

Dr hab. n. o. zdrowiu Agnieszka Młynarska, Prof. SUM

Katowice, 04.08.2022

Zakład Gerontologii i Pielęgniarstwa Geriatrycznego,

Katedra Pielęgniarstwa

Wydział Nauk o Zdrowiu

Śląski Uniwersytet Medyczny



Review of doctoral dissertation in the field of medical sciences and health sciences

Siamala Sinnadurai title:

Integrated approach to cardiovascular risk factor management in patient with chronic coronary syndrome,

whose promoter is Prof. dr hab. n. med. Karol Kamiński

Cardiovascular diseases are currently one of the main causes of death in the Polish population. It is a vast group of diseases within which there are 100 ICD-10 codes. As a result the course, symptoms and diagnostic process are determined by a specific disease entity. According to the literature, the most common causes of cardiovascular diseases include: unbalanced diet, smoking, low physical activity, increased values blood pressure and cholesterol parameters as well as overweight or obesity. The current recommendations are consistent with the legitimacy of conducting preventive actions targeting both cardiovascular diseases, hypertension and hypercholesterolemia. Most of the attached recommendations indicate the need for health education in terms of risk factors, health effects and the risk of other diseases accompanying diseases of the cardiovascular system. In addition, the need for a separate implementation is relatively often emphasized an intervention aimed at modifying the patient's lifestyle. As part of this intervention, it is recommended detailed education and specialist counseling on modifiable elements of the style life, including: preventing overweight and obesity, minimizing excessive consumption alcohol and gradually increasing the level of physical activity.

Formal characteristics of the dissertation:

The doctoral dissertation presented for review a thematically coherent set of 2 scientific papers published in peer-reviewed medical journals:

1. Sinnadurai S, Sowa P, Jankowski P, Gasior Z, Kosior DA, Haberka M, Czarnecka D, Pajak



A, Setny M, Jamiolkowski J, Lapinska M, Kaminski KA. Effects of cardiac rehabilitation on risk factor management and quality of life in patients with ischemic heart disease: a multicentre cross-sectional study. Polish Archive Internal Medicine. 2021; 131: 617-625. doi:

10.20452/pamw.16019

IF: 3,27

MEIN: 140

2. Sinnadurai S, Sowa P, Jankowski P, Gasior Z, Kosior DA, Haberka M, Czarnecka D, Pajak A, Setny M, Jamiolkowski J, Sawicka-Smiarowska E, Kaminski KA. Recollection of Physician Information about Risk Factor and Lifestyle Changes in Chronic Coronary Syndrome Patients. International Journal of Environment Research and Public Health. 2022; 19 (11): 6416. doi:

10.3390/ijerph.19116416

IF: 3.39

MEIN : 140

The author attaches copies of 2 published original manuscript. In each of the manuscript included in the PhD cycle, she is the first author. As these are not monographs, the author has attached statements from all co-authors about their participation in the publication. The analysis of the declarations carried out does not raise any objections as to the significant participation of the PhD student. This part of the dissertation does not raise any formal objections. The total IF of the two manuscripts presented in the monothematic cycle is 6.66 and 280 points from the Polish Ministry of Science and Higher Education.

In the print submitted for review, the works included in the monothematic cycle were preceded and concluded with theses, which include a brief introduction, assumptions, aim, description of material and methods, research and analysis results, as well as a summary and conclusions. The doctoral student presents the general aim of the work, which is to evaluate secondary prevention strategies in patients with chronic coronary artery disease.

Additionally, 2 specific objectives are presented:

1. To study the impact of cardiac rehabilitation on risk factor management in a real-life multicenter registry of patients with ischemic heart disease.
2. To address potential characteristics associated with a patient's recollection of physician information and lifestyle changes in chronic coronary syndrome patients.



The results are briefly presented, but all details can be found in the attached publications. The presented conclusions correspond to the aim and research problems of the work. Abstract in Polish and English language are also included.

Substantive characteristics

In the first work in the series entitled "Effects of cardiac rehabilitation on risk factor management and quality of life in patients with ischemic heart disease: a multicenter cross - sectional study" the author presents the effectiveness of cardiac rehabilitation in a patient population enrolled in a cardiac rehabilitation in 14 cardiology centers. The study included 1012 patients from 4 geographical areas of Poland who met the inclusion criteria for the study. A follow-up visit was carried out in the study. Correct research tools were used in the study, and the questionnaires used are standardized and have correct psychometric values. The results of the doctoral student's research showed that most patients had an improved lifestyle after participation in cardiac rehabilitation, with the main identified long-term benefits being an increase in the rates of those giving up smoking and a better quality of life score in the physical domain.

The second work of the series "Recollection of Physician Information about Risk Factor and Lifestyle Changes in Chronic Coronary Syndrome Patients" concerns doctors reminding about risk factors and changes in the lifestyle of patients with chronic coronary syndrome. The final analysis included 946 chronic coronary syndrome patients after excluding 72 who did not complete the risk factor questionnaire during the face-to-face interview. The inclusion and exclusion criteria from the study are clearly described. Standardized research tools adequate to the conducted research were used in the study. The aim of the study was to assess the effectiveness of patient-doctor communication by examining the frequency of occurrence and potential determinants related to recalling information about risk factors related to lifestyle by patients with coronary artery disease. The results of the PhD student showed that the frequency of remembering information about risk factors by the patient was higher in patients with multiple comorbidities and that these patients significantly changed their health behavior.

As a reviewer, I have a question:

whether the minimum number of respondents in the sample was calculated.

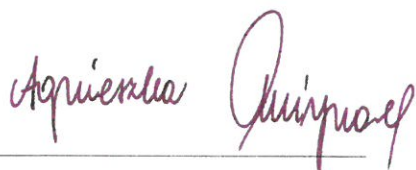
Summary of the review



Due to the fact that the results of the research conducted by the PhD student have already been published in peer-reviewed and prestigious scientific journals and have previously been thoroughly assessed by the reviewers of the journals in question, my role as a reviewer of the doctoral dissertation in assessing the substantive issues of the thesis is limited. However, this does not change the fact that in the case of all the above-mentioned publications, I do not find any factual errors. Moreover, in my opinion, the topic of the dissertation is important, the presented results are of practical importance, and the presented works have important elements of novelty.

To sum up, the submitted single-topic series of works has a logical structure and is substantially coherent. The methodology itself and data acquisition are correct and do not raise any doubts. This part of the dissertation does not raise any formal objections.

Doctoral dissertation of Siamala Sinnadurai entitled "Integrated approach to cardiovascular risk factor management in patient with chronic coronary meets the specified conditions" meets the conditions set out in art. 13 ust.1 ustawy z dnia 14 marca 2003 r. o stopniach naukowych i tytule naukowym oraz o stopniach i tytule w zakresie sztuki (Dz. U. Nr 64, poz. 595, z późn. zm.). The doctoral dissertation is an original solution to a scientific problem, the doctoral student has demonstrated theoretical knowledge in the discipline of medical and health science and has the ability to independently conduct scientific research. On this basis, I present to the Senate at the Medical University in Białystok application for admission of a PhD student to further stages of the doctoral procedure. At the same time, taking into account the high value of the doctoral dissertation, I would like to request it to be honored.



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