

REVIEW

By Prof. Dr. Sonya Koleva Toncheva, PhD, DSc

Director of Shoumen Subsidiary of Varna Medical University

Chairperson of the Scientific Council, under an Order by the Rector of Varna Medical University.

Regarding: PhD thesis for conferring an educational and scientific degree of PhD in field 7 'Health Care and Sport'; professional field 7.4., Public Health 7.1., Specialty - Health Care Management.

Based on an order No P-109-298 Dated 27.09.2019, by the Rector of Varna Medical University, I have been assigned to provide a review of the PhD thesis on: **MODELS FOR HEALTH CARE AND WELL BEING OF THE ELDERLY LIVING ON THEIR OWN** for conferring the educational and professional degree of PhD, to **Yanka Georgieva Markova-Dimitrova**, an assistant professor at the Department of Health Care, Veliko Turnovo Subsidiary of Varna Medical University 'Prof. Paraskev Stoyanov', a part-time PhD student with the Department of Health Care at Varna Medical University. Academic supervisor: **Prof. Silvia Borisova, PhD, DSc**.

All documents required under the Law on Development of the Academic Staff in the Republic of Bulgaria, the Regulations with it for development of the academic staff at Varna Medical University have been submitted.

1. Candidate's Career Profile

Yanka Georgieva Markova-Dimitrova – born on March, 11-th, 1970 in Svishtov. Graduated from the Institute of Medical Professionals with specialised secondary education 'Dr. Varban Genchev', Veliko Turnovo, with a major – nurse – general profile in 1988. In 1994 she finished her semi-higher education in the same major at the Medical Institute of Semi-higher education in Pleven. Acquired a Bachelor's degree (2009) and a Master's degree in 2011 – with a major – Health Care Management at Pleven Medical University. Graduated in 2015 under the Master's program Health Care Manager at Gabrovo Technical University. Yanka Georgieva Markova-Dimitrova's professional career and experience begins in 1988 as a nurse on the surgical ward at 'Dimitar Pavlovich', multiprofile hospital for active treatment in Svishtov, and later at the operating suite, the dialysis unit, she was a senior nurse on the surgical ward and the Intensive Care Unit. In 2012 she worked as a nurse in the Intensive

Care Unit and the unit of Orthopedics and Traumatology at ‚Stefan Cherkhezov‘ multiprofile hospital for active treatment in Veliko Turnovo. In 2014 she became a part-time lecturer at the Centre for postgraduate qualifications with Gabrovo Technical University. From 2015 - present, she is an assistant professor at Varna Medical University Prof. Dr. Paraskev Stoyanov’, Department of Health Care, Veliko Turnovo Subsidiary. She has more than 4 years of teaching experience, and trains nurse students at the Veliko Turnovo Subsidiary. She speaks Russian. Member of the Bulgarian Association of Health Care Professionals. Assistant professor Yanka Markova’s scientific interests are in the field of health care, pedagogy and health care management.

2. Evaluation of the theme’s topicality

Assistant professor Y. Markova has decided on an important issue, concerning the population of many countries; she has also identified the issues of the middle-aged and the elderly within the scope of the research conducted by her in Veliko Turnovo District. The link between the growing older population, the presence of the distinctive features for that age and the issues connected with the growing demand for medical care by these people, both in the pre-hospital and hospital treatment has been taken into account. The major issues related to the growing life span, and the issues arising in medical and social respect have been highlighted: *work and people at an advanced age; the role of the family and the accompanying difficulties upon providing care, because of work engagements, the home and the older person – providing conditions which facilitate self-care at home; nutrition of the middle-aged and the elderly, depending on the individual characteristics; a need for specialised geriatric care.*

The significance of the activities directed towards the development of the maximum abilities, depending on the patients’ individual physical, mental and social skills with the aim to improve the quality of life and independence of the elderly has been analysed.

The in-depth and comprehensive research, as well as the methodology used, yield results which could prove beneficial for seeking ways to provide complex, long-term care by nurses, and the implementation of the approaches suggested by the authoress - ‘Models’ for tackling the problem, could be important to ‘managing a case’ in the out-of-hospital care (close to the middle-aged and old person in their natural environment, their home). The clarification of the nurse’s involvement in providing long-term care to this important, high-priority group, and the author’s models suggested, make the issue chosen for research and analysis most topical.

3. Assessment of the results

The PhD thesis includes 175 pages, 10 tables and 65 figures, 9 enclosures. 184 literature references have been cited, of which 124 in Cyrillic, 48 in Latin and 12 Internet sources. Structurally, the thesis encompasses five chapters – *review of the literature, methodology and organisation of the research, her own results and discussions, practical approaches to reducing labour turnover, conclusions, contributions and recommendations*. The structure and content of the PhD thesis are logically connected with the aims and tasks set, which have been consistently solved in the individual paragraphs of the three main chapters.

Assistant professor Markova has set the aim of the research clearly, and seven tasks have been assigned for its achievement. Four working hypotheses have been formulated, taking into account the need for optimising health care of the elderly at home.

The object of the research are nurses and doctors, social workers and the elderly from various structures, providing and using care and services - hospital and out-of-hospital structures, hospices, nursing homes, etc. in Veliko Turnovo District. **640** people have been polled, distributed in three groups:

I. **Medical professionals**, working in the out-of-hospital and hospital care – 200

II. **Social workers**, practising in the field of social services – 40

III. **Elderly**, people aged over 65, who need home care – *100 people living on their own, and 300 patients*.

The signs of each logical unit and the criteria for admission to the research and the experiment have been detailed. The tools, specifically developed for the purposes of the research (inquiry cards and informed consent), as well as validated tools have been presented.

The eight stages of the research have been detailed, by specifying the time and place of the application of the respective tools. The design of the experiment conducted by the PhD student, through the model for providing care at home, developed by her, has also been detailed. The cross section contains an experimental group of 31 people, and a control group of 32 people. The following principles have been observed during the experiment: ***control, randomisation, repetitions***. The research methods have been carefully selected ***a documentary and inquiry method, observation and experiment***, which guarantee plausibility of the results obtained. Adequate statistical methods have been applied for processing the primary information.

Chapter One contains a theoretical rationale of the problem. The biological and social aspects of aging, global and demographic challenges in Bulgaria related to aging, providing

care to the middle-aged and the elderly, the needs of the aged to sustain their quality of life have been examined. In detail assistant professor Yanka Markova has presented the international experience of organising the care of the middle-aged and the elderly at home, in countries such as Japan, Poland, Romania, Slovakia, Austria, Germany, Holland, Croatia, etc, and a method for assessing the well-being and the quality of life. What makes an impression is the fact that the author is well acquainted with the problem through the various author's concepts, and an ability to analyse the literature available, and the ability to express her own opinion.

Chapter three of Y. Markova's PhD thesis contains an analysis of the Organisation of the medical and social services in Veliko Turnovo District, building on the results of the demographic characteristics of the district. An important document of regional importance has been discussed – *A municipal strategy for the development of the 2016-202 social service period, which outlines the approaches to providing care of the elderly in the District of Veliko Turnovo.*

Drawing upon the analytical judgement, assistant professor Y. Markova organises the research, which proves the following results:

- **A considerable part of the elderly living on their own have difficulty in caring for themselves.** One fourth of them need help to maintain their personal hygiene, 37% need help to dress and undress, one out of four (43%) – have difficulty walking outside their home, over half of the respondents need someone else to do their shopping (57%), and cleaning their home (66%).
- **The middle-aged and elderly who live on their own face huge difficulties in communicating with the various institutions.** The relative share of the elderly from small towns and villages is the highest (84.0 %), followed by those from Veliko Turnovo (80.0 %);
- **The ability to get various medical services varies for the towns and villages.** City dwellers have better opportunities for specialised medical treatment, dental services, visits at home by a doctor or a nurse, laboratory tests, medication and extra technical facilities, whereas this is difficult for the people in small towns and villages;
- To get various medical services, almost 30% of the elderly living on their own seek help from relatives, and approximately 25% turn to the emergency;

- Regarding the degree of satisfaction with the medical service, the users put the GPs in the first place – 83.3%, the nurse in the second place – 68.5%, and a medical specialist in the third place – 55.6%;
- Of the social services, paying household bills is in greatest demand (58%), being accompanied (to a doctor – 24%), receiving a pension (11%), help for establishing a contact with various institutions. Among the people who provide social assistance is the nurse as well;
- According to 31.5% (n=63) of the medical professionals, a change is needed in the current legislation for greater efficiency, and a little over half of them have no opinion – 62%.
- In the opinion of the specialists, the needs of the elderly living on their own are complex – medical care, social assistance, help with everyday activities, help with the household tasks;

Based on the research, the PhD student identifies the crucial biological and psycho-social determinants of the quality of life of the middle-aged and the elderly for home care.

The data obtained form the basis for the development of a bio-psycho-social model for activating the care of the middle-aged and the elderly at home. To do this, an assessment was performed of the activities which in the highest degree lead to the best possible quality of life by meeting the established biological and psycho-social determinants.

I find slight weak points: with certain figures (fig. 17 and 18), the analysis is missing or is insufficient, the figures' design style is uneven, also lapses in the style of the texts and failure to meet the criteria for scientific writing.

In chapter four of the PhD thesis, the authoress, drawing on the analysis of the results of a polled opinion and an experiment conducted, suggests *A Model for Health Care and Well Being of the Elderly Living on Their Own*, as well as specific nurse's documentation, tracking the elderly's condition at home. The model merits attention as it has been officially approved, and the benefits of its implementation proven. The results of a polled opinion of the elderly regarding health self-assessment, the impact of pain on the quality of life, the need for education and awareness and maintaining personal hygiene etc., have also been presented. Developments: *practical approaches* to educating the elderly living on their own, *Model of decision making* upon care provided by a nurse, the physical and therapeutic needs of the old person have been outlined, and the nurse's interventions have

been specified for the implementation of the authoress's model. Assistant professor Markova has suggested also *Practical steps in implementing a Model for health care and well-being of the elderly living on their own. The nurse's tasks of supporting the elderly* have been presented in a diagram.

In **Chapter Five**, building on the correctly conducted research, assistant professor Y. Markova draws eight conclusions, which have been clearly and exhaustively formulated, based on scientifically proven results.

Recommendations have been made, based on proven scientific results, precisely addressing institutions and structures, of which more relevant to the problem are:

The Ministry of Health and the Ministry of Labour and Social Policy

- to establish rules of better health care of the elderly;*
- to provide favourable conditions for regulating and financing the activities of the nurse in out-of-hospital care;*
- to approve a Model of integrated long-term care of the elderly at home;*

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- to set up a work group for establishing rules of good practice upon providing health care of the elderly at home*
- to discuss and suggest Models of taking care of the elderly.*

4. Assessment of contributions

The research results and the official approval of an author's model, the conclusions and recommendations formulated, outline contributions of *theoretical and cognitive significance and practical applied nature*, of which I accept the following:

Contributions of theoretical and cognitive significance

1. It is the first time the problem of providing medical and social care of the elderly living on their own in Veliko Turnovo District has been examined in detail.
2. A complex health and social approach to providing care of improving the elderly's health and well-being has been substantiated.
3. The biological and psycho-social needs of the middle-aged and the elderly in the absence of care at home have been identified.
4. Various aspects of the quality of life of the elderly living on their own in Veliko Turnovo District have been studied comprehensively.
5. Author's models have been developed for health and well-being care of the

elderly living on their own at home.

Practical Applied Contributions

A Model of decision making for planning care of the elderly living on their own.

1. Factors affecting the development and fulfilment of the plan for nursing care at home have been identified.
2. A nurse's information card and a protocol for the nurse's interventions as leading documents in providing care at home have been developed.
3. An author's model of the elderly home care, leading to the improvement of the quality of life has been officially approved.
4. A unified assessment of the needs of the elderly living on their own has been introduced to raise the possibilities and the innovative approaches to optimising home care.

The PhD thesis is sufficient in terms of volume and can be regarded as topical research with significant theoretical and practical contributions. I highly appreciate its original character, as well as the profound analysis, and think that it should be presented to the institutions to which the authoress sends recommendations, as well as be published at various scientific forums and in magazines to present the findings and results relating to health care which the nurse can provide to the elderly and contribute to the quality of life to those in need.

I accept the author's summary of the PhD thesis, which in terms of structure presents its substantial points. The PhD student's portfolio includes four full-text publications, connected with the theme of the PhD thesis, laid out evenly in the time of the thesis's development – 2016 – 2018. I recommend complete and accurate presentation of her own research product.

Assistant professor Y. Markova meets entirely the requirements laid out by Varna Medical University for conferring the educational and scientific degree of PhD.

5. Personal impressions

I have known the PhD student for about five years, and I think that the practical experience gained, as well as her teaching skills have been instrumental in her decision to choose a problem which is topical and practical in the country, whose development promotes health care management at home. The skills acquired through continuous training considerably contribute to the PhD student's critical view of the problem under research in all

of its aspects. Full of initiatives, curious, cooperative and polite, assistant professor Y. Markova possesses very good skills for teamwork, and an ability to make independent and coordinated decisions, aimed at achieving a maximum effect. Her communication skills and her pursue of results and high work motivation are her distinctive features, which make her a good professional and researcher. She is respected both by her colleagues and students.

In conclusion: based on the professional development, her research and teaching achievements, and taking into consideration the criteria of the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Regulations with it and the Regulations for development of the academic staff at Varna Medical University, I give my positive assessment, and suggest to the respected Scientific Council that the PhD student **Yanka Georgieva Markova- Dimitrova**, with the theme of her PhD thesis **MODELS FOR HEALTH CARE AND WELL-BEING OF THE ELDERLY LIVING ON THEIR OWN**, should be conferred the educational and scientific degree of PhD, for 'Health Care Management', for the needs of the Department of Health Care, Veliko Turnovo Subsidiary.



30-th, September, 2019

Prof. Dr. Sonya Koleva Toncheva, PhD, DSc

Chair of the Scientific Council