

# Medical University "Prof. dr Paraskev Stoyanov" – Varna Sliven Department of Health Care

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### INDEPENDENT NURSING PRACTICE – OPPORTUNITIES AND CHALLENGES

#### **AUTHOR'S ABSTRACT**

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The dissertation was discussed by the Department Council of the Department of Health Care at the Sliven Branch of Medical University "Prof. Dr. P. Stoyanov" – Varna, and is directed for public defense before a scientific jury consisting of:

- 1. Prof. Maria Anastasova Semerdzhieva, MD, PhD
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The public defense will be held on September 19, 2025, at 12.00 o'clock in the virtual hall of the Webex electronic platform at Medical University – Varna in an open session of the Scientific Jury.

The defense materials are available at the Scientific Department of Medical University – Varna and published on the university's website.

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#### LIST OF ABBREVIATIONS

- OGPCHS OUTPATIENT GROUP PRACTICE FOR NURSING CARE
- APOZ ASSOCIATION OF PATIENTS WITH ONCOLOGICAL DISEASES
- AHCP- ASSOCIATION OF HEALTH CARE PROFESSIONALS
- BAHCP BULGARIAN ASSOCIATION OF HEALTH CARE PROFESSIONALS
- BMA BULGARIAN MEDICAL ASSOCIATION
- BRC BULGARIAN RED CROSS
- SG STATE GAZETTE
- VHI VOLUNTARY HEALTH INSURANCE
- DCC DIAGNOSTIC AND CONSULTATIVE CENTER
- SLLC SOLE LIMITED LIABILITY COMPANY
- LME LAW ON MEDICAL ESTABLISHMENTS
- HIA HEALTH INSURANCE ACT
- MDHAT MULTIDISCIPLINARY HOSPITAL FOR ACTIVE TREATMENT
- MDUHAT MULTIDISCIPLINARY UNITED HOSPITAL FOR ACTIVE TREATMENT
- MES MINISTRY OF EDUCATION AND SCIENCE
- MC MEDICAL CENTER
- NHIF NATIONAL HEALTH INSURANCE FUND
- NSI NATIONAL STATISTICAL INSTITUTE

- OE ORGANISATION FOR ECONOMICS
- OD OPERATION AND DEVELOPMENT
- EQD EDUCATIONAL QUALIFICATION DEGREE
- LLC LIMITED LIABILITY COMPANY
- PGE-POST GRADUATE EDUCATION
- AANP AMERICAN ASSOCIATION OF NURSE PRACTITIONERS
- ANA AMERICAN NURSES ASSOCIATION
- APRNS ADVANCED PRACTICE REGISTERED NURSES
- CRP CARDIOPULMONARY RESUSCITATION
- ICN INTERNATIONAL COUNCIL OF NURSES
- INP INDEPENDENT NURSING PRACTICE
- NP NURSE PRACTITIONER
- SWOT STRENGTHS, WEAKNESSES, OPPORTUNITIES, THREATS.
- TEMC TERRITORIAL EXPERT MEDICAL COMMISSION

#### INTRODUCTION

Population aging, the increasing prevalence of chronic diseases, epidemics and pandemics, rising clinical costs, scarce resources, rapidly developing technologies, and economic pressure create numerous threats and challenges to health systems both globally and in the Republic of Bulgaria. The shortage of medical professionals is becoming increasingly acute, further exacerbating the above problems and difficulties.

These challenges highlight the need to seek innovative approaches to meet the continuously growing societal demand for quality and effective health care. Despite the dramatic restructuring of the health system, the professional potential of nurses remains largely underutilized in efforts for change. Meanwhile, nurses are expanding their professional responsibilities and changing their careers to provide a variety of high-quality and effective health care services.

Independent nurses are in a position to provide care based on evidence, knowledge, skills, and nursing values, and to promote new contemporary concepts of health and healthcare.

In connection with all the above, and due to the lack of an independent, in-depth, and systematized study of the problem, the investigation of the opportunities and challenges related to independent nursing practices and outlining innovative approaches to optimize their activity has important scientific and practical significance.

### I. METHODOLOGY AND ORGANIZATION OF THE SCIENTIFIC STUDY

#### 1.1. Aim, objectives, and hypotheses of the study

**Aim:** To investigate the opportunities and challenges related to independent nursing practices and to outline directions for optimizing their activity.

#### **Objectives:**

- 1. To study and analyze available literature sources to clarify the theoretical state of the problem.
- 2. To conduct a comparative analysis of the regulatory framework in Bulgaria and other countries regarding requirements for establishment, functioning, financing of independent nursing practices, and documentation and systematization of information related to nursing care for patients.
- 3. To perform a SWOT analysis of the status and development of independent nursing practices in Bulgaria.
- 4. To explore the opinions of patients, nurses, and experts regarding the needs and attitudes of patients to use care provided by nurses with independent nursing practices, financing possibilities, and main challenges related to their implementation.
- 5. To study possibilities for regulatory financing of nursing activities and care provided by nurses in independent nursing practices.
- 6. To analyze the need for regulatory introduction of a unified electronic system for documenting and systematizing information related to nursing activities and care provided by nurses in independent nursing practices.
- 7. To investigate the need for additional training of nurses working through independent nursing practices.
- 8. To develop innovative approaches for organizing information related to nursing activities and care provided by nurses in independent nursing practices to increase awareness, optimize healthcare professionals' activities, and ensure continuity and coherence of patient care.
- 9. To prepare an expert assessment of the applicability of the developed innovative approaches for organizing information

related to nursing activities and care provided by nurses in independent nursing practices.

#### **Research hypotheses:**

- It is assumed that the main challenges for independent nursing practices are lack of information, lack of funding, and lack of a unified electronic system for documenting nursing activities and care.
- 2. It is assumed that the need to refine the regulatory framework in Bulgaria related to financing and documenting activities and care provided by nurses in independent nursing practices will be proven.
- 3. It is assumed that the majority of experts will support the regulatory introduction of innovative approaches enabling patient information, as well as planning, organizing, evaluating, monitoring, accountability, costing, and financing of nursing activities and care.

### 1.2. Subject, Object, Scope, and Organization of the Study Subject of the study:

The challenges facing independent nursing practices and the opportunities for optimizing nursing activities and patient care.

#### **Object of the study:**

Patients, nurses, and experts.

#### **Scope of the study:**

The study included 750 individuals, divided into the following groups:

- Patients who received nursing care in hospital and outpatient settings 350 persons;
- Nurses working in hospital and outpatient settings 350 persons;
- Experts nurses conducting their activities through independent nursing practices 50 persons.

Each patient and nurse completed an anonymous questionnaire after providing prior consent to participate in the study. Experts were interviewed after declaring their consent.

#### 1.2.1. Logical Units of the Study

#### **Logical units of the study:**

- First logical unit patient who received nursing care in hospital and outpatient settings;
- Second logical unit nurse working in hospital and outpatient settings;
- Third logical unit expert nurse conducting activities through independent nursing practice.

#### **Characteristics of the logical units:**

### Characteristics common to the first, second, and third logical units:

- Awareness regarding the existence of independent nursing practices.
- Patients' needs and attitudes toward receiving home care provided by nurses with independent nursing practices.
   Possibilities for financing care provided by nurses with
- independent nursing practices.
- Challenges related to care provided by nurses with independent nursing practices.
- Need for regulatory introduction of a unified electronic system for documenting and systematizing information related to nursing activities and care performed by nurses with independent nursing practices.
- Importance of the unified electronic system for documenting and systematizing information related to nursing activities and care performed by nurses with independent nursing practices for health professionals and patients.
- Role of the nurse conducting activities through independent nursing practice in providing comprehensive, quality medicalsocial care for patients at home.

#### Characteristics specific to the second and third logical units:

Opportunities and challenges related to independent nursing practice.

#### Characteristics specific to the second logical unit:

Attitudes toward establishing independent nursing practices.

#### Characteristics specific to the third logical unit:

 Opinions and assessment of the applicability of developed innovative models and tools for organizing information related to nursing activities and care performed by nurses with independent nursing practices to increase awareness, optimize health professionals' activities, and enable continuity and coherence in patient care.

#### **Inclusion criteria:**

- Individuals over 18 years old;
- Patients who received nursing care in hospital, outpatient settings, or independent nursing practices;
- Nurses working in hospital, outpatient settings, or independent nursing practices;
- Individuals who signed informed consent.

#### **Exclusion criteria:**

- Individuals under 18 years old;
- Patients who have not received nursing care in hospital, outpatient settings, or independent nursing practices;
- Nurses not working in hospital, outpatient settings, or independent nursing practices;
- Individuals who did not sign informed consent.

#### Sources of information collection:

- Available scientific literature;
- Available national and international regulatory documents;
- Opinions of patients who received nursing care in hospital, outpatient settings, or independent nursing practices, and nurses working in hospital, outpatient settings, or independent nursing practices.
- The studies were approved by the Ethics Committee for Scientific Research (EC-SR) of Medical University Varna (Protocol No. 12/27.03.2025).

#### 1.2.2. Time and Place of the Study

**Duration:** July 2021 – June 2025

The scientific study has a total duration of 4 years. It consists of theoretical and sociological research. The theoretical study focuses on analyzing available scientific literature, regulatory, and strategic documents related to the researched problem. The sociological study started after approval from the Ethics Committee for Scientific Research (EC-SR).

#### Place of the study:

• Healthcare institutions for hospital and outpatient care in the cities of Sliven, Varna, Veliko Tarnovo, and Shumen.

Ambulatories for individual and group health care practices in the cities of Asenovgrad, Burgas, Varna, Veliko Tarnovo, Vidin, Dulovo, Karlovo, Kardzhali, Lovech, Montana, Pazardzhik, Pleven, Plovdiv, Ruse, Silistra, Stara Zagora, Sofia.

Table 1. Stages of the study

| Stage                                 | Activity  | Description Scope<br>(Group - Number)   | Location  | Tools   |
|---------------------------------------|---|---|---|---|
| I.<br>from<br>07.2021<br>to 03.2025   | Researching the messages, the relevance and formulation of the problem:  • Formulating the topic, object and study of the subject of this;  • Defining goals, objectives and developing   |   | Varna   | Literary sources,<br>bibliographic<br>references,<br>articles,<br>publications,<br>statistical data,<br>reports,<br>references,<br>regulatory<br>documents, etc |
|                                       | hypotheses;  • • Selecting research methods and tools for its implementation.   |   |   |   |
| II.<br>from<br>04.2025<br>to 05.2025  | Fieldwork:  Conducting an anonymous survey to determine awareness of independent nursing practices, opportunities and challenges associated with them.  | Patients who received nursing care in hospital and outpatient care or in independent nursing practices – 350 people;     Nurses working in hospital and outpatient care – 350 people. | *Sliven; •Varna; •Veliko Tarnovo •Shumen.  *Sliven; •Varna; •Veliko Tarnovo •Shumen.  | Questionnaire<br>No. 1, 2<br>Questionnaire<br>for conducting a<br>semi-structured<br>interview<br>(Appendix<br>No. 4)   |
|                                       | ❖ • Conducting a semi-<br>structured interview with<br>experts, in order to<br>identify the opportunities<br>and challenges related to<br>independent nursing<br>practices and the<br>applicability of the<br>proposed innovative<br>models for<br>implementation in<br>practice. | 3. Experts - Nurses carrying out their activities through independent nursing practice – 50 people.   | Asenovgrad<br>Burgas, Varna,<br>Veliko Tarnovo,<br>Vidin, Dulovo,<br>Karlovo,<br>Karlovo,<br>Kardzhali,<br>Lovech,<br>Montana,<br>Pazardzhik,<br>Pleven,<br>Plovdiv, Ruse,<br>Silistra, Stara<br>Zagora, Sofia. |   |
| III.<br>from<br>05.2025<br>to 06.2025 | Data processing and analysis  |   | Varna   | SPSS v. 20.0  |
| IV.<br>until<br>06.2025               | Description of results  |   | Varna   |   |
| V. 06.2025                            | Drawing up conclusions and contributions. Formatting the dissertation .   |   | Varna   |   |

#### **Organization and Bodies of the Study**

The majority of the study was conducted independently by the doctoral student. When surveying the opinions of patients and nurses

in healthcare facilities for inpatient and outpatient care, collaboration with head and senior nurses was also utilized. All selected collaborators were previously informed about the purpose and methodology of the study and were trained to work with the research tools.

#### 1.3. Methods of the Study

To achieve the aim and objectives, the following methods were used:

#### 1.3.1. Documentary Method

The documentary method was used to analyze literary sources, documents, and regulatory acts describing the researched issues.

#### 1.3.2. Sociological Method

- Direct anonymous individual survey regarding awareness of independent nursing practices, related opportunities and challenges, targeting:
- Patients who have received nursing care in inpatient and outpatient settings 350 individuals;
- Nurses working in healthcare facilities for inpatient and outpatient care 350 individuals;
- Semi-structured interview with experts nurses practicing through independent nursing practices, aiming to establish the experts' opinions and assessments regarding the main challenges facing independent nursing practices, possibilities for addressing them, and expert evaluation of the applicability of the developed innovative approaches for organizing information related to nursing activities and care provided by nurses in independent nursing practices to improve awareness, optimize the activities of healthcare professionals, and ensure continuity and coherence in patient care.

#### 1.3.2. Statistical Methods

- Descriptive analysis to determine the mean levels and variations in quantitative variables and absolute and relative values in qualitative variables;
- Parametric methods for hypothesis testing (Student's t-test);
- Non-parametric methods for hypothesis testing;

- Correlation analysis to examine the relationship between observed phenomena (Pearson's r; Spearman's  $\rho$ ; Contingency C); Statistical significance of results at p < 0.05;
- Tabular and graphical methods for data presentation simple and multidimensional tables; linear and bar charts.

Statistical analysis of the data was performed using the professional statistical software SPSS v. 20.0.

#### 1.4. Study Tools

A proprietary set of tools was developed for conducting the survey among respondents: survey forms and a questionnaire for the semi-structured interview.

#### **1.4.1.** Direct Anonymous

Individual Survey To study the opportunities and challenges related to independent nursing practices and the need to outline directions for optimizing their activities, a survey method using a direct anonymous questionnaire was employed. Survey Form No. 1 – investigates the opinions of patients who have received nursing care in inpatient and outpatient settings. It includes 27 questions, of which 9 are closed, 16 are semi-closed, and 2 are identifying. Survey Form No. 2 – investigates the opinions of nurses working in healthcare facilities for inpatient and outpatient care. It includes 26 questions, of which 11 are closed, 12 are semi-closed, and 3 are identifying.

#### 1.4.2. Semi-Structured

Interview A qualitative study was conducted through semistructured interviews with a total of 50 experts on the opportunities and challenges related to independent nursing practices and the applicability of the proposed innovative models for introduction into practice.

#### II. RESULTS AND DISCUSSION

### **2.1.** Results and Analysis from the Sociological Survey Conducted among Nurses, Patients, and Experts

### **2.1.1.** Characteristics of the surveyed respondent groups Characteristics of the Surveyed Patients

The study examined the opinions of 350 patients treated in healthcare facilities for inpatient and outpatient care. Of all participating patients, 280 were hospitalized, and 70 were treated as outpatients. At the time of the study, 75.5% of all patients in the structures of outpatient and inpatient care were covered.

The study involved patients aged 18 to 91 years. The average age of the surveyed patients was  $50.6 \pm 15.6$  years. The majority of patients were in the age group 41 to 50 years (22.3%), followed by those aged 31 to 40 years (20.9%). The predominance of patients in the 41 to 50 age group indicates a worrying trend of a younger population of patients with diseases for which they sought medical help in outpatient and inpatient care (Table 2).

The study of the place of residence of the surveyed individuals is important for comparing their access to healthcare. More than half of the patients live in a large city (55.7%), 28.9% in a small town, and the smallest share are those living in a village (15.4%) (Table 2). The study of patients by gender is also important for examining the need for care provided by independently practicing nurses among different genders. The data show that the distribution of patients by gender is uneven – the majority of participants in the patient group are female (75.7%); n = 265, and 85 are male (24.3%) (Table 2).

The survey included a question about education, as it provides guidance on whether there is a relationship between education and patients' needs, their access to nursing care, and their opinions regarding the financing of independent practices, challenges, and opportunities for improving the quality of care. The data show that the largest share of patients have secondary education (45.4%), followed by those with higher education (34.0%). The share of patients with semi-higher (7.4%) and primary education (6.0%) is approximately the same, and the smallest share is those without education (0.3%). It is noteworthy that among the patients, there are also those with higher medical education (6.3%), which suggests better awareness of most aspects related to care (Table 2).

The presence of diseases is related to the patient's experience regarding all aspects of the need for care and treatment in general, including care provided by medical specialists with independent nursing practices, and determines the patient's opinion on the studied issue. It is interesting to note that the majority of patients in our sample do not have chronic diseases (72.9%), while the remaining 27.1% confirm the presence of a disease (Table 2).

In this regard, in view of studying the need for care provided by a nurse with an independent practice in the long term, it is of interest to examine whether the patients in the sample have established and proven permanent reduced working capacity with a disability established by the Territorial Expert Medical Commission (TEMC). Again, similar to the answers to the previous question, the majority of patients participating in the study do not have established and proven permanent reduced working capacity with a TEMC decision (84.9%), while the remaining 15.1% confirm the presence of such a decision (Table 2).

For the same reason, the distribution of respondents regarding whether they live alone or not was also studied. The majority of surveyed individuals state that they do not live alone (79.1%), and only one-fifth of patients confirm that they live alone (20.9%) (Table 2).

In view of studying the need for nursing care provided by health professionals with independent practice, it is also of interest to ask whether patients use social services. The majority of patients do not use social services (94.3%), and only 5.7% of the patients confirm that they are users of such a service. (Table 2).

Table 2. Characteristics of the studied patients

| Socio-demographic characteristics | Characteristics                               | n   | %      |  |
|-----------------------------------|---|-----|--------|--|
| Age                               | Average age ( $\pm$ SD) 50,6 $\pm$ 15,6 years |     |        |  |
|                                   | untill 30 years of age                        | 37  | 10,6%  |  |
|                                   | 31 – 40                                       | 73  | 20,9%  |  |
|                                   | 41 - 50                                       | 78  | 22,3%  |  |
|                                   | 51 - 60                                       | 57  | 16,3%  |  |
|                                   | 61 - 70                                       | 67  | 19,1%  |  |
|                                   | above 70 years                                | 38  | 10,9%  |  |
|                                   | Общо  | 350 | 100,0% |  |
| Gender                            | Male  | 85  | 24,3%  |  |
|                                   | Fimale  | 265 | 75,7%  |  |
|                                   | Total   | 350 | 100,0% |  |
| Place of residence                | Big city                                      | 195 | 55,7%  |  |
|                                   | Small town                                    | 101 | 28,9%  |  |
|                                   | Village                                       | 54  | 15,4%  |  |
|                                   | Total   | 350 | 100,0% |  |
| Education                         | I have no completed                           | 1   | 0,3%   |  |
|                                   | education                                     |     |        |  |

|                  | Primary        | 21  | 6,0%   |
|------------------|----------------|-----|--------|
|                  | Secondary      | 159 | 45,4%  |
|                  | Semi-higher    | 26  | 7,4%   |
|                  | Higher         | 119 | 34,0%  |
|                  | Higher medical | 22  | 6,3%   |
|                  | education      |     |        |
|                  | Total          | 350 | 100,0% |
| Patients with    | They have      | 95  | 27,1%  |
| chronic diseases | They have not  | 255 | 72,9%  |
|                  | Total          | 350 | 100,0% |
| Patients with    | They have      | 53  | 15,1%  |
| TEMC decision    | They have not  | 297 | 84,9%  |
|                  | Total          | 350 | 100,0% |
| Living alone     | Yes            | 73  | 20,9%  |
|                  | No             | 277 | 79,1%  |
|                  | Total          | 350 | 100,0% |
| Patients using   | Yes            | 20  | 5,7%   |
| social services  | No             | 330 | 94,3%  |
|                  |                |     |        |

#### **Characteristics of the Surveyed Nurses**

The study included 350 nurses working in healthcare institutions in both inpatient and outpatient care. The surveyed nurses represent 82.5% of all nurses currently employed at the time of the study.

The average age of the surveyed healthcare professionals is 47.9 years ( $\pm$  13.3 years). The largest proportion of nurses are aged between 51 and 60 years (28.9%), followed by those aged 41 to 50 years (25.1%), and 16.0% are in the age range of 61 to 70 years. These data are quite indicative and testify to the aging of the nursing workforce. (Table 3).

The majority of the surveyed nurses are women (30%). Most nurses work in inpatient healthcare institutions (86.3%), about one in ten nurses practice in outpatient healthcare institutions (10.3%), and

3.4% indicate other healthcare facilities. The average length of service of the nurses is 27.9 years  $\pm$  14.9 years. The largest share comprises those with professional experience ranging from 31 to 40 years, one fifth have between 21 and 30 years of experience, and a little more than a quarter have up to 10 years of experience. As seen from the data presented, the majority of nurses participating in this study have extensive professional experience, which suggests a deep understanding of the nursing profession in all its aspects – duties, rights, activities, roles, and functions (Table 3).

The largest share of nurses hold a Bachelor's degree in Nursing (27.7%), followed by those with a post-secondary education (25.7%), and 16.0% have a higher education as Specialists. It is noteworthy that among the surveyed nurses there are also those with a Bachelor's degree in Health Care Management (7.7%), a Master's degree in Health Care Management (13.4%), a Master's degree in other specialties (4.0%), and three of the participating nurses hold a Doctoral degree. These results indicate a high level of professional competence among some of the surveyed nurses and suggest awareness and experience regarding the researched issue (Table 3).

Table 3. Characteristics of the surveyed nurses

| Socio-demographic | Characteristics                            | n   | %      |
|-------------------|--|-----|--------|
| characteristics   |  |     |        |
| Age               | Average age $(\pm SD) 47.9 \pm 13.3$ years |     |        |
|                   | 21 - 30                                    | 57  | 16,3%  |
|                   | 31 - 40                                    | 43  | 12,3%  |
|                   | 41 - 50                                    | 88  | 25,1%  |
|                   | 51 - 60                                    | 101 | 28,9%  |
|                   | 61 - 70                                    | 56  | 16,0%  |
|                   | over 70 years                              | 5   | 1,4%   |
|                   | Total                                      | 350 | 100,0% |
| Gender            | Male                                       | 8   | 2,3%   |
|                   | Fimale                                     | 342 | 97,7%  |
|                   | Total                                      | 350 | 100,0% |
| Workplace         | Outpatient care facility                   | 36  | 10,3%  |

|                 | Hospital care facility                              | 302 | 86,3%  |  |
|-----------------|---|-----|--------|--|
|                 | Other   | 12  | 3,4%   |  |
|                 | Total   | 350 | 100,0% |  |
| Work experience | Average work experience ( $\pm$ SD) 27,9 $\pm$ 14,9 |     |        |  |
|                 | untill 10 years                                     | 93  | 26,6%  |  |
|                 | 11 - 20   | 57  | 16,3%  |  |
|                 | 21 - 30   | 70  | 20,0%  |  |
|                 | 31 - 40   | 94  | 26,9%  |  |
|                 | 40 - 50   | 36  | 10,3%  |  |
|                 | Total   | 350 | 100,0% |  |
| Education       | Secondary specialized                               | 16  | 0,0%   |  |
|                 | Semi-higher   | 90  | 25,7%  |  |
|                 | Higher specialist                                   | 56  | 16,0%  |  |
|                 | Higher Vocational                                   |     |        |  |
|                 | Certificate "Bachelor",                             |     |        |  |
|                 | specialty "Nurse"                                   | 97  | 27,7%  |  |
|                 | Higher Education                                    |     |        |  |
|                 | Qualification "Bachelor",                           |     |        |  |
|                 | specialty "Health Care                              |     |        |  |
|                 | Management"   | 27  | 7,7%   |  |
|                 | Higher education                                    |     |        |  |
|                 | qualification "Master" in a                         |     |        |  |
|                 | specialty other than                                |     |        |  |
|                 | "Health Care  |     |        |  |
|                 | Management"   | 14  | 4,0%   |  |
|                 | Higher Education                                    |     |        |  |
|                 | Institution "Master"                                |     |        |  |
|                 | specialty "Management"                              |     | 12.424 |  |
|                 | health care"  | 47  | 13,4%  |  |
|                 | Higher National                                     |     |        |  |
|                 | Vocational Training                                 |     | 0.00/  |  |
|                 | Institute "Doctor"                                  | 3   | 0,9%   |  |
|                 | Total   | 350 | 100,0% |  |

#### **Characteristics of the Surveyed Experts**

The study included 50 experts – medical professionals working in outpatient clinics for individual and group health care practices. They represent 65.5% of all medical professionals currently employed at the time of the study.

The average age of the surveyed experts is 47.8 years ( $\pm$  7.8 years), with a minimum age of 31 and a maximum age of 65. The largest proportion of experts is in the age group 46–50 years (44.0%), followed by those over 55 years old (24.0%) (Table 3). These data align with the increasingly concerning trends of population aging, which also affect the experts as part of the nursing profession. All experts participating in the study are female (100.0%) (Table 4).

The average length of service of the experts is 25.0 years  $\pm$  8.8 years. The largest share of experts have 21 to 30 years of experience (52.0%), 22.0% have over 30 years of experience, and one fifth have 11 to 20 years of experience (Table 4). These results demonstrate extensive professional experience and suggest a deep understanding of the importance of the nurse's role in the overall process related to the activities of independent nursing practices.

Of particular interest are the data regarding whether the experts, besides working in independent nursing practice, also have a second job. One third of the experts work only in independent nursing practice (70.0%). Two thirds of the experts (30.0%) confirm having a second job. The majority of those with a second job work additionally in a hospital healthcare facility (71.4%), while 17.1% work in an outpatient healthcare facility (Table 4).

Table 4. Characteristics of the surveyed experts

| Socio-demographic charac | cteristics  | n              | %      |  |
|--------------------------|---|----------------|--------|--|
| Age                      |   |                |        |  |
|                          | to 40 years   | 11             | 22%    |  |
|                          | 41 – 45   | 2              | 4%     |  |
|                          | 46 – 50   | 22             | 44%    |  |
|                          | 51 – 55   | 3              | 6%     |  |
|                          | over 55 years                                       | 12             | 24%    |  |
|                          | Total   | 50             | 100,0% |  |
| Gender                   | Fimale  | 50             | 100,0% |  |
| Work experience          | Average work experience (± SD)                      | $25,0 \pm 8,8$ | years  |  |
| _                        | to 10 years   | 3              | 6,0%   |  |
|                          | 11 – 20   | 10             | 20,0%  |  |
|                          | 21 – 30   | 26             | 52,0%  |  |
|                          | Over 30 years                                       | 11             | 22,0%  |  |
|                          | Total   | 50             | 100,0% |  |
| Education                | Postgraduate  | 4              | 8,0%   |  |
|                          | Higher specialist                                   | 1              | 2,0%   |  |
|                          | Higher secondary vocational                         |                |        |  |
|                          | education "Bachelor", specialty                     |                |        |  |
|                          | "Nursing"   | 17             | 34,0%  |  |
|                          | Higher secondary vocational                         |                |        |  |
|                          | education "Bachelor", specialty                     |                | 10.00/ |  |
|                          | "Healthcare Management"                             | 6              | 12,0%  |  |
|                          | Higher secondary vocational education "Master" in a |                |        |  |
|                          | specialty other than UZG                            | 6              | 12,0%  |  |
|                          | Higher secondary vocational                         | U              | 12,070 |  |
|                          | education "Master" specialty                        |                |        |  |
|                          | "Healthcare Management"                             | 16             | 32,0%  |  |
|                          | Total   | 50             | 100,0% |  |
| Availability of a second | Yes   | 35             | 70,0%  |  |
| job                      | No  | 15             | 30,0%  |  |
|                          | Total   | 50             | 100,0% |  |
| Second job               | Outpatient care facility                            | 6              | 17,1%  |  |
|                          | Inpatient care facility                             | 25             | 71,4%  |  |
|                          | Other   | 4              | 11,4%  |  |
|                          | Total   | 50             | 100,0% |  |

## Patients' Needs for Health Care Provided by Nurses in Independent Nursing Practices – Challenges and Opportunities to Address Them

When asked whether patients are aware of the existence of independent nursing practices, the majority of the surveyed patients (59.4%) indicated that they are informed. At the same time, however, the majority of nurses (77.7%) and experts (72.0%) are categorical that patients are not sufficiently aware of the existence of independent nursing practices (Fig. 1).

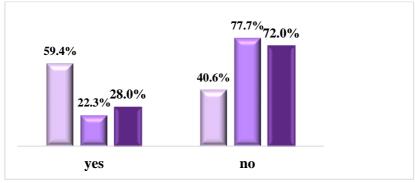


Fig. 1. Patient awareness of the existence of independent nursing practices

There is a statistical difference in the opinions of the three groups of respondents, presented in Fig. 1 ( $\chi 2 = 103.810$ ; p < 0.001). The indicated differences could be interpreted ambiguously. On the one hand, the question arises as to how complete the information indicated by the patients is. On the other hand, the experts and nurses express their opinion based on their observations and accumulated experience. Evidence for their statement could be the data confirming the closure of a large part of independent practices in Bulgaria (15). It is precisely the lack of information of the patients that could be one of the reasons for this.

A statistically significant moderate proportional relationship was also found between the patients' awareness and their age

(Contingency C = 0.453; p < 0.05), education (Contingency C = 0.193; p < 0.05) and place of residence (Contingency C = 0.193; p < 0.05). With increasing age, educational level and size of the settlement, the awareness of patients also increases. No statistically significant relationship was found between the opinion of nurses and experts on the issue and their socio-demographic characteristics (p > 0.05).

The majority of both patients (88.6%) and nurses (88.3%) were categorical that patients would seek out a private practice nurse for home care. There was no statistically significant difference between the responses of the two groups of respondents (p > 0.05) (Fig. 2).

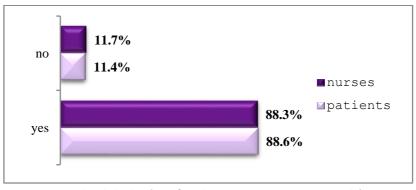


Fig. 2 Attitudes of patients to turn to a nurse with an independent nursing practice, when in need of nursing care at home

When asked whether they had any difficulties in finding a nurse to provide the necessary care/treatments/for them at home, more than half of the patients (53.8%) and a significant part of the nurses (93.1%) answered positively. The above results are fully explainable by the lack of sufficient independent nursing practices in Bulgaria, as well as by the insufficient awareness about them, also established in the present study. The difficulties of most of the patients are most likely due to the lack of regulatory provisions that would oblige general practitioners to appoint nurses in their practices and a large part of them work alone or with technical assistants who perform only

administrative functions (33). The differences in the answers of patients and nurses to the question are statistically significant ( $\chi$ 2= 8.106; p > 0.05) (Fig. 3).

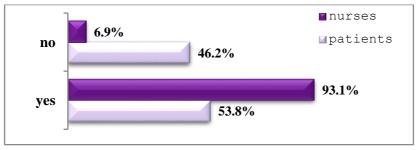


Fig. 3. Patients' difficulties in finding a nurse for home care

Of interest is also the opinion of the surveyed patients and nurses as to whether patients pay for nursing care/treatments provided at home. The majority of patients claim that they receive nursing care/treatments at home free of charge (38.0%). In contrast, the majority of health professionals believe that patients pay for all care/treatments received at home (57.4%). The same statement is shared by only 28.0% of patients. There is also a statistically significant difference between the opinions of patients and nurses on the issue under consideration ( $\chi$ 2=2.801; p < 0.05). (Fig. 4).

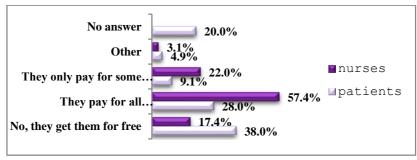


Fig. 4. Payment for nursing care/treatments provided at home by patients

When asked whether patients who paid for nursing care at home experienced financial difficulties, the majority of nurses (82.9%) and only 38.6% of patients answered in the affirmative. More than half of patients denied having financial difficulties (53.1%), while only 17.1% of health professionals shared the same opinion. There was a discrepancy in the opinions of patients and nurses on this issue, which was statistically significant ( $\chi$ 2=6.402; p<0.05) (Fig. 5).

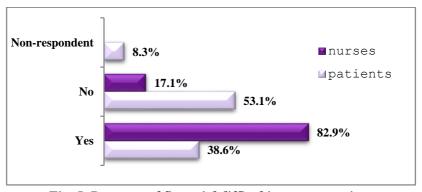


Fig. 5. Presence of financial difficulties among patients

In connection with the obtained results, the question of the need for regulatory regulation of the financing of nursing activities and care performed by nurses with independent nursing practices logically follows. The majority of patients (88.9%), nurses (88.0%) and experts (94.0%) categorically support the regulatory regulation of the financing of nursing activities and care performed by independent nursing practices (Fig. 6).

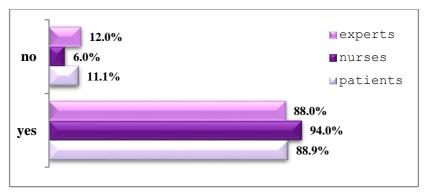


Fig. 6. Need for regulatory regulation of the financing of nursing activities and care performed by nurses with independent nursing practices

Against the background of the expressed unanimity, no statistically significant difference was found in the responses of patients, nurses and experts (p > 0.05) (Fig. 6).

The opinion of the respondents regarding the most appropriate approach to financing nursing care at home was also important for us. The share of patients, nurses and experts who indicated the NHIF or the state budget as the source of financing is relatively identical. It should be noted, however, that the majority of patients (31.1%), nurses (32.9%) and experts (56.0%) express the opinion that financing should be combined from the NHIF and Supplementary Health Insurance Funds. It is striking that while the share of nurses and that of patients are relatively equal, the share of experts is significantly higher, which we attribute to their existing experience in relation to the problem under study. A statistically significant difference in the opinions of the different groups of respondents was demonstrated ( $\chi 2 = 6.451$ ; p < 0.05) (Fig. 7).

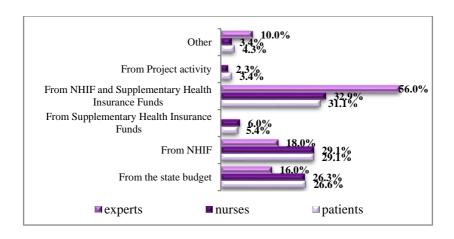


Fig. 7. Most appropriate approach to financing home nursing care

However, the financing of nursing activities and care could not happen if their respective due reporting is not carried out. For this purpose, it is necessary to have a unified reporting system, which has not been introduced in Bulgaria to date. Given the development of information technologies and their ever-increasing importance in modern times, we believe that such nursing documentation could be part of a unified electronic system for documenting and systematizing information related to nursing activities and care performed by nurses with independent nursing practices. In this regard, we studied the opinion of nurses and patients on whether the introduction of such a system is necessary. The majority of both nurses (92.9%) and patients (89.4%) agree on the need for regulatory regulation of the introduction of a unified electronic system for documenting and systematizing information related to nursing activities and care performed by nurses with independent nursing practices. There was no statistically significant difference in opinions (p > 0.05) (Fig. 8).

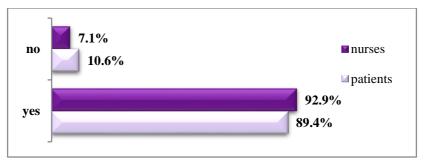


Fig. 8. Need for regulatory introduction of a unified electronic system for information related to independent nursing practices

In connection with the results obtained, we asked both groups of respondents whether the introduction of a single electronic system for documenting and systematizing information related to nursing activities and care performed by nurses with independent nursing practices would contribute to the valuation of their work. Again, there is unanimity in both groups of respondents, with a large proportion of both nurses (91.4%) and patients (90.0%) giving a positive answer. Logically, no statistically significant difference in the opinion of the two groups of respondents was proven (p > 0.05) (Fig. 9).

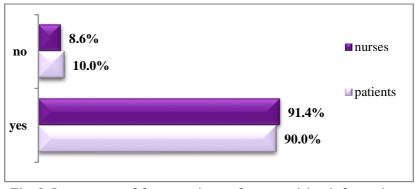


Fig. 9. Importance of documenting and systematizing information related to nursing activities and care for valuing their work

According to a significant part of the nurses (89.4%) and patients (89.4%), the regulatory regulation of the introduction of a unified electronic system for documenting and systematizing information related to nursing activities and care performed by nurses with independent nursing practices will also contribute to the continuity and continuity of patient care. This is especially important, given the possibility that patients may have to travel to another location and be taken care of by another nurse with independent practice there. No statistically significant difference was demonstrated in the opinions of the two groups of respondents on the studied question (p > 0.05), (Fig.10).

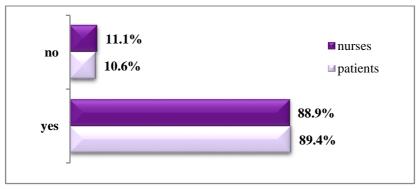


Fig. 10. Importance of documenting and systematizing information related to nursing activities and care for continuity and continuity of patient care

Of interest is the opinion of patients, nurses and experts regarding the nursing activities and care at home that patients need most often. The majority of patients (75.7%), nurses (93.7%) and experts (98.0%) unanimously indicated that injections are the most necessary for patients. Next in demand, according to a significant part of patients (42.0%), nurses (77.7%) and experts (92.0%), are bandages. In third place, patients (35.7%), nurses (47.4%) and experts (70.0%) order blood/urine collection for examination. The remaining activities

and care, as evident from the data in Figure 11, are ranked in a different sequence by the three groups of respondents. A statistically significant difference in the opinions of the two groups of respondents on the question under study was demonstrated ( $\chi 2 = 59.610$ ; p < 0.001) (Fig.11).

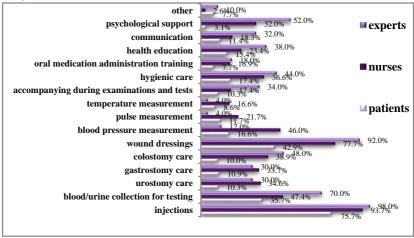


Fig. 11. Nursing activities and home care that patients most often need (Answers exceed 100% as the question allows for multiple answers)

Of particular interest are the opinions of patients, nurses and experts on the main challenges related to the care provided by nurses with independent nursing practice. Lack of funding was unanimously identified as the most serious challenge by the majority of patients (70.9%), nurses (66.6%) and experts (59.2%). Lack of information about independent nursing practices was the second most important problem, indicated by approximately equal shares of nurses (43.4%) and experts (42.9%) and by one third of patients. More than one third of nurses (35.1%) and slightly more than one quarter of experts (27.1%) and patients (26.5%) considered the lack of a unified electronic documentation system as the third most important challenge related to the care provided by nurses with independent nursing

practice. No statistically significant difference was found in the opinions of the three groups of respondents (p > 0.05) (Fig. 12).

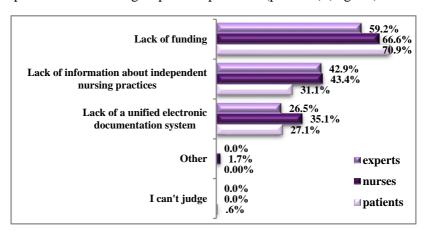


Fig. 12. Key challenges related to care provided by nurses with independent nursing practice (Answers exceed 100% as the question allows for multiple answers)

As a result of the statistical analysis, a weak correlation was found between the patients' opinion on the challenges related to the care provided by nurses with independent nursing practice and their financial difficulties (Contingency C=0.218, p<0.05). It is worth noting that among those who indicated the lack of funding as the main challenge, the share of those who confirmed the presence of financial difficulties (80.6%) is greater than that of patients who do not have such (63.6%). At the same time, among those who indicated a lack of information about independent nursing practices, the share of patients who declared the absence of financial difficulties related to care was twice as high as that of patients with financial difficulties.

#### Role, preparedness and attitudes of nurses to provide quality care through independent nursing practices

One third of patients (37.7%), more than half of nurses (52.6%) and a significant part of experts (86.0%) expressed the opinion that the nurse with independent practice has an important role in the process of providing care to patients. At the same time, the majority of patients (47.4%), one third of nurses (31.7%) and a small part of experts (4.0%) considered this role to be extremely important (Fig.13).

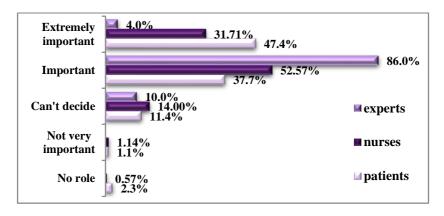


Fig. 13. Role of the nurse with independent nursing practice in providing complex medical and social care for patients at home

Against the backdrop of continuous socio-economic upheavals and poor health and demographic characteristics of the population, the needs for health care are constantly increasing. In this regard, it is important to study the attitudes of nurses to provide care through an officially registered independent nursing practice. The results of the study prove that two thirds of nurses (65.4%) express positive attitudes to provide care within the framework of independent nursing practices, while in contrast, one third of health professionals would not take such a step (34.6%) (Fig. 14).

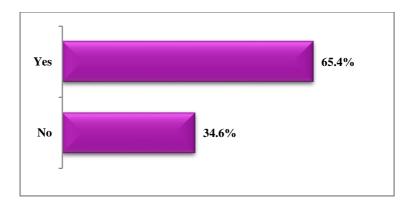
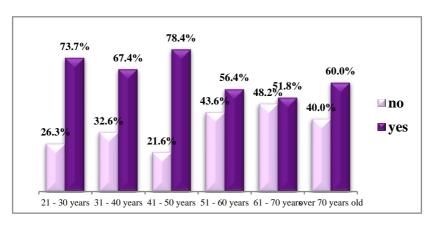


Fig. 14. Nurses' attitudes towards providing care through officially registered independent nursing practice

It was found that age has a weak influence on the attitudes of nurses towards providing care through officially registered independent nursing practice ( $\chi 2=16.634$ ; p<0.05). As can be seen from the data in Fig. 15, the highest share of those expressing positive attitudes is among younger nurses from the age groups in the range of 21 - 30 years, 31 - 40 years and 41 - 50 years. In contrast, the number of those over 51 years who responded positively is relatively smaller, but still outweighs those who responded negatively (Fig. 15).



# Fig. 15. Attitudes of nurses from different age groups towards providing care through officially registered independent nursing practice

There is also a statistically significant difference in the responses of nurses with different experience ( $\chi 2=16.049$ ; p < 0.05). It is striking that with increasing experience (except for those with work experience from 21 to 30 years), the share of those willing to provide care through an officially registered independent nursing practice decreases. Most likely, these results are due to the fact that with the accumulation of years of work experience, nurses are more settled, less flexible and do not want to take risks in a new and unknown endeavor for them. (Fig. 16).

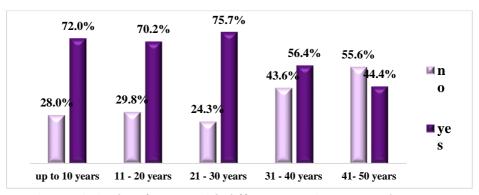


Fig. 16. Attitudes of nurses with different experience towards providing care through officially registered independent nursing practice

It is worth noting the established proportional correlation between the education of nurses and their attitudes towards providing care through officially registered independent nursing practice ( $\chi 2=19.104$ ; p<0.05). According to the data from the analysis, with increasing educational level, the share of nurses expressing positive attitudes towards providing care through officially registered independent nursing practice increases. The indicated results are not

unexpected, since education is associated with better preparedness and awareness and hence higher creativity (Fig. 17).

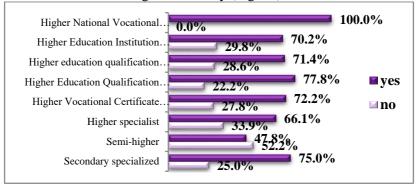


Fig. 17. Attitudes of nurses with different educational levels towards providing care through officially registered independent nursing practice

No statistically significant difference was found in the attitudes of nurses towards working in independent practices and their workplace (p > 0.05).

The results obtained are quite encouraging and indicate the readiness and courage of most nurses to step off the beaten track and take risks, implementing a new, more challenging, but also more innovative model of patient care.

Although a relatively smaller proportion of the surveyed health professionals perceived the possibility of providing care to patients through an officially registered independent nursing practice negatively, we were interested in the reasons for this. A quarter of the nurses who responded negatively indicated "the many bureaucratic procedures" and "the unwillingness to take risks" as the leading arguments. 18.2% of healthcare professionals justify their refusal with the "lack of legally regulated financial mechanisms for payment of services from the state budget, NHIF/other supplementary insurance funds", as well as with "numerous difficulties related to the implementation of nursing care". Other arguments shared by some

nurses are also worth mentioning, such as "lack of time", "low interest on the part of patients" and "priority of current job" (Fig. 18).

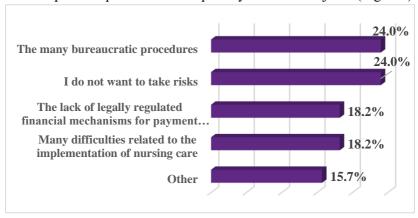


Fig. 18. Reasons for nurses' reluctance to provide care through officially registered independent nursing practice

Also of interest are the main motives of nurses and experts for carrying out activities and care through officially registered independent nursing practice. The opportunity to provide quality care to patients and their relatives was mentioned by 96.0% of experts and 63.3% of nurses. Another important motive for a large part of experts (62.0%) and nurses (49.0%) was the opportunity to achieve financial independence. The same proportion of experts (58.0%) indicated the opportunity to raise the prestige of the profession and for autonomous professional activity as incentives for independent practice. The latter was also mentioned by approximately half of nurses (47.2%), and less than a quarter of them considered professional prestige as a motivating factor (23.1%). Approximately half of the experts and a relatively smaller proportion of nurses see independent nursing practices as a chance to overcome numerous difficulties related to providing nursing care for patients at home (respectively: 44.0% and 25.3%) and for personal fulfillment (respectively: 44.0% and 35.8%) (Fig. 19).

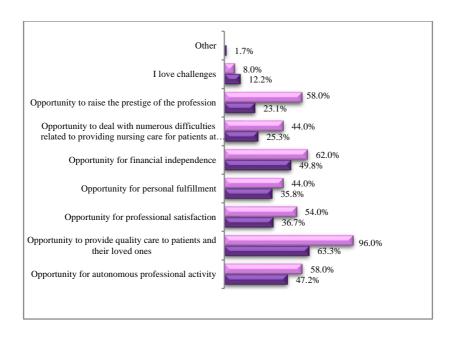


Fig. 19. Main motives of nurses and experts for carrying out activities and care through officially registered independent nursing practice

(Answers exceed 100% as the question allows for multiple answers)

### **2.1.4.** Need for postgraduate qualification of the nurse working in independent nursing practice

When asked about the minimum required work experience in the specialty in order for a medical specialist to have the right to open and work in an independent healthcare practice, the majority of experts are categorical that this experience should be at least 5 years (44.0%), a third even believe that it should be at least 10 years (32.0%), and only a fifth of them are of the opinion that three years are sufficient for work in an independent nursing practice. As can be seen from the data in Fig. 20, the opinion of most of the experts differs from that of the Bulgarian legislator. Based on their expert experience, namely in independent practice, the experts have reached the conclusion about the need for a longer (than three years) experience when starting and

working in an independent healthcare practice, at least within 5 years. The indicated data are grounds for organizing discussions regarding the minimum required experience when starting an independent practice and rethinking and refining the regulatory framework in this direction (Fig.20).

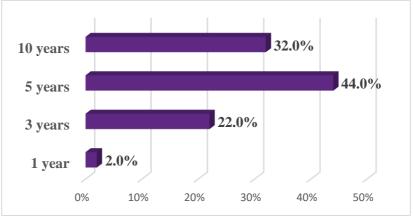


Fig. 20. Required minimum work experience in the specialty, entitling the medical specialist to open and work in an independent healthcare practice, according to experts

Of interest is the opinion of the experts on whether special requirements should be introduced for professional training for carrying out certain activities within the framework of independent nursing practice. As can be seen from the data in Fig. 21, the majority of experts give an affirmative answer (54.0%), thereby emphasizing that special training is necessary in terms of acquiring knowledge, skills and professional competence in graduating health professionals, focused on the specifics of work in independent nursing practice (Fig.21).

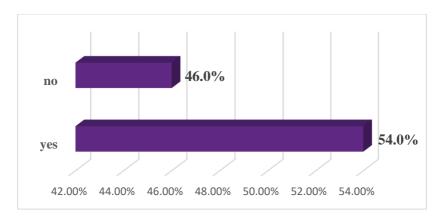


Fig. 21. Need to introduce special requirements for professional training for carrying out certain activities within the framework of independent nursing practice, according to experts

When asked to specify which nursing activities require special requirements, the experts mentioned a number of activities and care, including highly specialized activities such as modern wound care approaches, maintenance and care of the central venous catheter, insertion of a port system, and administration of biological therapies. It is striking that most of the skills mentioned are generally acquired in basic training. However, the experts are categorical in their answers that these skills must be mastered to the point of virtuosity, since in the patient's home the nurse is alone and in most cases must demonstrate not only high professionalism, but also speed, resourcefulness, the ability to think critically, and "competent and qualified nursing skills." The opinion expressed by one of the experts that independently practicing nurses must have the skills to report scarification samples after completing a training course is also noteworthy. The specified activity is currently within the scope of medical competence, but most likely the respondent is basing his/her opinion on the experience of other countries where nurses have the right to practice in so-called advanced/extended practices, within which they are entitled to perform certain medical activities, but explicitly regulated in the legislation of the respective country and under certain conditions related to the level of training, experience and certification of the nurse. The need for training in specialized courses conducted by nurses with independent practices is also emphasized (Fig. 22).

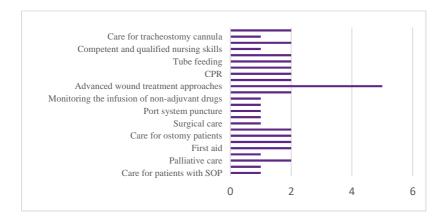


Fig. 22. Nursing activities for which special requirements should be introduced for the professional training of independently practicing nurses, according to experts (in numbers)

The experts who indicated the need for special professional training for carrying out certain activities within the framework of independent nursing practice were asked to specify what training should be required. The majority of the experts emphasized the need for a completed specialization under the PGT, while the rest indicated a completed specialized course under the PGT. Along with them, some of the experts also indicated other online courses for postgraduate qualification by disease groups, as well as annual refresher training for emergency situations. (Fig.23).



Fig. 23. Training that would provide the necessary professional preparation for independent practicing nurses for certain specific nursing activities, according to experts

In response to the question "Do you think continuous training of medical specialists carrying out independent nursing practice is necessary?" a significant part of the experts (90.0%) expressed a categorical conviction regarding the need for such training. At the same time, the fact that one tenth of the experts do not see a need to update the knowledge and skills of health professionals with independent practices is alarming (Fig. 24).

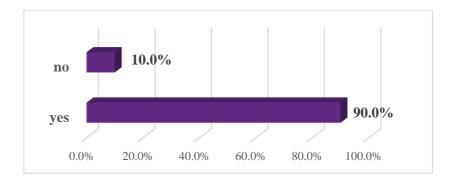


Fig. 24. Need for continuous continuing education of medical specialists carrying out independent nursing practice, according to experts

A statistically significant difference was also found in the answers of experts from different age groups to the question about the need for continuous continuing education of medical specialists carrying out independent nursing practice (Contingency  $C=0.249;\ p<0.05$ ). With increasing age, the share of experts assessing the importance of continuous education also increases. It is pleasing to note that all experts in age groups over 51 years are categorical that medical specialists with independent nursing practice must increase and improve their knowledge, skills and professional competence.

The results of the statistical analysis proved that work experience is also a factor that moderately influences the opinion of experts on the issue (Contingency C=0.426; p<0.05). With increasing work experience, the share of experts confirming the need for continuous education of health professionals with independent practices also increases.

## 2.2. Expertise of nurses in independent nursing practices – opportunities and challenges

The question of whether the experts encountered difficulties in opening an independent nursing practice is also of interest. The majority of the experts confirmed the presence of difficulties in starting their practice (60.0%). The share of those who did not experience such difficulties is relatively smaller (40.0%). (Fig. 25).

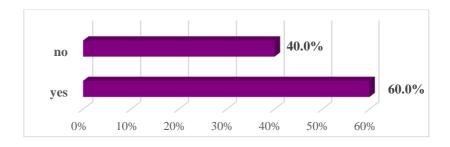


Fig. 25. Presence of difficulties for experts in revealing independent nursing practice

When asked what difficulties they encountered when opening an independent nursing practice, the majority of experts indicated a lack of information about the regulatory requirements for opening an independent nursing practice (44.00%), one third had bureaucratic difficulties (34.00%) and approximately the same number faced a lack of information about the rules for operating an independent nursing practice (30.00%). Other challenges shared by the experts were financial difficulties (14.00%) and lack of trust from colleagues (12.00%). One in ten had difficulties caused by a lack of understanding (10.00%), lack of support (10.00%), and the smallest share indicated a lack of trust from patients (4.00%). The results provided valuable information and guidance for taking targeted actions in order to overcome the aforementioned challenges facing health professionals when opening an independent nursing practice (Fig. 26).

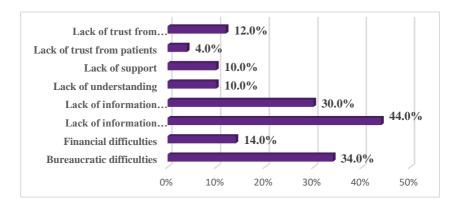


Fig. 26. Difficulties that experts had when opening an independent nursing practice

In connection with the results obtained, we decided to study what difficulties experts experience in their activities in independent practice. Half of the interviewed experts noted difficulties related to the lack of information about independent nursing practices and the same number to the lack of a unified electronic system for documenting and

systematizing information related to nursing activities and care. The majority of the experts experience difficulties related to the lack of funding from the NHIF and other sources (56.0%). The largest share of those who indicated that due to financial difficulties of the patients themselves and their relatives, out of empathy they do not always charge them (80%). From there, the financial difficulties related to covering the costs of operating an independent nursing practice logically follow, shared by more than a quarter of the experts (26.7%). The share of those who indicated a lack of understanding (6.7%) is relatively small. Also of interest are other difficulties shared by one-tenth (10.0%) of the interviewed experts, such as: "We were the first, we had to cope on our own", "lack of advertising opportunities" and "lack of nurses". The results highlight the need for targeted and consistent steps to overcome the difficulties considered (Fig. 27).

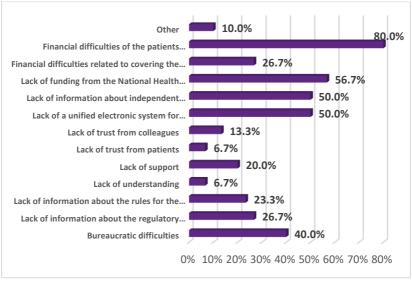


Fig. 27. Difficulties experienced by experts in carrying out their activities in independent nursing practice.

(Answers exceed 100%, as the question allows for multiple answers)

The experts' opinions on the possibilities for dealing with the identified difficulties were also studied. The majority of the experts

consider raising awareness of independent nursing practices among patients and their relatives (80.00%), as well as general practitioners, specialists and nurses from outpatient care (70.00%). Another possibility is "financing the activities of independent nursing practices from the National Health Insurance Fund and other supplementary health insurance funds" (64.00%). More than half of the experts emphasize the need for "normative regulation of the introduction of a unified electronic system for documenting and systematizing information related to independent nursing practices" (52.00%), as well as "introducing a unified model of a form for obtaining informed consent from patients for nursing activities and care provided by independent nursing practices" (44.0%).

The data provided is very valuable, as the experts' opinions stem from their real-world practical experience in operating and managing a private practice. They can be the basis for subsequent reforms to optimize their operations and, as a result, facilitate and improve patient care (Fig. 28).

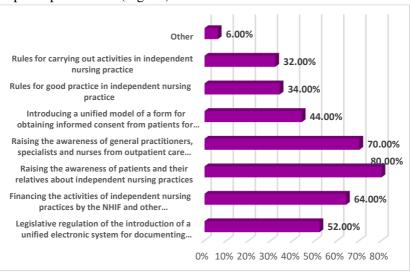


Fig. 28. Opportunities for optimizing the activities of nurses in independent nursing practices, according to experts (Answers exceed 100%, as the question allows for multiple answer)

## 2.2. Analysis of the activities of the Outpatient Clinic for Group Practice "Sestrite" Ltd. – Varna



OGPCHS "SESTRITE" LTD. – Varna Manipulations and professional wound care Tel. 0897 435 018

OGPCHS "Sestrite" Ltd. - Varna was established in 2017 as Independent Nursing Unit at the Chaika Medical Center. The practice began work with a team of five highly qualified nurses who provide medical care both in an outpatient office and in a home environment. It started at the beginning as a wound treatment office, but very quickly the activity also included a whole range of all nursing activities. This was followed by investment in equipment, medical supplies and the creation of a protected environment for patients in

the office, which attracted more patients to it. During the period of the Covid 19 pandemic, the Outpatient Clinic worked with patients with chronic diseases who remained outside the hospital structures. Home visits were also provided during this period.

With the increase in demand and changes in the regulatory framework, the practice was transformed into an Outpatient Clinic for Group Practice for Outpatient Health Care, registered under the Commercial Act.

Table 5. OGPCHS "Sestrite" Ltd. – Varna - Number of patients undergoing outpatient procedures, outpatient examinations and home procedures in the period 2017 - May 2025.

## Outpatient Clinic for Group Practice "Sestrite" Ltd. – Varna

| Year    | Number<br>of<br>patients<br>passed | Outpatient<br>procedures | Outpatient<br>dressings | Number of home visits | Manipula<br>tions at<br>home | Bandages<br>at home |
|---------|------------------------------------|--------------------------|-------------------------|-----------------------|------------------------------|---------------------|
| 2017    | 296                                | 220                      | 76                      | 571                   | 321                          | 250                 |
| 2018    | 324                                | 250                      | 74                      | 774                   | 560                          | 214                 |
| 2019    | 686                                | 526                      | 160                     | 886                   | 613                          | 273                 |
| 2020    | 683                                | 480                      | 203                     | 1005                  | 720                          | 285                 |
| 2021    | 661                                | 450                      | 211                     | 1204                  | 790                          | 414                 |
| 2022    | 1291                               | 820                      | 471                     | 987                   | 615                          | 372                 |
| 2023    | 2009                               | 1600                     | 409                     | 1134                  | 920                          | 214                 |
| 2024    | 3168                               | 2100                     | 1068                    | 1345                  | 975                          | 370                 |
| May, 25 | 1019                               | 618                      | 401                     | 450                   | 310                          | 140                 |
| Total   | 9517                               | 14200                    | 6200                    | 7011                  | 14200                        | 2068                |

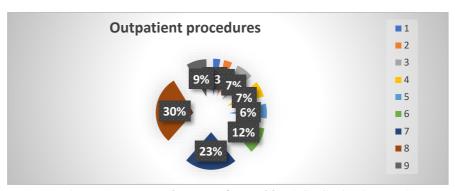


Fig. 30. Outpatient procedures performed by OGPCHS "Sestrite" Ltd. - Varna (%)

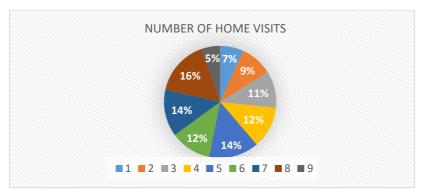


Fig.31. Number of home visits carried out by OGPCHS "Sestrite" Ltd. - Varna (%)

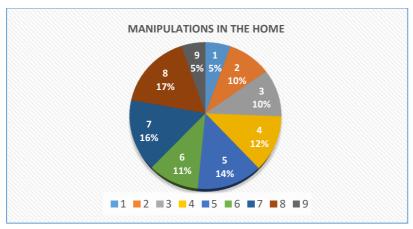


Fig.32. Manipulations in the home performed by OGPCHS

"Sestrite" Ltd. - Varna (%)

#### The data analysis shows:

- Stable and sustainable growth in the number of patients with each passing year;
- Gradual shift of the burden from home to outpatient visits thanks to improvements in the base and equipment;
- Expansion of the scope of services including dressings, package services for chronically ill patients and specialized manipulations;

- Adaptability during crisis situations such as the Covid pandemic (2020-2023);
- Investment in infrastructure and medical equipment to improve the quality of service.

#### Quality and specialization of services

The team consists of nurses with specializations in pediatric care, surgery and intensive care. All have certificates in:

- work with ostomy patients;
- parenteral nutrition;
- treatment of difficult-to-heal wounds;
- use of PORT systems;
- oxygen therapy and non-invasive ventilation;
- care for patients with tracheostomies and palliative needs.

Care is provided on the basis of previously prepared nursing documentation and in close cooperation with medical teams. Photo files are systematically kept for monitoring the condition.

#### Financial sustainability and advertising

The practice is funded entirely by patients, which sometimes limits access to services. Advertising is done through a website, business cards, and flyers. Additional funding sources through partnerships or programs are being explored.

#### SWOT ANALYSIS of OGPCHS "Sestrite" Ltd. - Varna

#### **Strengths:**

- Highly qualified team of nurses with specialties in pediatric, surgical and resuscitation care;
- Experience in hospital and intensive care environments, allowing effective work at home;
  - Certified skills in specific nursing activities;
- Good location the office is located on the ground floor of the Chaika Medical Center, close to a laboratory, pharmacy, X-ray and doctor's offices:
  - Collaboration with specialists from various medical fields;

- Built-in documentation system with photo files;
- Possibility of complex care for palliative and pediatric patients.

#### Weaknesses:

- Limited human resources 5 nurses;
- Partial employment of staff due to commitment to work under a basic employment contract in a hospital care facility;
- Working hours of the outpatient clinic limited to 2 hours per day;
  - Financing entirely through payment from patients;
  - Limited capacity to serve more patients;
  - Limited recognition despite advertising efforts.

#### Opportunities

- Expansion of the team and services;
- Digitalization of processes;
- Partnerships with GPs and health institutions;
- Possibility of inclusion in externally funded programs;
- Profiling in specialized services;
- Organization of training for relatives and assistants.

#### Threats:

- Overload and burnout;
- Financial instability;
- Legislative restrictions;
- Lack of young staff and continuity;
- Public underestimation of the nursing profession;
- Potential competition with better funding
- 2.2. OGPCHS "Sestrite" Ltd. Varna represents a successful model for the development of independent nursing practice in outpatient care. The combination of professionalism, adaptability, teamwork and sustainable growth outlines significant potential for future development and expansion of the scope of health care offered.
- 2.3. SWOT analysis of the status and development of independent nursing practices in the Republic of Bulgaria

#### Strengths **Strengths:** Availability of trained healthcare professionals with basic education, providing knowledge, skills and professional competence, to perform autonomous functions in patient care • Stable, actively working professional organization Certification of licensed nurses • Conducting scientific research in the field of healthcare • Active participation of nurses in scientific research Conducting regional, national international forums of healthcare professionals Weaknesses Weaknesses: Fragmentation of the regulatory framework in the Republic of Bulgaria. Bulgaria, regulating public relations related to the implementation of the activities of independent nursing practices • Incomplete legal framework regarding the financing of nursing activities and care provided by independent nursing practices • Inability of nurses to conclude contracts with the NHIF and the resulting inability to finance nursing activities and care provided by independent nursing practices • Resistance from the Bulgarian Medical Association regarding the conclusion of contracts between individual and group practices and the NHIF for the financing of nursing activities and care • Insufficient support from society and patient organizations regarding the financing of

independent nursing practices

nursing activities and care provided by

- Lack of unified nursing documentation and a unified electronic system for registration, reporting and control of nursing activities and care provided by nurses with independent nursing practices
- The lack of regulatory framework for the introduction of unified nursing documentation and a unified electronic system for registration, reporting and control of nursing activities and care provided by nurses with independent nursing practices
- Reduced capabilities of health professionals to plan, organize, evaluate, monitor and report on care
- Difficulties in ensuring continuity and continuity in providing patient care
- Lack of standards for the implementation of autonomous nursing activities by independent nursing practices
- Insufficient collaboration between nurses working through independent nursing practices and other medical specialists
- Insufficient awareness of those in need of health care and their families about the possibilities for providing modern and quality nursing care by nurses with independent nursing practices
- Inequality of patients in their access to nursing activities and care provided by nurses with independent nursing practices, due to the lack of funding from the NHIF
- Traditional perceptions of the nurse's dependence in providing health care.
- Lack of confidence among nurses regarding the possibilities of providing modern and quality healthcare through independent nursing practices

| • Fear and concerns of nurses regarding lack of security, financial instability and failure, in connection with carrying out their activities through independent nursing practice  Opportunities:  • Opportunity of the educational system in the Republic of Bulgaria to implement modern scientifically based training of nurses to acquire knowledge, skills and professional competence for providing quality nursing care in independent individual / group health care practice  • Opportunity of the educational system in the Republic of Bulgaria to implement training under the SDO of nurses in the specialty "Nurse in independent individual / group health care practice"  • Opportunity of the educational system to train nurse managers implementing health care management in independent individual / group health care practice"  • Opportunities for regulatory regulation of the financing of independent individual / group health care practice from various sources (MES, NHIF, municipalities, European projects)  • Opportunity to adopt Rules for good nursing practice;  • Opportunity to introduce a Standard for health care provided by Individual health care practice;  • Opportunity to introduce a unified nursing documentation and a unified electronic system for registration, reporting and control of nursing activities and care, performed by nurses with independent nursing practices |               |  |
|---|---------------|--|
| <ul> <li>Opportunity of the educational system in the Republic of Bulgaria to implement modern scientifically based training of nurses to acquire knowledge, skills and professional competence for providing quality nursing care in independent individual / group health care practice</li> <li>Opportunity of the educational system in the Republic of Bulgaria to implement training under the SDO of nurses in the specialty "Nurse in independent individual / group health care practice"</li> <li>Opportunity of the educational system to train nurse managers implementing health care management in independent individual / group health care practice"</li> <li>Opportunities for regulatory regulation of the financing of independent individual / group health care practice from various sources (MES, NHIF, municipalities, European projects)</li> <li>Opportunity to adopt Rules for good nursing practice;</li> <li>Opportunity to introduce a Standard for health care provided by Individual health care practice;</li> <li>Opportunity to introduce a unified nursing documentation and a unified electronic system for registration, reporting and control of nursing activities and care, performed by</li> </ul>   |               | of security, financial instability and failure, in connection with carrying out their activities   |
|   | Opportunities | Opportunities: Opportunity of the educational system in the Republic of Bulgaria to implement modern scientifically based training of nurses to acquire knowledge, skills and professional competence for providing quality nursing care in independent individual / group health care practice Opportunity of the educational system in the Republic of Bulgaria to implement training under the SDO of nurses in the specialty "Nurse in independent individual / group health care practice" Opportunity of the educational system to train nurse managers implementing health care management in independent individual / group health care practice" Opportunities for regulatory regulation of the financing of independent individual / group health care practice from various sources (MES, NHIF, municipalities, European projects) Opportunity to adopt Rules for good nursing practice; Opportunity to introduce a Standard for health care provided by Individual health care practice; Opportunity to introduce a unified nursing documentation and a unified electronic system for registration, reporting and control of nursing activities and care, performed by |

• Opportunities for planning, organizing, evaluating, monitoring and reporting on care by health professionals Opportunity to ensure continuity and continuity in the implementation of patient care • Lack of standards for the implementation of autonomous nursing activities by independent nursing practices • Opportunities for nurses to contribute to improving the quality and effectiveness of health care provided by Independent individual/group health care practice; • Opportunities for meeting patients' needs for health care • Opportunities for increasing patient satisfaction with the provided health care • Opportunity for implementing the nursing process as an innovative modern scientifically based methodology for planning, implementing and evaluating health care in the context of independent nursing practices in the Republic of Bulgaria • Opportunity for implementing specific nursing documentation Opportunity for participation of professional organization, at an expert level, in the organization and control of autonomous nursing activities. **Threats** Threats: • Increasingly deepening and critical shortage of nurses in the Republic of Bulgaria • Insufficient remuneration and inadequate categorization of nurses' work Professional burnout of nurses • Migration of nurses abroad • Declining public prestige of the profession • Emigration from the profession

- Lack of incentives to upgrade the education of nurses
- Lack of motivation for continuing education and professional development on the part of practicing nurses
- Resistance to the implementation of autonomous nursing activities on the part of other interested groups of professionals doctors, etc.
- Political instability and frequent change of governments, due to which the agreements reached between the previous rulers and the National Agency for Nursing Care remain unrealized
- Omissions in the provision of nursing care and health problems
- Increasing economic instability.
- Danger from disasters, accidents, pandemics, wars.
- III. INNOVATIVE PRACTICAL APPROACHES TO OVERCOMING HEALTH CARE CHALLENGES PROVIDED BY NURSES IN INDEPENDENT NURSING PRACTICES
  - 3.1. A unified electronic system for documenting and systematizing information related to nursing activities and care performed by nurses with independent nursing practices

Sample outpatient nursing practice sheet

https://forms.gle/CFJAA5X4HDdthXSP6

#### **Screens from Google Forms:**

| Sample Ambulatory Sheet for Nursing Practice   | × | : |
|--|---|---|
| Ambulatory sheet for a home visit, for to carry out manipulations, treating wounds and bandages. |   |   |
| $B \ \boxed{I} \ \underline{U} \ \Leftrightarrow \ \boxminus \ \sqsubseteq \ \overline{X}$       |   |   |
| This form is automatically collecting emails from all respondents. Change settings               |   |   |
| Checklist number: * Short answer text  |   |   |
| Date: *  |   |   |
| Month, day, year   |   |   |

| Patient data:            |      |  |
|--------------------------|------|--|
| Name, middle name, surna | ame: |  |
| Your answer              |      |  |
| Address:                 |      |  |
| Your answer              |      |  |
| Phone number:            |      |  |
| Your answer              |      |  |

| Analysis of the patient's need | s           |           |
|--------------------------------|-------------|-----------|
| Needments:                     |             |           |
|                                | Independent | Dependent |
| Breathing                      |             |           |
| Feeding and fluid intake       |             |           |
| Discharge                      |             |           |
| Movement and correct posture   |             |           |
| To sleep and rest              |             |           |
| To dress and undress           |             |           |
| To maintain body temperature   |             |           |

# 3.2. Model of a unified form for obtaining informed consent from the patient for the provision of health care and activities by a nurse

The proposed Model of a unified form for obtaining informed consent from the patient for the provision of health care and activities by a nurse from an individual/group health care practice is based on the current legislative framework of the Republic of Bulgaria. The basis for its development are: the model of a technical sheet for obtaining informed consent, proposed by S. Toncheva (2012), the model of a protocol for informed consent, proposed by N. Vassilev et al. (2014) and the technical sheet for obtaining informed consent by A. Georgieva (2013) (28, 32, 99).

The presented Model of a unified form for obtaining informed consent from the patient for the provision of health care and activities by a nurse (health care specialist) from an individual/group health care practice is an original document, with a structure and content reflecting all the necessary requisites of the written form for obtaining informed consent from the patient. The need for its introduction stems from the importance of ensuring compliance with the patient's right to written informed consent for activities and care within the professional competence of specialists with independent practice. implementation in practice, on the one hand, will contribute to compliance with the patient's right to informed consent, for the lawful performance of health activities and care by medical specialists carrying out their activities within the framework of independent practice, and on the other hand, will protect them from liability in the event of the realization of a risk accompanying the specified activities and care.

### DECLARATION OF INFORMED CONSENT FOR HEALTH CARE AND ACTIVITIES

| Name:  |
|--|
| ID   |
| Name of the medical facility - individual/group healthcare |
| practice:  |
| Patient ID/Patient Electronic Health Record                |
| Number:  |

#### INFORMATION PROVIDED TO THE PATIENT

#### PURPOSE OF THE INFORMED CONSENT

Dear Madam/Sir,

During your treatment and diagnostic process, certain healthcare services and activities need to be performed.

Before these healthcare services and activities are performed by a nurse (healthcare specialist) from an individual/group healthcare practice, it is necessary to obtain your voluntary informed consent and, if possible, active participation and cooperation.

For this purpose, we provide you with information about the essence of the individual/group healthcare practice, the nature of the healthcare services and activities, the potential risks, benefits and your rights as a patient.

## ESSENCE OF INDIVIDUAL/GROUP HEALTHCARE PRACTICE

Individual/group healthcare practices are organizationally distinct structures in which physician assistants, nurses, midwives or rehabilitators independently carry out all or some of the following activities:

- provision of medical and healthcare care;
- performance of manipulations;
- promotion of health, prevention and prophylaxis of diseases.

### DESCRIPTION OF NURSING CARE AND ACTIVITIES

Nursing care includes, but is not limited to:

- Monitoring vital signs
- Administering medications
- Wound care and dressing changes

- Assistance with mobility, hygiene, and nutrition
- Health education and emotional support
- Communication with physicians and medical staff

These health care services and activities are provided by licensed health care professionals, in accordance with applicable laws, regulations, and professional standards.

#### RISKS AND COMPLICATIONS

Although healthcare and activities are essential to your health and well-being, all interventions carry some risk. These may include:

- Allergic reactions to medications or materials
- Infection at intravenous injection sites or during wound care
- Skin irritation from medical devices
- Emotional and physical discomfort related to the personal care and assistance provided
- Your nurses/healthcare professionals/will take all necessary precautions to minimize these risks.
- Please note that information about the reasons and motivations for the doctor's decision to prescribe a specific therapy, as well as the benefits and risks of it, are solely within the doctor's competence and we are ready to put you in touch with him/her if you have any questions.

#### ADVANTAGES

The health activities and care provided by nurses /healthcare professionals/ help protect, maintain, strengthen or restore your health and ensure the safe implementation of preventive, therapeutic or rehabilitation approaches and measures, monitoring of health status and timely reporting of any complications.

#### AS A PATIENT, YOU HAVE THE FOLLOWING RIGHTS:

• You have the right to ask questions about health activities and care at any time: before, during and after their implementation.

- You can refuse any specific health care/activity, unless it is legally or medically necessary.
  - Your privacy and dignity will be respected at all times.
- You can request another nurse/or healthcare professional/, if you feel uncomfortable for any reason, depending on availability and appropriateness.
  - You have the right to protection of personal data.

Full access to the categories of personal data provided by you will be available to members of the individual/group healthcare practice team.

In cases where it is necessary for your personal data to be provided to a natural or legal person, public authority, agency or other body for the purpose of processing on behalf of the controller (processor), this will be in accordance with the requirements of EU Regulation 2016/679 and to ensure the protection of your rights

#### **VOLUNTARY CONSENT**

I confirm that I have read and understood the information above.

I have had the opportunity to ask questions and receive answers.

I understand that I may withdraw my consent at any time, except in emergency situations or when required by law.

I am aware of the liability under Article 313 of the Criminal Code for providing false information.

With this declaration, I give my voluntary and informed consent to receive health activities and care.

| Signature of patient/ le | egal representative: |
|--------------------------|----------------------|
|                          |                      |
|                          |                      |
| /first and last name/    |                      |

| Relationship of legal representative to patient (if applicable): |
|--|
|  |
| Signature of nurse (healthcare professional) - witness:          |
| /first and last name/  |
| Date:  |

## **3.3.**Curriculum for training in the specialty "Independent Practice of Health Care"

#### INTRODUCTION

- **1.1.Name of the specialty** Independent Practice of Health Care
  - **1.2. Duration of training** 1 (one) year
- 1.3. Required basic education for admission to training in the specialty "Independent Practice of Health Care" educational and qualification degree "Bachelor" in the professional field "Health Care"

#### 1.4. General provisions.

The constantly growing needs of the population for quality and effective care have brought to the forefront the importance of independently practicing nurses in addressing the many challenges in the field of public health.

#### 2. DEFINITION OF THE SPECIALTY

The specialty "Independent Practice of Health Care" is a specialty in the field of health care. The legal definition of independent practice of health care is regulated in Art. 2, para. 2 of the Health Care Act, which states that "medical institutions specifically concerning the activities of healthcare professionals are "organizationally separate structures in which physician assistants, nurses, midwives or

rehabilitators independently carry out all or some of the following activities:

- provision of medical and healthcare care;
- carrying out manipulations;
- promotion of health, prevention and prophylaxis of diseases".

#### 3. PURPOSE OF THE TRAINING

The purpose of the training in the specialty "Independent Practice of Health Care" is:

- Formation of specialized knowledge, skills and professional competence, aimed at:
- Development of business and entrepreneurial knowledge and skills
- Knowledge, understanding and application of legal, ethical and regulatory responsibilities
- Formation of knowledge, skills and professional competence for effective communication and management of relationships with patients and their families
  - Integration of technologies in independent practice for
  - Promotion of interprofessional cooperation and networking
- Promotion of sustainability and quality in independent practice of health care

#### 4. TRAINING

#### 4.1. Curriculum

The specialization has a duration of 470 academic hours within one academic year distributed as follows:

 $1\ \text{year}$  -  $150\ \text{hours}$  of theory +  $320\ \text{hours}$  - practical training – internship.

## The curriculum of the specialty is implemented over one year, structured in the following seven modules:

| Module's name                | Duration  |
|------------------------------|---|
| Module 1. General            | 4 months, during which:                         |
| and specialized health       | theoretical training – 7 days                   |
| activities and care          | (56 academic hours)                             |
| (interdependent and          | practical training – 14 days (112 academic      |
| autonomous activities)       | hours)  |
| Module 2. Assessment         | 4 months, during which:                         |
| and documentation of         | theoretical training – 3 days (24 academic      |
| health status                | hours)  |
|                              | practical training – 6 days (48 academic hours) |
| Module 3.                    | 1 month, during which:                          |
| Entrepreneurship and         | theoretical training – 2 days (16 academic      |
| business skills              | hours)  |
|                              | practical training – 4 days (32 academic hours) |
| Module 4. Legal and          | 1 month, during which:                          |
| ethical framework of         | theoretical training – 2 days (16 academic      |
| independent                  | hours)  |
| healthcare practice          | practical training – 4 days (32 academic hours  |
| Module 5.                    | 1 month, during which:                          |
| Communication and            | theoretical training – 2 days (16 academic      |
| patient relationships        | hours)  |
|                              | practical training – 2 days (16 academic hours) |
| Module 6. Technology         | 1 month, during which:                          |
| and digital tools            | theoretical training – 2 days (16 academic      |
|                              | hours)  |
|                              | practical training – 4 days (32 academic hours) |
| Module 7.                    | 1 month, during which:                          |
| <b>Professional networks</b> | theoretical training – 2 days (16 academic      |
| and development              | hours)  |
|                              | practical training – 6 days (48 academic hours) |

## 3.4. Algorithm for creating an Outpatient Clinic for individual/group healthcare practice

#### Justification

#### The applied algorithm aims to:

- To structure the process of creating an independent nursing practice.
  - To facilitate nurses in their entry into entrepreneurial activity
- To provide a legal, professional and ethical framework for the sustainability and quality of the medical care provided

Based on the regulatory framework, professional standards and global trends in healthcare, I propose the following algorithm for creating an Independent Nursing Practice.

It can be used as an applicable model for nurses intending to pursue a professional career outside of hospitals.

#### 1. Qualification requirements:

- Completed higher education in the specialty "Nurse" educational and qualification degree Bachelor or Master
- Acquired professional competence to practice the profession, according to the Health Act and Regulation 1 of the Ministry of Health / diploma or certificate/
- Membership and valid registration in the Bulgarian Association of Healthcare Professionals /AHP/
  - Professional experience minimum 3 years of active practice

#### 2. Development of a Business Plan

- Analysis of the needs of the population for nursing services in the selected region
- Determining the scope of the services offered manipulations, prophylaxis, health consultations and palliative care
- Financial planning; estimated costs, expected revenues, sources of financing
  - Pricing of the services offered
  - Development of an organizational structure of the practice
  - Marketing and client acquisition strategy

#### 3. Choice of organizational and legal form

• Registration as a Sole Proprietor /SP/, Sole Proprietorship with Limited Liability Company /LLC/ or other company according to the Commercial Law.

#### 4. Company Registration

- In the Commercial Register at the Registry Agency
- Required documents:
- Memorandum of Association
- Application for registration /form A1/
- Copy of diploma and certificate of legal capacity
- Certificate from the Bulgarian National Institute of Nursing and Midwifery
  - Proof of paid state fee

#### 5. Application and licensing of the practice

- Submission of an application to the Regional Health Inspectorate/regional health inspectorate/ for opening an Independent Nursing Practice
  - Documents proving qualification and legal capacity
  - Lease agreement or own premises
  - Description of technical and medical equipment
  - Plan for organization of the activity
  - Certificate of registration in the Commercial Register

#### 6. Provision of material and technical base

- Separate premises meeting the sanitary-hygienic and functional requirements
  - Location with access to patients
- Basic medical equipment and consumables according to the profile of the activity
- Compliance with the requirements of the Regional Health Inspectorate

#### 7. Financial and insurance commitments

- Signing contracts with NHIF, private health funds, with doctors, laboratories, suppliers
  - Mandatory insurance "Professional liability"

#### 8. Starting and developing the practice

- Actual start of the activity after obtaining permission from the RHI
- Keeping mandatory medical documentation Outpatient list, Nursing file, Register of performed manipulations.
- Ensuring conditions for confidentiality, ethics and patient safety
- Carrying out activities to inform the public and advertise the services creating a website, Facebook page, business cards, flyers, participation in communities and health events

## 3.5. Approaches to financing health activities and care provided by nurses in independent nursing practices

The financing of Independent Nursing Practices, defined by the legislator as Individual Health Care Practice under Art. 18a., para. 1 of the Hospitals Act (HCA) or Group Health Care Practice under Art. 18a., para. 2 of the HCA, is an important prerequisite for their accessibility to patients. Paying for them from the personal budget would not be more difficult for the majority of those in need and this is a serious barrier to patients' access to nursing care provided by Individual or Group Health Care Practice under Art. 18a., para. 1 and 2 of the HCA. On the other hand, most of the people in need of nursing care have been paying their insurance premiums under the Health Insurance Act (HICA) for many years and at the moment when they need such care, they cannot benefit from it due to the lack of regulatory mechanisms to provide it to them. In this sense, the state is a debtor to this category of its citizens.

In view of this, opportunities should be sought to fill the gaps in the legislative framework and, in particular, by regulating minimum packages for nursing care provided by an Individual Health Care Practice under Art. 18a., para. 1 of the Health Care Act or a Group Health Care Practice under Art. 18a., para. 2 of the Health Care Act, which should be paid for by the NHIF. The specified minimum packages for nursing care should be prepared in accordance with

Regulation No. 1 of February 8, 2011 on the professional activities that nurses, midwives, associated medical specialists, dental technicians and health assistants may perform by appointment or independently (title supplemented - SG, issue 61 of 2022) which, after regulatory regulation, can be paid for by the NHIF.

Other additional funding opportunities could also be sought by considering changes to the regulatory framework related to voluntary health insurance (VHI), as a form of supplementary insurance regulated by the Health Insurance Act. It is offered by licensed health insurance companies that are not insurers. Based on the main characteristic of the SCI, according to which the insurer bears the costs of medical services that are not covered by the NHIF, it could be envisaged to finance supplementary nursing care packages through funds from voluntary health insurance.

Other sources of funding may be activities under European projects and donations from individuals or legal entities, but they do not constitute a permanent solution with regard to the financing of nursing care provided by an Individual Health Care Practice under Art. 18a., para. 1 of the Health Care Act or a Group Health Care Practice under Art. 18a., para. 2 of the Health Care Act and may be of a complementary nature.

According to the provisions of Art. 58. of Section VIII of the Health Insurance Act (HIA), entitled "Agreement between the National Health Insurance Fund and a Medical Care Provider", it is stated that "Medical care providers within the meaning of this Act are medical institutions or their associations under the Medical Institutions Act, with the exception of medical institutions under Art. 8, para. 1, item 5 of the Medical Institutions Act, and national centers for public health problems under the Health Act".

According to the specified text of 58. of Section VIII of the Health Insurance Act (HIA), it is evident that an Individual Health Care Practice, regulated in Art. 18a., para. 1 of the HIA or a Group Health Care Practice, regulated in Art. 18a., para. 2 of the HIA, are

providers of medical care under the HIA, since they are medical institutions under the Medical Institutions Act, and do not fall under the exceptions that the legislator has expressly mentioned, namely medical institutions under Art. 8, para. 1, item 5 of the Medical Institutions Act, and national centers for public health problems under the Health Act.

And according to the rule of Art. 59, para. 1 of the HIPAA "The contracts under Art. 20, para. 1, item 4 for the provision of medical care under this Act shall be concluded between the Director of the RHIF and the medical care providers in accordance with the NRF".

As stated in the rule of Art. 5, para. 2, item 2, of the Health Insurance Act, "The national framework contracts contain the individual types of medical care under Art. 45; the terms and conditions for providing assistance under item 2; the volumes, prices and methodologies for pricing and purchasing the types of medical care under item 2; criteria for quality and accessibility of assistance under item 2; documentation and document flow; the obligations of the parties regarding information provision and information exchange; the terms and conditions for control over the implementation of contracts; sanctions for non-performance of the contract; other issues of importance for health insurance. It should be emphasized that the legislator also includes medical care for treatment at home among the individual types of medical care under Art. 45 of the Health Insurance Act, and the Individual Health Care Practice under Art. 18a., para. 1 of the Health Insurance Act and the Group Health Care Practice under Art. 18a., para. 2 of the Health Insurance Act provide precisely home care (Art. 45, para. 10 of the Health Insurance Act).

Therefore, it is appropriate to make a change in the regulatory framework related to the conclusion of the NRF and the medical care providers, which would make it possible to conclude a contract between the NHIF and the Individual Health Care Practice under Art. 18a, para. 1 of the Health Care Act and the Group Health Care Practice under Art. 18a, para. 2 of the Health Care Act, in their capacity as providers of medical care under

the Health Insurance Act and medical institutions under the Medical Institutions Act.

In this regard, in the event of a future change in the Health Insurance Act as a regulatory act regulating health insurance in the Republic of Bulgaria and related public relations, it is appropriate de lege ferenda:

In Section VII. National Framework Agreement

To the provisions of Art. 53, para. 1. the following texts shall be added (marked in bold):

"For the implementation of the activities provided for in this Act, the NHIF and the Bulgarian Medical Association

- \* "and the Bulgarian Association of Healthcare Professionals" shall adopt by signing a National Framework Agreement for Medical Activities and
- \* "healthcare", and the NHIF and the Bulgarian Dental Association shall adopt by signing a National Framework Agreement for Dental Activities.

In the rule of Art. 59c., para. 1 of the Health Insurance Act, the legislator emphasizes that "Criteria for accessibility and quality of medical care are:

- 1. provision of the medical facility under Art. 9 of the Law on Medical Facilities with medical specialists on a basic employment contract;
- 2. availability of the legally defined and technically sound medical equipment and technology on the territory of the relevant medical facility;
- 3. provision by the medical facility under Art. 9 of the Law on Medical Facilities of continuous 24-hour provision of medical care in emergency situations;
- 4. provision of medical care in accordance with the approved medical standards and Rules for good medical practice."

In this regard, in addition to the proposed changes in the legislation and in order to ensure their applicability, it is appropriate

for the National Quality Council at the Bulgarian Academy of Nursing and Health Care to initiate the adoption of Rules for good nursing practice and a Standard for health care provided by an Individual Health Care Practice under Art. 18a, para. 1 of the Health Care Act and Group Practice for Health Care under Art. 18a., para. 2 of the Health Care Act, with a view to providing health care within the meaning of Art. 59c, para. 4 of the Health Care Act.

The proposed approaches aimed at the regulatory regulation of the financing of healthcare provided by medical specialists with independent practice, on the one hand, will contribute to the provision of affordable healthcare, and on the other hand - to an adequate response to the needs of patients and an increase in their quality of life and satisfaction.

## 3.6. Expert assessment of the proposed innovative practical approaches

The opinion and assessment of the experts on the presented innovative practical approaches was studied.

According to a significant part of the experts (72.0%), the unified electronic system proposed by us for documenting and systematizing information related to nursing activities and care performed by nurses with independent nursing practices is practically applicable and will be adopted for work by healthcare specialists working in these practices (Fig. 33).

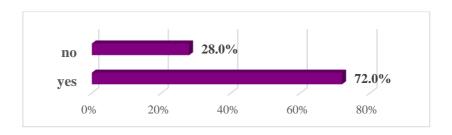


Fig. 33. Expert assessment of the practical applicability of the unified electronic system for documenting and systematizing information related to nursing activities and care in independent nursing practices

When asked about the possible contributions to the practice of the unified electronic system for documenting and systematizing information related to nursing activities and care in independent practices, the majority of experts indicated that it would contribute to increasing the awareness of medical specialists in independent nursing practices (52.0%), to ensuring continuity and continuity of patient care (52.0%), to optimizing the activities of health professionals (46.0%), and 38.0% of them see an opportunity to value their work. A small part of the experts believe that the unified electronic system is a way to create a network of all independent practices (2.0%) (Fig. 34).

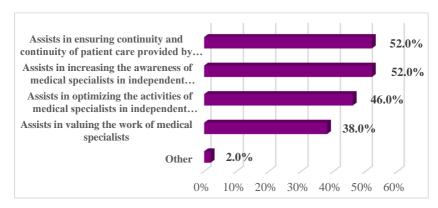


Fig. 34. Opinion of experts on the practical significance of the unified electronic system for documenting and systematizing information related to nursing activities and care in independent nursing practices

(Answers exceed 100%, as the question allows for multiple answers)

In connection with the obtained results, the experts' assessment of the proposed model of a unified form for obtaining informed consent from the patient for the performance of health care and activities by a nurse from an individual/group health care practice is also important. A few experts expressed a negative opinion on the issue (4.0%). Their main arguments are that "colleagues are trying to escape from filling out forms at the expense of performing a larger number of paid manipulations". In contrast, a significant part of the experts (96.0%) have no comments and recommendations and believe that the proposed model of a unified form for obtaining informed consent from the patient is applicable in practice (Fig. 35).

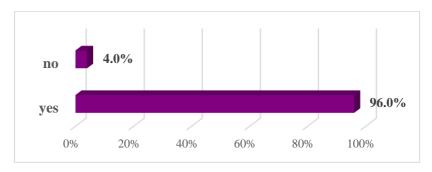


Fig. 35. Expert assessment of the practical applicability of the unified form for obtaining informed consent from the patient

Experts believe that the unified form for obtaining informed consent from the patient for health care and activities in individual/group practice will contribute to the professional comfort and security of medical specialists in independent nursing practices (90.0%), to respecting the patient's right to informed consent (70.0%), to optimizing the activities of medical specialists in independent nursing practices (38.0%) and to protecting against possible legal claims to their activities (2.0%) (Fig. 36).

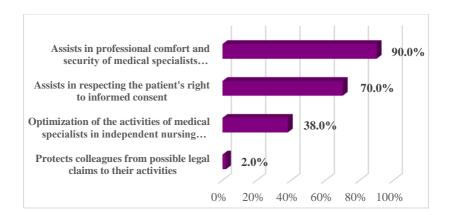


Fig. 36. Possible contributions of the unified form for obtaining informed consent from the patient

(Answers exceed 100%, as the question allows for multiple answers)

The experts were offered for evaluation the Algorithm for the establishment of independent nursing practices developed by us. The experts believe that it will make it easier for nurses to take this important step in their careers and will help to orientate themselves more quickly in the regulatory requirements.

According to a significant part of the experts, the curriculum we proposed for the specialty "Independent Health Care Practice" in the healthcare system, for persons with professional qualifications in a medical profession from the professional field "Health Care" (physician assistants, nurses, midwives or rehabilitators), will contribute to the formation of specialized knowledge, skills and professional competence related to their activities in independent health care practices.

The experts also positively assess the approaches we proposed for financing health activities and care provided by medical specialists in independent practices. According to them, they will contribute to facilitating patients' access to health care and overcoming financial challenges for both patients and health care specialists.

The results of the expert assessment provide grounds for drawing the following conclusions:

The proposed practical approaches, creating opportunities for overcoming the challenges of healthcare provided by nurses in independent nursing practices, are practically applicable and will be adopted for work by healthcare professionals.

- 1. It is necessary to regulate the proposed:
- A unified electronic system for documenting and systematizing information related to nursing activities and care in independent nursing practices;
- A unified form for obtaining informed consent from the patient;
- Approaches to financing health activities and care provided by medical specialists in independent practices;
- Curriculum for the specialty "Independent Health Care Practice".

#### **CONCLUSIONS**

The results of the study provide grounds for drawing the following conclusions:

- 1. It has been proven that the main challenges facing independent nursing practices are the lack of funding, the lack of information about independent nursing practices and the lack of a unified electronic system for documenting health activities and care.
- 2. Based on the comparative legal analysis of the legislation of the Republic of Bulgaria and the studied countries, it was found that there is no unified approach regarding the requirements for financing independent nursing practices and documenting and systematizing information related to nursing care for patients.
- 3. It has been proven that there is a need to further develop and refine the current legal framework in the Republic of Bulgaria regarding the financing of independent nursing practices and documenting and systematizing information related to nursing care for patients.

- 4. The majority of nurses, patients and experts are categorical that the nurse with independent practice has an important role in the process of providing quality comprehensive care for patients.
- 5. Positive attitudes of patients to benefit from care provided by nurses with independent nursing practice have been proven.
- 6. According to the majority of experts, there is a need for additional training for nurses carrying out their activities through independent nursing practice.
- 7. The strengths and weaknesses, opportunities and threats outlined in the SWOT analysis regarding independent nursing practices in our country justify the need to develop innovative approaches for organizing information related to nursing activities and care, their financing, as well as their regulatory regulation in the legislation of the Republic of Bulgaria.
- 8. All experts unite around the need to introduce the proposed innovative approaches, in order to increase awareness and optimize the activities of health professionals, by creating opportunities for planning, organizing, evaluating, monitoring and reporting on nursing activities and care and from there for their valuation and financing.
- 9. The expert assessment categorically proved the applicability of the developed innovative approaches for organizing information related to nursing activities and care performed by nurses with independent nursing practices and for their financing.

#### **SUGGESTIONS**

#### 1. To the Ministry of Health:

To further develop and refine the current legal framework in the Republic of Bulgaria relating to the financing of independent nursing practices and the documentation and systematization of information related to nursing care for patients, by introducing:

- A unified electronic system for documenting and systematizing information related to health activities and care performed by nurses with independent health care practices.
- A model of a unified form for obtaining informed consent from the patient for the performance of health care and activities by a nurse (health care specialist) from an individual/group health care practice.
- Approaches to financing health activities and care provided by medical specialists in independent health care practices.
- Introduction of the specialty "Independent Health Care Practice" in the health care system, for persons with professional qualifications in a medical profession from the professional field "Health Care" (physician assistants, nurses, midwives or rehabilitators).

#### 2. To the Bulgarian Association of Healthcare Professionals:

- To initiate regulatory regulation and implementation of the proposed innovative approaches for organizing information related to health activities and care performed by medical specialists with independent healthcare practices.
- To stimulate and support the professional development and improvement of healthcare specialists performing their activities through independent healthcare practices, through continuous training in the field of continuing education.

#### 3. To Medical Universities:

• To promote the implementation of training under the PGE system for the improvement of medical specialists performing their activities through independent healthcare practices in the Republic of Bulgaria.

#### **CONTRIBUTIONS**

#### With theoretical and cognitive significance:

- 1. The first-of-its-kind comprehensive, targeted and in-depth study of the opportunities and challenges related to independent nursing practices has been conducted.
- 2. Based on the surveyed opinions of patients, nurses and experts, the important role and contribution of the nurse with an independent practice to improving the quality of care, the attitudes of patients to benefit from this care have been proven, and the main challenges and opportunities related to their implementation have been identified.
- 3. Based on a comparative legal analysis of the legislation of the Republic of Bulgaria and other countries relating to independent nursing practices, specific recommendations have been made to supplement and refine the current regulatory framework in our country, in connection with regulating the requirements for documenting and systematizing information related to health activities and care in independent nursing practices and their financing.
- 4. Proposals and recommendations have been formulated to the responsible institutions for the organization of information related to nursing activities and care performed by nurses with independent nursing practices, in order to increase awareness, improve the activities of health professionals, ensure continuity and continuity of patient care, and enable their valuation and financing.

#### **Practical and applied contributions:**

- 1. A unified electronic system has been developed for documenting and systematizing information related to nursing activities and care performed by nurses with independent nursing practices.
- 2. An author's model of a unified form for obtaining informed consent from the patient for the performance of health care and activities by a nurse (health care specialist) from an individual/group health care practice has been created, helping to respect the patients' right to informed consent, to create partnership relationships and shared responsibility between medical specialists and patients.
- 3. A training program has been developed for training in the specialty "Independent Health Care Practice"
- 4. An algorithm has been developed for establishing an Outpatient Clinic for Individual/Group Health Care Practice.
- 5. Approaches have been developed for financing health activities and care performed by nurses in independent nursing practices.

#### CONCLUSION

The first-of-its-kind comprehensive, targeted and in-depth study of the opportunities and challenges associated with independent nursing practices has been carried out.

Based on the results obtained, innovative approaches have been developed for organizing information related to nursing activities and care performed by nurses with independent nursing practices, in order to increase awareness, optimize the activities of health professionals and ensure continuity and continuity of patient care.

An expert assessment has been conducted, proving the applicability of the developed innovative approaches for organizing information related to nursing activities and care performed by nurses with independent nursing practices.

## SCIENTIFIC PUBLICATIONS AND PARTICIPATIONS RELATED TO THE DISSERTATION

- Georgieva A, Vasileva D. Concepts of advanced nursing practice, XXIII International Scientific and Practical Conference "Human Health from the Positions of Practical Medicine: A Scientific Approach", 28.07.2023; Science Time. 2023; 7(114):14-19. ISSN2310-7006
- 2. Georgieva A, Vasileva D. Comparative legal study of the regulatory framework of the activities of free-lance nurses in the USA, Canada and France. XI Scientific Session for lecturers, doctoral candidates and students of the Medical College Varna with international participation, Varna, 22 November 2024; Varna Medical Forum. 2024; 2(13):267 -273. ISSN 1314-8338