicine, is an additional circumstance that confirms the relevance of the topic.

Dissertation evaluation

The dissertation is written on 127 standard pages and illustrated with 34 figures and 5 tables. The literature review covers 258 sources, of which 254 are in English and 4 - in Bulgarian.

The introduction is short, clear and outlines the main topics in the dissertation. The literary review is detailed and skillfully presented. It is worth mentioning the impressive knowledge of the problem demonstrated by the doctoral student and the attempt to address the topic from both medical and ethical and technical aspects, using appropriate terminology.

The purpose of the dissertation research, as well as the objectives for its achievement, are formulated clearly and consistently.

The design of the study is adequate regarding the set objectives, although it has some shortcomings such as - lack of a standardized method for assessing digital literacy and lack of guidance for using the mobile application on a schedule basis. It is worth noting that the scientific work is preceded by intensive efforts aimed at the digital product itself. The study included 40 patients with substance use disorders who were followed for 3 months or until relapse and stratified according to their socio-demographic, clinical and digital characteristics. Given the high prevalence of relapse, although small, the sample allows reliable statistical analysis. The selection of statistic methods includes mainly those for non-parametric analysis, which is derived from the distribution of data. Although homogeneous, the methods used are sufficient for the purposes of the study.

The results are presented systematically and adequately illustrated. The applicability of digital methods among the Bulgarian patient population is proved and the attitudes towards directing them only to young patients are rejected. The presented results clearly show the lack of satisfactory informative value of socio-demographic and clinical data, including those monitored in dynamics, unlike the general manifestations of digital activity. According to the data, the cessation of activity and the occurrence of relapse are events with approximately simultaneous onset, which raises questions about the possibility of intervention.

The discussion critically presents an interpretation of the results obtained in the light of the own work and world literature. There is no lack of criticism of the shortcomings of the dissertation research.

Analysis of conclusions and contributions

There is a synchrony between the set goal, the formulated objectives and the presented conclusions.

I accept the contributions. Assessing the applicability of digital methods among the Bulgarian patient population, as well as the characterization of innovative markers for assessing their condition have real scientific and practical value and provide an innovative view of metadata in the field of digital psychiatry.

The doctoral student presents 1 article in Bulgarian in a peer-reviewed scientific journal and 1 participation in an international scientific forum.

The presented abstract (80 pages) contains the main chapters of the dissertation and meets the requirements for layout.

Critical notes and recommendations

The analysis and conclusions would have been more sound if there had been a larger sample size. The results should be presented with more intensive publishing.

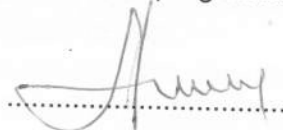
CONCLUSION:

The dissertation is an original research and contains original, confirmatory and applied contributions, thus meeting the requirements of the Academic Staff Development Act in the Republic of Bulgaria, the regulations of its application and the regulations of Medical University of Varna.

Through the presented dissertation, Dr. Samuela Krasteva shows in-depth knowledge of the topic, as well as the ability to form logical hypotheses, to conduct independent research with modern methodology, to analyze and discuss its results.

Taking into consideration all of the above, I confidently give my positive evaluation, and I recommend the esteemed scientific jury to award the educational and scientific degree "Doctor" of Dr. Samuela Georgieva Krasteva in doctoral program in psychiatry.

Date: 21 DEC 2021

A handwritten signature in black ink, appearing to read 'Petar Milchev', written over a horizontal dotted line.

Assoc. Prof. Petar Milchev Petrov, MD, PhD, DSc