

STATEMENT

By Prof. Mariana Dimitrova Arnaudova-Jekova, MD, PhD, Department of Psychiatry and Medical Psychology, Varna Medical University "Prof. Dr. Paraskev Stoyanov", based on the Order No. R-109-217/25.05.2022 of the Rector of the University and the protocol of the Scientific Jury meeting No. 1/ 06.06.2022.

Subject: Dissertation thesis "Screening questionnaire application in the assessment of alcohol-using patients in a clinical sample" for awarding the educational and scientific degree "Doctor" in the field of higher education 7. Healthcare and sports, professional direction 7.1. Medicine, scientific specialty "Psychiatry" at Varna Medical University "Prof. Dr. Paraskev Stoyanov".

Author: Dr. Svetla Milcheva Borisova

This opinion has been prepared in accordance with the requirements of the Academic Staff Development Act in the Republic of Bulgaria (ASDA), the Regulations for the Implementation of the ASDA and the Regulations for the Conditions and Procedures for the Acquisition of Scientific Degrees and the Holding of Academic Positions at MU-Varna.

Brief biography and data on the carrier development and qualification of the candidate

Dr. Svetla Milcheva Borisova completed her higher medical education in 2002 at the Medical University of Varna. She completed her specialization in psychiatry in 2012. From 2019 to 2022 she was a PhD student at the Department of Psychiatry and Medical Psychology at Varna Medical University. She worked as a resident doctor from 2008 to 2012 at the Second Psychiatric Clinic of the University Hospital "St. Marina" - Varna, then from 2013 to 2019 as an assistant - doctor in the same clinic. From 2019 to 2022 he is a PhD student at the Department of Psychiatry and Medical Psychology at Varna Medical University.

Additional qualifications: *project training "To develop brain science, to actively stimulate better treatment and to improve mental health" – Varna Medical University, Department of Psychiatry and Medical Psychology - 13.01.2012 - 15.01.2012; Training within the ECNP Mini-Symposium - 10.02.2012; Training on "Cognitive disorders in mental disorders"- Varna Medical University, Department of Psychiatry and Medical Psychology - 26.01.2013; Conference training "College of Private Psychiatry" - 21- 23.03.2013; Training within the annual conference of the Bulgarian Psychiatric Association -18 - 20.10.2013; Postgraduate school in CNS-16-17.05.14- Istanbul, Turkey.; Humphrey Fellowship Program 2017-2018, USARHAB 691 GR Counseling techniques class - Virginia Commonwealth University, USA; PSYC 671 GR Independent Readings and Research - Virginia Commonwealth University, USA; SPSS Training, Virginia Commonwealth University, USA; Chief Resident Immersion Training, Boston, Boston Medical Center, 2018; Refining Reading, Writing and Critical thinking skills and Research Paper class - UC Davis, USA.*

She has very good computer skills. She speaks other foreign languages besides English. Member of BMA, BPA, NIDA, CPDD.

Topic relevance

Alcohol use in the categories of harmful use and dependence is undoubtedly a significant multifactorial problem, affecting people of different ages, genders, and social classes. The extension of the age range towards youth (even puberty) and late adulthood places alcohol use among the most prevalent psychiatric problems. There is a paucity of research objectively assessing their nature, highlighting which factors contribute to their development and persistence.

Therefore, I believe that the dissertation thesis of Dr. Svetla Milcheva Borisova has not only theoretical but also clinical and practical significance.

Structure of the dissertation

The structure of the dissertation meets the requirements specified in the Regulations for the conditions and procedure for the acquisition of scientific degrees and academic positions at Varna Medical University. The text is written in 166 standard pages and includes 29 figures, 45 tables, and a bibliography of 156 references, of which 16 are in Cyrillic and 140 in Latin. There are the following sections: introduction, literature review (discussing the topicality of the issues), aim, objectives, hypotheses, methodology, research results, discussion of results, conclusions, contributions, and list of sources used.

Introduction

The importance of the problem for individuals, families, and society is highlighted. It is stressed that the pervasiveness of the problem, the high mortality rate and the range of physiological, psychological, and social consequences create a need for active prevention, including early detection and timely interventions.

Literature review

The literature review is extensive, and informative enough, but needs some structuring and centering on the main objective- validation of the AUDIT screening methodology used to identify cases of harmful alcohol use and alcohol dependence. The author presents data on the alcohol problem globally and nationally while convincing us of its importance. Harmful use and dependence are seen as multilayered phenomena. It is pointed out that alcohol is one of the most used substances worldwide, which has the capacity to cause dependence, but its legal use in most countries gives it a special place among the group of substances with country-specific regulations. The concept of a standard drink is set out in some detail. A variety of patterns of alcohol consumption are presented in terms of moderate-risk and high risk and according to different classifications. A large proportion of the thesis is devoted to the process of affecting brain structures from alcohol use to dependence. A considerable proportion is devoted to the impact of anxiety on alcohol use in a pandemic context and benefits and harms are derived. Epidemiological aspects of alcohol use are presented in WHO reports, studies, and publications abroad and in Bulgaria.

The last ten pages are devoted to the Alcohol Use Assessment Questionnaires, as this is the subject of the study. The Alcohol Use Disorders Identification Questionnaire-AUDIT, which is applicable both as a self-assessment and in the form of a clinical interview by a professional, is presented in a comprehensive manner. The questionnaire has been translated into English and is in use but has not been validated and its screening value has not been confirmed. The questionnaire includes 10 questions grouped into 3 items. Scores are reported on a point-by-point basis with a cutoff of 8 points above which use is risky. The

following groups emerged when completing the questionnaire- persons with high-risk alcohol consumption; persons with risky alcohol consumption; persons with harmful alcohol consumption.

Another questionnaire that is described is the CAGE Questionnaire.

The literature review concludes with the importance of screening using the Alcohol Use Disorders Identification Test (AUDIT) and interventions. It is highlighted that validation of the questionnaire would yield more accurate screening and comparability of results with global standards, more accurate assessment, and targeted interventions.

Aim

Validation of the AUDIT screening methodology is used to identify conditions associated with risk alcohol use, harmful use, and dependence.

Objectives

The main stages of the study to achieve the set aim are divided into 2 separate objectives:

1. To establish the factor structure of the screening instrument for the Bulgarian population.
2. To conduct external and internal validity analyses of the questionnaire, as well as analyses to demonstrate the screening value of the questionnaire in comparison to other screening questionnaires identifying alcohol-related conditions.

Four hypotheses are also formulated in relation to the main hypothesis concerning the factor structure of the Questionnaire.

Methodology

Participants were divided into two main groups – individuals with harmful alcohol use/dependence (33 participants) and a control group (128). Two types of methods were used: data collection and statistical.

The screening tests/questionnaires used are:

The AUDIT Alcohol Use Disorders Identification Test, AUDIT-C, CAGE questionnaire, and Stait Trait Anxiety Inventory.

Advanced statistical analyses were used to process the data.

Research results

Dr. Milcheva shows a very good knowledge of the methodologies used and discusses in detail the results obtained with consideration of their significant practical application, which is in fact the aim of the dissertation and its advantage, and which she then summarizes in the conclusions, 10 in total. At the same time, she has compared them with data from world literature. The results could be summarized in a better way by their logical sequence and topic.

As a limitation of the study, the PhD student correctly points out that it is aimed at validating one methodology - the **AUDIT Alcohol Use Disorders Identification Test**, compared with the others mentioned above, probably due to some theoretical considerations. Other problems and limitations of the research are discussed (time interval, pandemic setting, a small number of subjects from Varna region only), etc. Despite the small number of persons included in the study, the correlations found between the **AUDIT and CAGE** screening tests **allow** the **AUDIT** (and **AUDIT-C**) methodology to be used for screening **for conditions of risky, harmful alcohol use and dependence**.

Regarding some recommendations:

The surveyed persons are only from the Varna region and have no representation for the country. The literature review should be more concise and centered on the topic and aim of the study. Presentation and discussion of results - to be more structured and summarized. Dr. Milcheva extends very extensively on statistical research as theory and results. My opinion is that there is a need to be concise in terms of the presentation of information in all parts of the research.

Contributions

Dr. Svetla Milcheva Borisova has highlighted 3 contributions - assessment of the psychometric properties of the Alcohol Use Disorders Identification test - AUDIT; validation of the Alcohol Use Disorders Identification Test - AUDIT methodology for the Bulgarian population; estimation of the prevalence of risky and harmful use in the examined sample of healthy individuals.

Summary evaluation of the thesis

The study is well designed and implemented. The presentation style could have been concise. There is a logical connection between the different parts of the dissertation. The dissertation demonstrates that Dr. Svetla Milcheva Borisova possesses in-depth theoretical knowledge and the skills to conduct independent research. The abstract meets the requirements and reflects the essence of the dissertation text accurately enough. The publications on the dissertation topic also meet the requirements. They are three in total and in one is the first author.

Conclusion

The peer-reviewed dissertation fully meets the requirements for the award of the educational and scientific degree "**Doctor**" at Varna Medical University. Therefore, I confidently give it a positive evaluation and I recommend to the esteemed Scientific jury to vote positively for the award of the educational and scientific degree "**Doctor**" in the scientific specialty "Psychiatry" to **Dr. Svetla Milcheva Borisova**.

23. 06.2022

Varna

(Prof. Dr. M. Arnaudova, MD, PhD)

