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**CONTINUING EDUCATION OF MIDWIFE –  
INNOVATIVE EDUCATIONAL APPROACHES**

**ABSTRACT**

**of dissertation work**

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professional field 7.4. “Public Health”,  
scientific specialty “Health Care Management”

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## USED ABBREVIATIONS

- BAHCP** – Bulgarian Association of Health Care Professional
- ABM** – Alliance of Bulgarian Midwives (professional organization of midwives in Bulgaria)
- EQF** – European Qualifications Framework for lifelong learning
- EU** – European Union
- LPONMAMS** – Law on the Professional Organization of Nurses, Midwives and Associated Medical Specialists
- LHE** – Law on Higher Education
- LA** – Law on Health
- LME** – Law on Medical Establishments
- LPET** – Law on Professional Education and Training
- CE** – Continuing education
- WHO** – World Health Organization
- UNESCO** – United Nations Educational, Scientific and Cultural Organization
- EMA** – European Midwives Association
- ICM** – International Confederation of Midwives
- EFN** – European Federation of Nurses' Associations
- EACCME** – European Accreditation Council for Continuing Medical Education
- ECVET** – European Credit Transfer System for Vocational Education and Training
- LLL** – lifelong learning
- RCM** (Royal College of Midwives) – Royal College of Obstetricians in the UK
- WFME** – World Federation for Medical Education
- EUSM** – European Union of Specialist of Medicine
- OGD** – Obstetrics- Gynecology Department
- OC** – Outpatient care
- MHAT** – Multidisciplinary Hospital for Active Treatment
- UMHAT** – University Multidisciplinary Hospital for Active Treatment
- SHMGAT** – Specialized Hospital for Midwifery and Gynecology Active Treatment

## I. INTRODUCTION

In 2003, through the WHO's "Power for Health" strategy, the member states of the European region have united around the growing need for high-quality, efficient and safe healthcare services, which are based on continuous professional development and self-improvement. This strategy is fundamental to the uninterrupted education of medical professionals and it sees continuing education as a "milestone" in the process of improvement through lifelong learning.

Continues education and related professional development exists in every profession, but it is especially relevant for mid wife, who belongs to the regulated professions and she is of public importance and essential for human life and health. The WHO "Health 2020" concept emphasizes the key role of nurses and midwives in society's efforts to address public health challenges and in ensuring continuity of health cares. Therefore, they must constantly maintain their competence at a high professional level through continuing education.

Despite the fact that Bulgaria has been working in this direction for several decades, continues education of medical specialists and in particular of midwives remains in the background. At this stage in our country there is no working model, linking the increase of professional competence with the achieved results from continuing education, with stimulation and career development. Employers, who must be leaders in providing professional qualifications, are not interested and do not invest enough funds in staff training. The deficit is not only on their part, but also on the part of all institutions responsible for this, as well as on the portion of the class itself. The process deepens the problems and leads to demotivation of midwives for continuing education, low professional status and loss of public trust in their professionalism.

## II. METHODOLOGY AND ORGANIZATION OF SCIENTIFIC RESEARCH

### 2.1. Purpose and tasks of the research

**Objective:** based on an analysis of continuing midwife's education in European systems and surveyed opinion of different groups of respondents, a SWOT analysis of the existing reality in our country to be made and an innovative model for evaluating the results of continuing education to be proposed.

In order objective to be achieved we set the following **scientific research tasks:**

1. A review and comparative analysis of the systems for continuing midwife's education in Bulgaria and Europe in terms of legal regulation, licensing, organization, control, financing and stimulation of activities to be done.
2. Awareness of midwives and students about continuing education and their attitudes to participate in activities related to qualification incensement and continuous professional development to be studied.
3. The health care managers' opinion and the role they play in the process of continuing education of midwives to be researched.
4. Identifying the factors hindering effective continuing education.
5. SWOT analysis of the continuing education of midwives in our country to be implemented.
6. The necessity to develop and implement new approaches for control and evaluation of continuing education related to the basic guidelines for quality and safety of obstetric care to be evidenced.
7. **Continuing education assessment model**, containing appropriate tools, guaranteeing objectivity to be developed.
8. The experts' opinion on the self-developed **Continuing education assessment model** to be explored.

### 2.2. Working hypotheses

1. The comparative analysis of the systems for continuing midwives' education in Europe will show that the Bulgarian continuing education meets the criteria for legal regulation, organization, transparency and provision of activities.

2. New approaches to the assessment and monitoring of continuing education would increase the ability of midwives to provide safe care.
3. The lack of opportunities for career development and funding for continuing education demotivates midwives for lifelong learning.

### 2.3. Organization of the research

- **Object of the study**

We have determined for the object of the research:

- **Regular midwives** working in OGD and Neonatology Departments
- 3rd and 4th year *students* of specialty of “Midwife” during their studies at MU
- **Experts**
  1. **health care managers** (chief and senior midwives/nurses)
  2. **habilitated lecturers** with basic medical education “Midwife” and “Nurse”.

- **Scope of the study and technical units**

A total of 498 persons are covered, divided into the following groups

- **First group – regular midwives (n = 324)**, working in OGD and Neonatology Departments in the indicated medical establishments, by cities, (*Fig. 1.*):

|                           |                                 |                       |                          |                            |
|---------------------------|---------------------------------|-----------------------|--------------------------|----------------------------|
| SHMGAT<br>Varna<br>31     | Second<br>SHMGAT Sofia<br>36    | UMHAT<br>Pleven<br>25 | UMHAT<br>Ruse<br>21      | MHAT<br>Razgrad<br>20      |
| MHAT<br>Sliven<br>21      | MHAT<br>Kardzhali<br>19         | MHAT<br>Dobrich<br>31 | MHAT<br>V. Tarnovo<br>19 | UMHAT-<br>Medica<br>Ruse14 |
| MHAT<br>Targovishte<br>17 | MHAT Gorna<br>Oryahovitsa<br>12 | MHAT<br>Shumen<br>27  | MHAT<br>Sevlievo<br>9    | MHAT<br>Gabrovo<br>22      |

*Fig. 1. Distribution of midwives by medical institutions and cities*

- **Second group – Students (n = 104)** from III and IV year of the specialty “Midwife”, entered the training in the specialty and formed an attitude for future realization of the following schools (**Fig. 2.**).



**Fig. 2. Distribution of students by educational institutions**

- **Third group – Experts**

**1. Health care managers (n = 58)** – chief midwives/nurses of specialized obstetrics-gynecology, university hospitals and hospitals, with the presence of OGD or Neonatology structure and senior midwives/nurses working in OGD and Neonatology departments in the indicated on (**Fig. 3.**) medical establishments, by cities:



**Fig. 3. Distribution of managers by medical institutions and cities**

**2. Habilitated lecturers (n = 12)** with basic medical education “Midwife” and “Nurse” from the indicated universities and branches of (**Fig. 4**):



|                                    |                            |                                   |
|------------------------------------|----------------------------|-----------------------------------|
| MU -<br>Sofia<br>2                 | MU -<br>Pleven<br>2        | MU -<br>Varna<br>4                |
| Affiliate -<br>Veliko Tarnovo<br>1 | Affiliate -<br>Shumen<br>2 | RU „Angel<br>Kanchev” - Ruse<br>1 |

**Fig. 4. Distribution of habilitated lecturers by university's institutions**

- **Logical units of the research:**
  - **Every regular midwife**, working in OGD, Neonatology Department;
  - **Each student** from III and IV year of education in specialty “Midwife”;
  - **Every expert**, in the position of manager of midwifery health care (chief and senior midwives/nurses);
  - **Every expert**, habilitated lecturer with basic medical education “Midwife” and “Nurse”

- **Criteria for inclusion of individuals in the survey**

***First group – regular Midwives***

- Working as regular midwives in Obstetric Gynecological Department (OGD), Neonatology Department
- Specialty experience non less than 1 year
- Signed informed consent and participated voluntarily in the study

***Second group – group of Students***

- Midwifery students
- Students III и IV year of education
- Signed informed consent and participated voluntarily in the study

***Third Group – Experts***

***1. Healthcare managers (chief and senior midwives/nurses)***

- Position of chief/senior midwife/nurse in a specialized, university or multidisciplinary hospital with Obstetrics-Gynecology and / or Neonatology structure
  - Basic medical education “Midwife” or “Nurse”
  - Graduates of the Master's or Bachelor's degree in “Health Care Management”
  - Internship in the specialty not less than 1 year as a manager
  - Signed informed consent and participated voluntarily in the study
- 2. *Habilitated lectures***
- University lecturers with at least 5 years of experience
  - Posse basic medical education “Midwife” or “Nurse”
  - Occupying the academic position of “Associate Professor” or “Professor”
  - Signed informed consent and participated voluntarily in the study

- **Stages of the study and location**

The organization of the study is represented in (*Table 1.*).

***Table 1. Research organization***

| <b>Stage</b>   | <b>Activity</b>                                                                                                                                                           | <b>Location</b>            | <b>Toolkit</b>                                                                                                                                                                                | <b>Period</b>        |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| <b>Stage 1</b> | Critical analysis of the scientific literature on the subject.                                                                                                            | Veliko Tarnovo city        | Specialized literature; specialized databases with publications.                                                                                                                              | June – December 2017 |
| <b>Stage 2</b> | 1. Defining the objective and tasks of scientific research<br>2. Choice of methods<br>3. Development of toolkit<br>4. Determining the centers for conducting the research | Veliko Tarnovo city        | <b>Questionnaire № 1</b> (midwives)<br><b>Questionnaire № 2</b> (students in Midwifery)<br><b>Questionnaire № 3</b> (health care managers)<br><b>Questionnaire №1</b> (habilitated lecturers) | January – June 2018  |
|                |                                                                                                                                                                           | 1.SHMGAT Varna<br>2.Second |                                                                                                                                                                                               |                      |

|                |                                                |                                                                                                                                                                                                                                                                                                               |                                                                                  |                         |
|----------------|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-------------------------|
| <b>Stage 3</b> | Conducting research                            | SHMGAT<br>„Sheynovo” Sofia<br>3.UMHAT Pleven<br>4. UMHAT Ruse<br>5.UMHAT Medica Ruse<br>6.MHAT Veliko Tarnovo<br>7. MHAT Gabrovo<br>8. MHAT Gorna Oryahovitsa<br>9. MHAT Dobrich<br>10. MHAT Kardzhali<br>11. MHAT Razgrad<br>12. MHAT Sevlievo<br>13. MHAT Sliven<br>14. MHAT Targovishte<br>15. MHAT Shumen | <b>Questionnaire № 1</b><br><b>Questionnaire № 2</b><br><b>Questionnaire № 3</b> | March – August 2019     |
| <b>Stage 4</b> | Statistical processing and analysis of results | Veliko Tarnovo city                                                                                                                                                                                                                                                                                           | Statistical package for processing IBM Statistics for Windows, ver. 19.          | August – September 2019 |
| <b>Stage 5</b> | Preparation of a Model and assessment tools    | Veliko Tarnovo city                                                                                                                                                                                                                                                                                           | <b>Questionnaire №1</b>                                                          | August – September 2019 |
| <b>Stage 6</b> | Forming the dissertation body                  | Veliko Tarnovo city                                                                                                                                                                                                                                                                                           |                                                                                  | July – September 2020   |

#### • Research bodies

For the most part, the study has been conducted independently and personally by the principal investigator to ensure reliability and proper operation of the toolkit. For a small part of the study, collaborators were involved – senior midwives/nurses of the respective departments where the research was conducted, previously trained to work with the tools and familiar with the purpose and methodology.

- **Sources for gathering information**
  - Opinion of chief, senior midwives/nurses and regular midwives working in OGD and Neonatology department of the listed (*Fig. 1.*) medical institutions.
  - Opinion of the students in the specialty “Midwife” from the indicated at (*Fig. 2.*) higher education institutions.
  - Opinions of habilitated lecturers from the Department of “Health Care” from the higher education institutions indicated in (*Fig. 3.*).
  - Legal and normative documents, regulating the regulation of midwifery CE in Bulgaria and in the EU.
  - Documents and strategies of WHO, EMA, ICM, EFN, on the policy and development of CE of midwives and other medical professionals.
  - Literature sources providing information on CE and career development, patient and staff safety in Bulgaria, the EU and around the world.

## **2.4. Research methods**

**1. Documentary – content method.** Researched normative documents of the WHO, the EU and the Republic of Bulgaria related to the midwife's CE.

**2. Qualitative content analysis** of documents – using a constructive approach, an analysis of the considered documents is made through interpretation.

### **3. Questionnaire method**

✓ Primary sociological information was collected through 3 author's questionnaires and a direct individual anonymous survey with regular midwives, students and experts (chief/senior midwives / nurses).

✓ Questionnaire for habilitated lecturers – semi-standardized interview

**4. SWOT analysis** to determine the strengths and weaknesses of the CE of midwives in Bulgaria, the threats and prospects arising from the current situation in our country.

### **5. Statistic methods:**

✓ **Comparative analysis** – to compare the changes in the indicators of the variables

- ✓ **Parametric and non-parametric tests** – for hypothesis evaluation – statistical comparison  $\chi^2$  analysis for testing hypotheses for connection between qualitative variables.
- ✓ **Variation analysis** – measures the differences in the population on a certain basis.
- ✓ **Correlation analysis** – to establish the degree of correlation between two variables.
- ✓ **Graphic analysis** – shows graphically processed data from the survey. MS Excel and IBM Statistics 19 were used for graphical analysis.

## 2.5. Research tools

To achieve the goal and to solve the pre-formulated research tasks, we developed our own tools for the four groups of respondents (*Table 2*).

*Table 2. Toolkit of the sociological research*

| Type of toolkit                                          | Questions    |        |                                                                             |      |
|----------------------------------------------------------|--------------|--------|-----------------------------------------------------------------------------|------|
|                                                          | Total number | Closed | Semi-open                                                                   | Open |
| Questionnaire №1 for practitioners midwives              | 17           | 6      | 9                                                                           | 2    |
| Questionnaire №2 for students form “Midwife’s specialty” | 14           | 5      | 7                                                                           | 2    |
| Questionnaire №3 for chief/senior midwives/nurses        | 16           | 7      | 8<br>Question №10<br>answers are ranked<br>in order of<br>importance        | 1    |
| Questionnaire №1 habilitated lectures                    | 11           | 0      | 10<br>Questions №2 и № 3<br>answers are ranked<br>in order of<br>importance | 1    |

**Questionnaire № 1 for regular midwives** is aimed at establishing:

- ✓ demographic characteristics and professional status;
- ✓ advanced qualification – participation in various forms of training, preferences, opinion about CE;
- ✓ motivation, application of CE, financing;
- ✓ factors hindering CE;
- ✓ information for inclusion in forms of CE and professional interests.

**Questionnaire № 2 for students from “Midwife” specialization** aims to research the attitude of students for professional realization and attitude to professional development after obtaining a bachelor's degree in “Midwife”.

**Questionnaire № 3 for experts (health care managers)** – aimed at establishing:

- ✓ demographic characteristics and professional status;
- ✓ participation in various forms and opinion about CE;
- ✓ organizing and planning CE events;
- ✓ factors hindering CE;
- ✓ motivation of staff to participate in forms of CE.

**Questionnaire №1 for habilitated lecturers** aims to examine the opinion of experts on the own developed model for assessment of continuing education. The questionnaire is implemented at a later stage, after the initial processing of the data from the survey, which allows for more targeted enrichment of information and deeper insight into the essence of the topic.

## **2.6. Conceptual apparatus**

Due to the significant number of terms that are used and are interpreted unambiguously, but are practically different, we consider it necessary to present the main terms used in the dissertation to clarify the chosen topic:

• **continuing education** – the term means a process of improvement of the acquired qualification in a profession and/or acquisition of new knowledge, skills and competencies.

**Specification:** “... continuation or resumption of organized learning after the completion of the initial educational phase of the profession in order to deepen the acquired knowledge and abilities and / or to acquire new knowledge, skills and abilities.”

*Gonon, Ph., Schlafti, A., et al.. Weiterbildung in der Schweiz. 1998. pp.13.*

• **innovative educational technologies** – defined as more effective learning processes oriented according to the planned goals.

**Specification:** “..supporting the educational process and improving student performance by creating, using and managing appropriate and more effective learning processes and resources.”

*Richey, R.C. (2008). Reflections on the 2008 AECT Definitions of the Field. TechTrends. 52(1) 24-25.*

### III. RESULTS AND DISCUSSION

The National Health Strategy (2014-2020) specifies the aims for the development of the health system and defines CE as a priority related to the health needs of people and society. The acquisition of knowledge and competencies through CE should facilitate the provision of team services, autonomous, home and long-term cares, but these priorities are only desirable for now.

CE in Bulgaria is based on scientific researches, evidences and competence and is provided through various forms, and midwives participate in activities with other specialists with whom they work in a team. Lending is carried out under the “Unified Credit System for Assessment of Forms of Continuing Education”, which takes into account primarily the duration of activities and less educational outcomes, and this is done before the implementation and does not guarantee the acquisition of relevant competencies. Standards for quality of obstetric cares and CE in Bulgaria have not yet been introduced.

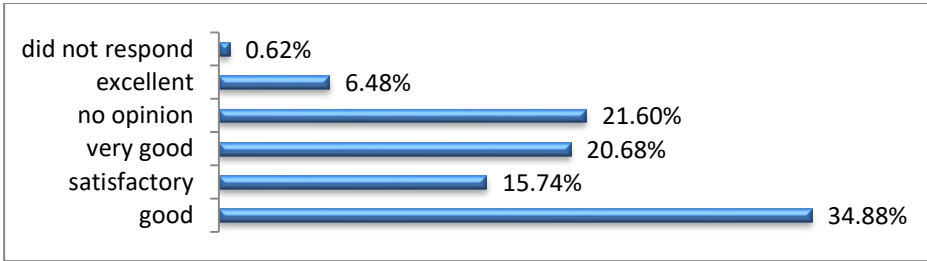
WHO recommendations for continuing education include quality improvement systems, regular evaluation, internal and external evaluation, quality analysis, but are not applied in Bulgaria. There is no working salary model related to the educational qualification degree, professional competence and the achieved results. Insufficient investments for professional qualification are invested in the CE by employers, who must be leaders in ensuring professional development, and the deficit of employer activity is not covered by the state or EU programs.

CE in Bulgaria remains in the background and this creates opportunities for expansion and deepening of the problems. In order to identify the causes, it is necessary to identify, compare and analyze the factors influencing these trends.

#### **3.1. Opinion of midwives on continuing education**

The opinion of the midwives about the level and condition of continuing education in Bulgaria is important for achieving the goal of the present research (*Fig. 5.*).

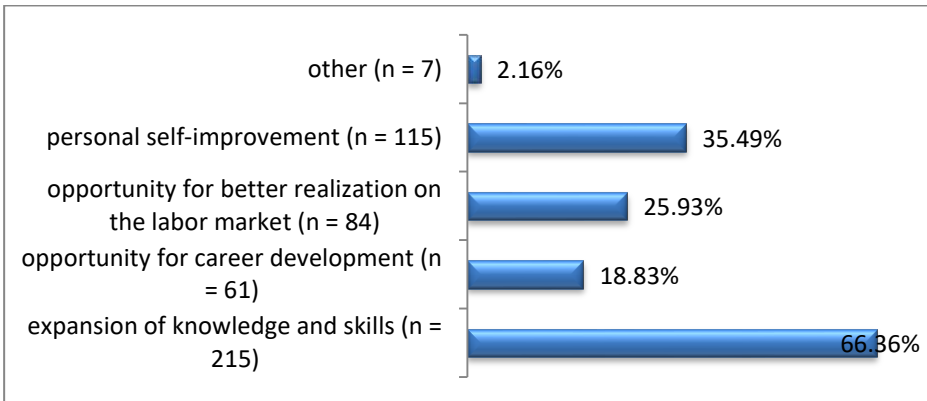




**Fig. 5. Midwives' opinion for the level of continuing education**

Positive attitude activates and motivates the person for professional development and self-improvement, it is an indicator of positive change in behavior. 34.88% of the midwives rated the continuing education as good, 20.68% gave a very good grade and 6.48% excellent grade. 15.74% of the midwives have mentioned a satisfactory assessment. The positive attitude of the majority of respondents implies a positive motivation to update knowledge and skills.

The influence of motivation on the change and maintenance of human behavior has been proven. When it comes to training, it is related to the desire to participate in the process of acquiring knowledge and acquisition new competencies, (*Fig. 6.*).



**Fig. 6. Motivation of midwives in CE participation**

(\*The results of the evaluation exceed 100%, as respondents have indicated more than one answer)

The majority of midwives (66.36%) has realized the importance of

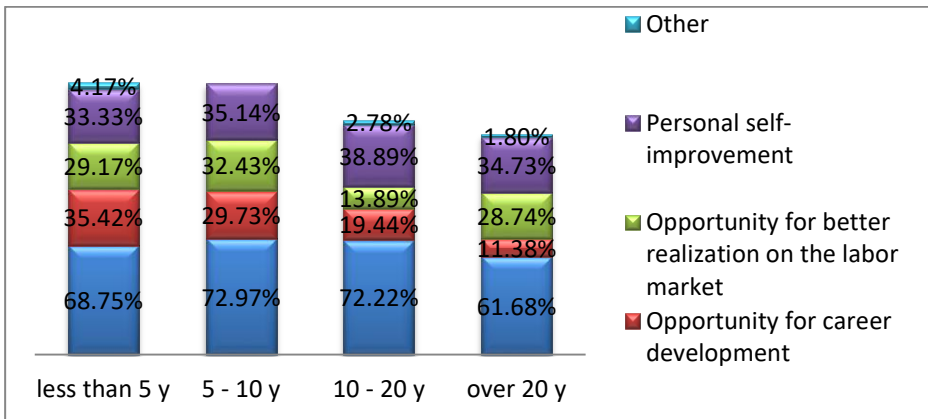
CE IAW the performance of their direct duties and has indicated in the first place, as a motivating factor, the expansion of knowledge and skills. Secondly, as a motive among the respondents (35.49%) is personal self-improvement, which in professional terms is associated with the acquisition of qualities such as empathy, discipline, responsibility, with the formation of attitudes to learning and self-learning, mastery of ethical and moral norms related to the value system and behavior.

For 25.93% of midwives, the motive for joining CE is better realization on the labor market. Upgrading the acquired knowledge, skills and competencies gives opportunities and advantages in the process of choosing a job. In 2011, the European Center for the Development of Vocational Education published a study that reflected the CE positive effect on higher payment rate, greater mobility and more effective labor integration. Part of the class is looking for realization on the labor market abroad, where this profession is valued and it is significantly better paid. The main reasons for the outflow of staff abroad are: insufficient payment, unsatisfactory working conditions, disrespect by colleagues, patients, low prestige in society. This fact is worrying and requires special attention.

Opportunities for career development as a motivating factor have indicated 18.83% of respondents. The university basic education in the profession is fundamental for the acquisition of professional competence and is carried out IAW uniform state requirements, including the acquisition of a bachelor's degree in midwifery and the opportunity to upgrade to a master's degree in "Health care management". The Law for the Development of the Academic Staff of 2010 provides an opportunity for the development of an academic career: acquisition of a scientific and educational degree "Doctor" with opportunities for habilitation (scientific title "Associate Professor", "Doctor of ... Sciences") and election for "Professor". This is the longest stage of career development, during which the teacher reaches the peak of his/her professionalism and achieves scientific growth.

2.5% of the surveyed midwives indicated financial stability as a motivating factor. There is no pay model in our country, linked to the professional competence and the achieved CE results. The ranking of the factors that motivate midwives to participate in CE does not change, regardless of whether they work in a multidisciplinary, specialized or university hospital.

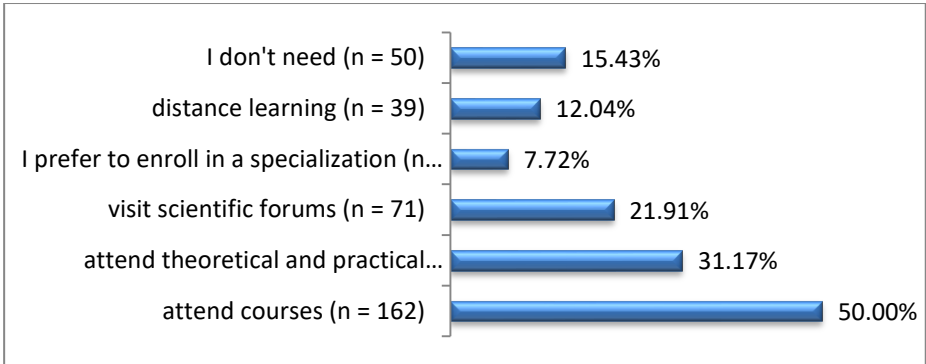
Depending on the motivation of the midwives to participate in CE from the professional experience, the expansion of knowledge and skills takes first place, with a relative share of over 60% in all groups (*Fig. 7.*).



**Fig. 7. Motivation for continuing education participation**  
 (according to the years of professional experience)  
 (\*The results of the evaluation exceed 100%, as respondents have indicated more than one answer)

On second place is personal self-improvement, with the exception of the group with less than 5 years of professional experience. In this group, second place as a motive is the opportunity for career development (35.42%). With the increase of the professional length of service, the motivation for career development decreases – for midwives with more than 20 years of work experience only 11.38% share this motive.

Advanced training is carried out through various activities (courses, seminars, conferences, distance learning, etc.). Half of the midwives (50%) have indicated that they improve their skills through courses. The short-term nature, the possibility to attend without leaving work and the minimal financial costs make the theoretical and practical seminars among the most preferred (31.17%). In the third place, midwives (21.91%) indicate the scientific forums (**Fig. 8.**).

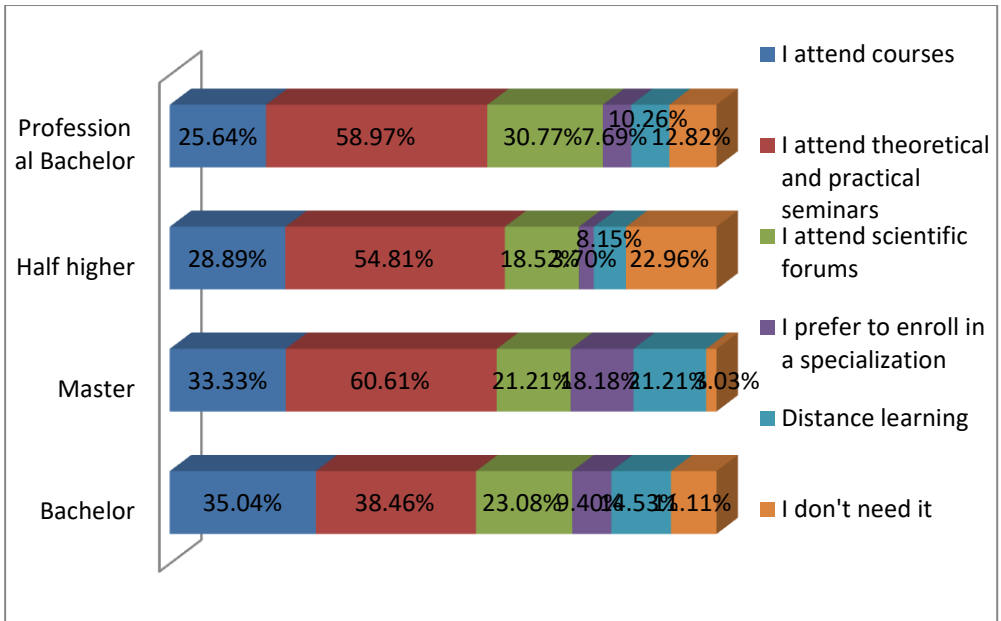


**Fig. 8. Rising qualification (midwives)**  
 (\*The results of the evaluation exceed 100%, as respondents have indicated more than one answer)

Distance learning is flexible, accessible and convenient, it saves time, allows for personal choice of topic, does not require detachment from the work process and it is preferred by 12.04% of midwives. The specialization ranks last in the preferences (7.72%). The acquisition of the specialty is carried out under Ordinance 1/2015 and is assigned to the after graduation education's departments of the medical universities in the country. The fields in which the midwife has the opportunity to specialize are: Anesthesiology and intensive care; Consultant on the issues of motherhood and newborn development, Surgical and dressing equipment, Emergency medical care, Hospital hygiene, Consultant on breastfeeding and healthy and dietary nutrition, Public health and Primary health care. The requirement for a specialty is not regulated in normative documents related to the professional activities for which the position requires additional qualification.

Worrying fact is that 15.43% of midwives have answered that they do not need to improve their skills.

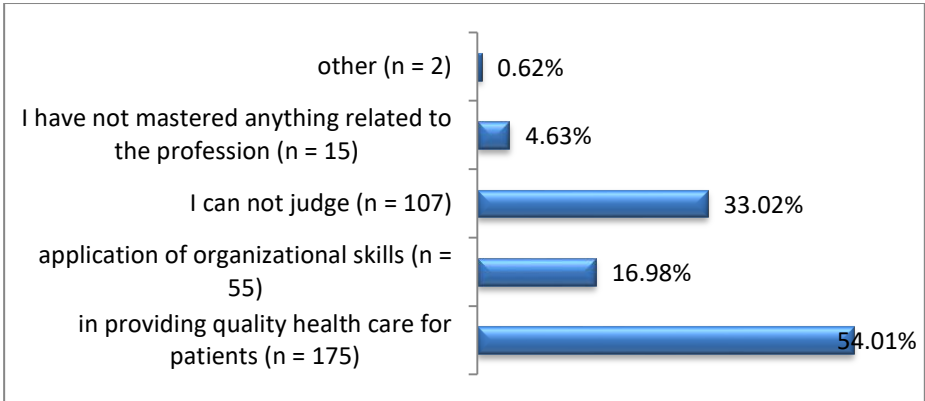
All midwives, regardless of their educational qualification degree (EQD) they possess, in the first place indicate that they prefer theoretical and practical seminars, in the second place put the visits to courses, (**Fig. 9.**)



**Fig 9. Raising qualification preferences of midwives (EQD)**  
 (\*The results of the evaluation exceed 100%, as respondents have indicated more than one answer)

Exceptions are professional bachelors (30.77%), who put visits to scientific forums in second place. Distance learning is most preferred for raising the qualification of masters (21.21%), along with visits to forums. The specialization ranks last position in all EQD. The highest is the relative part of midwives with semi-higher education who believe that they do not need training (22.96%), which can be explained by the advanced age of the group, followed by professional bachelors (12.82%) and midwives with a bachelor's degree (14.53%). Masters are the most motivated to participate in CE, only 3.03% think that they do not need raising of qualification.

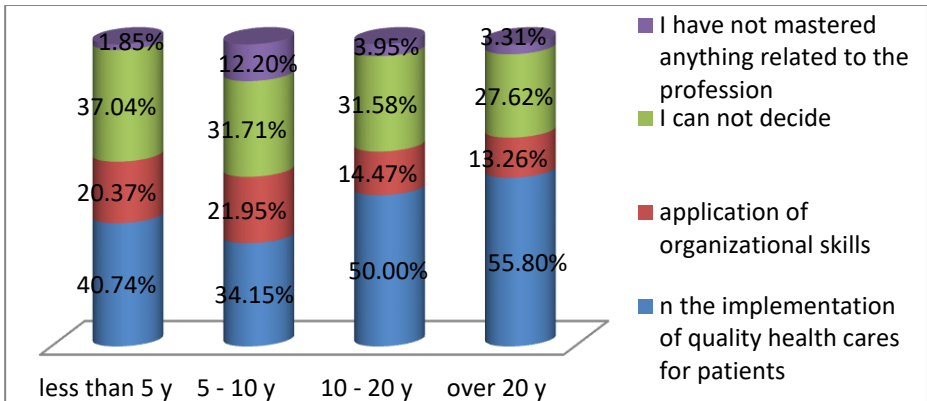
More than half of the surveyed midwives (54.01%) indicate that the knowledge and skills acquired during the CE are applied in the implementation of quality health cares (**Fig. 10.**).



**Fig.10. Application of continuing education (midwives)**

Continuing education contributes to the unstopped development and enrichment of professional and cognitive interests, to improve practical skills, which increases the quality of obstetric care. On second place midwives (16.98%) put the development of organizational skills. Only 4.63% of the respondents have answered that they have not mastered anything related to the profession, which means that the CE has no connection with their professional practice. One third of the midwives (33.02%) cannot judge where they apply the knowledge acquired from continuing training

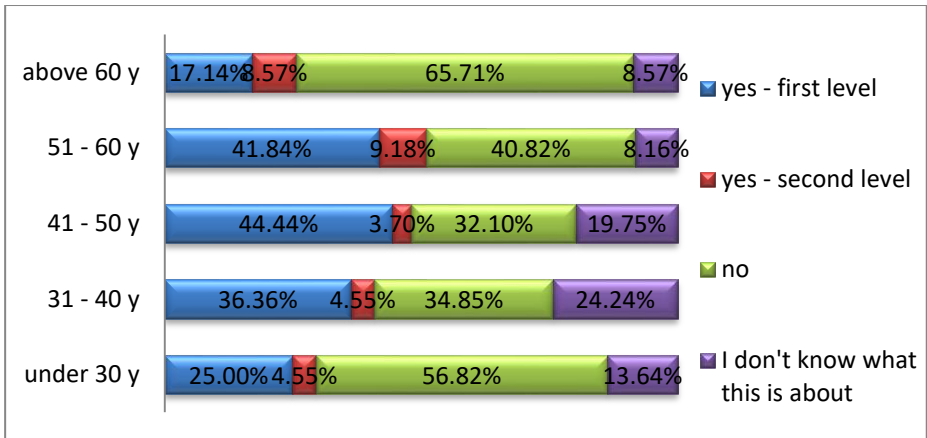
The competencies acquired during the basic education are constantly reviewed and developed. The updating of professional knowledge and skills through CE prepares the midwife for changes in her basic functions: new skills and behavior for coping in stressful situations; management in situations of uncertainty and lack of time; maintaining safe obstetric practice. We studied how midwives apply the knowledge and skills acquired by CE according to years of professional experience (**Fig. 11**).



**Fig. 11. Application of continuing education**  
*(according to the years of professional experience of the midwives)*

In all groups, on the first place is the answer in the implementation of quality health care, but with the highest relative share is the group of midwives with experience over 20 years (34.15%). In the groups with less experience (under 5 years and 5-10 years) the knowledge and skills of CE are more related to the application of organizational skills.

The certificate of professional qualification guarantees professional competence, certifies that the midwife has passed CE, corresponding to 150 credits in the previous 3 to 5 years and shows her personal responsibility for professional development. First level Certificate for professional qualification is possessed by 36.42% of the surveyed midwives, and only 6.17% have the second one. The high relative share of those who do not have a certificate stands out (42.28%), but it is even more worrying that 15.12% of midwives “do not know what it is about”. We have discovered that there is a statistically significant difference ( $\chi^2 = 29, 022$ ;  $n = 324$ ;  $r = -0.061$ ) and age affects the acquired qualifications. Midwives have realize that if they do not train constantly, they become unfit to practice their profession, so they strive to keep up with the times and their knowledge and skills to be time actual. The acquiring of new qualifications after 60 years decreases sharply, which indicates less interest or it is associated with the forthcoming transition to retirement age, (**Fig. 12.**).



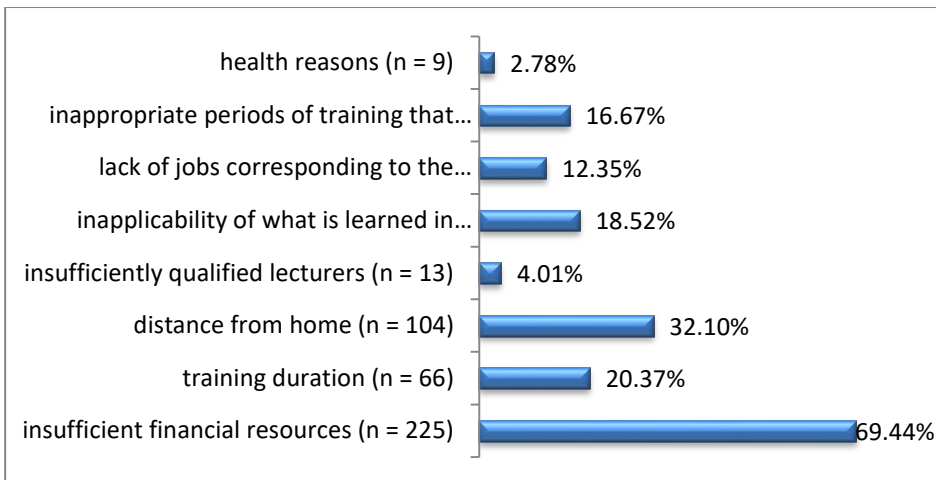
**Fig. 12. Possession of a certificate of professional qualification**  
(according to the age of the midwives)

With the increase of professional experience, the number of acquired certificates also increases, but a high relative share (from 37.50% to 60.42%) of midwives who do not have a certificate or are not familiar with the certification process is also noticed. The differences in the answers are not statistically significant ( $\chi^2 = 12,810$ ;  $n = 324$ ;  $r = -0,136$ ), at a significance level of  $p=0.05$ , i.e. the length of service does not affect the decision for professional qualification.

We have unveiled that the midwives' place of work also did not affect their decision to obtain a certificate. The highest is the relative share of midwives from OGD (37.92%), who have the first and second certificate. The differences in the answers are not statistically significant ( $\chi^2 = 8.522$ ;  $n = 324$ ;  $r = 0.047$ ), at a significance level of  $p = 0.05$ . Of those who do not know what it is about, most are those who work in the OC (28.13%). The low salary and the lack of normative documents to link the payment with the acquired qualifications demotivate the midwives to improve their qualification and to be certified.

On the first place among the factors hindering CE midwives (69,44) indicate insufficient financial resources (**Fig. 13.**).





**Fig. 13. Factors hindering the continuing education of midwives**  
 (\*The results of the evaluation exceed 100%, as respondents have indicated more than one answer)

In addition to the low income that midwives have, it also matters who funds the training. In our country it is paid mainly by the midwife. In many countries such as Malta, France, Sweden, Germany it is completely free, and the costs are borne by the state, the employer or the professional organization. The same can be said for study leave.

Secondly, as a factor hindering the participation of midwives in the CE is the distance from home (32.10%). Here we must take into account the feminization of the profession, the care of the family and children, which traditionally belongs to the woman, but the absence from home leads to additional financial burden.

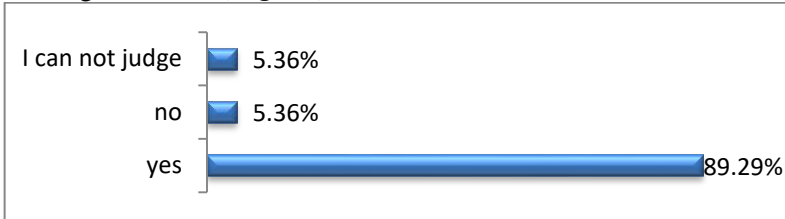
The duration of the education is indicated as a third factor (20.37%). The inapplicability of what has been learned in practice is another factor indicated by the respondents (18.52%). Inconsistent periods of training, making it difficult to combine work and study, indicate 16.67% of midwives. Other factors that appear as barriers to training are: lack of job positions corresponding to the acquired qualifications, insufficiently qualified lecturers, health reasons.

We found out that there were no significant differences in the ranking of the factors hindering CE in hospitals. The factors hindering CE are mostly financial and social – absence from home, remoteness.

### 3.2. Attitude of students from “Midwife” specialty for continuing education

The period of acquiring basic education prepares the future midwives and provides the competencies necessary for the performance of work tasks after graduation, as well as for the stages of their future professional development, which will be carried out through CE. Therefore, the opinion of students about continuing education is extremely important.

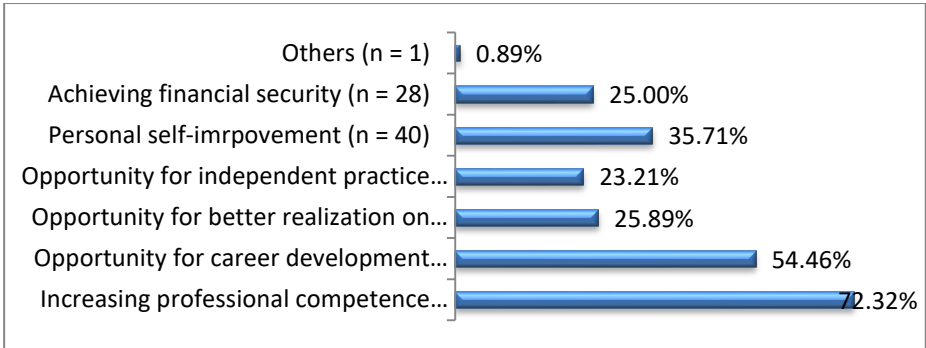
Students (89.29%) in the specialty “Midwife” show a positive attitude to continuing education (*Fig. 14*).



*Fig. 14. Attitudes of a student for continuing education*

Only 5.35% gave a negative answer and the same number still cannot decide whether they will upgrade their education. The attitude of the future midwives to the CE implies prospective professional development in various areas offered by educational system.

Motivation is a driving force for achieving certain goals. It is a key factor in the acquisition of knowledge and skills during the acquiring of university education, as well as in the further maintenance and improvement of qualifications. The main motive that the future midwives point out for inclusion in the various forms of CE is to increase and maintain the professional competence (72.31%), (*Fig. 15*).

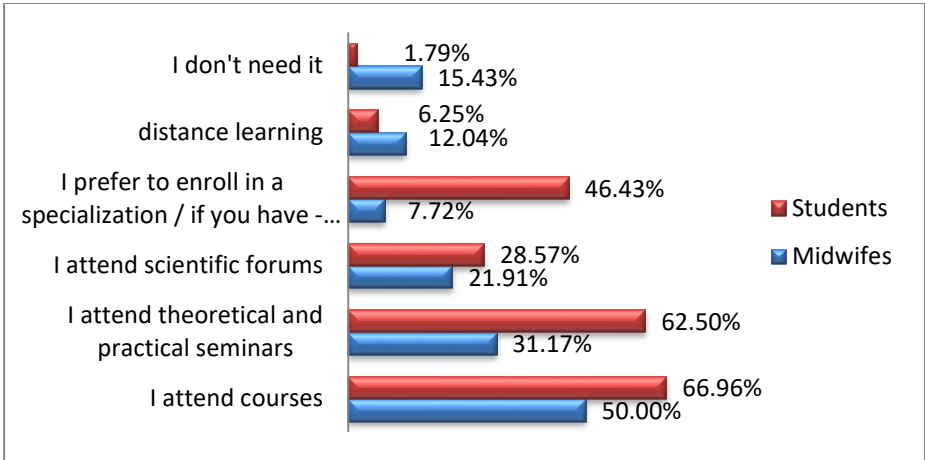


**Fig. 15. Motivation of students to participate in continuing education**

*(\*The results of the evaluation exceed 100%, as respondents have indicated more than one answer)*

For more than half of the surveyed students, the leading motive is the opportunity for career development (54.46%). Thirdly, students declare personal self-improvement as a motivating factor (35.71%). The opportunity for better realization on the labor market is in the fourth place, and in the last place is the opportunity for independent practice.

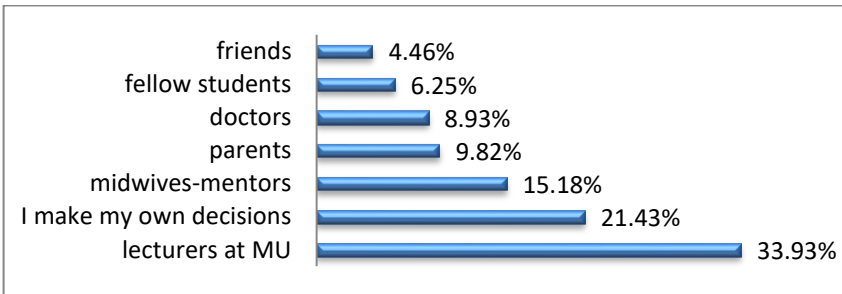
In the course of the research we have detected coincidences in the preferred forms of CE for midwives and students. Attendance at courses takes first place in both groups, seminars in second place, but with twice part of students (62.50%), scientific forums are in third place. The relative shares for all forms of CE in students are higher compared to midwives. Students show more active intentions to participate in all CDE forms. Future midwives have a much greater interest in acquiring a specialty (46.43%) than midwives practicing at the time of the study (7.72%). The only exception is distance learning, with which they are probably not familiar enough (**Fig. 16**).



**Fig. 16. Preferred forms of continuing education by midwives and students**  
 (\*The results of the evaluation exceed 100%, as respondents have indicated more than one answer)

Only 1.79% of students report that they do not have the attitude to participate in CE, while among midwives this share is 15.43%.

When researching the opportunities related to future professional development, we have revealed that students get information mostly from teachers at MU (33.93%), (**Fig. 17.**).



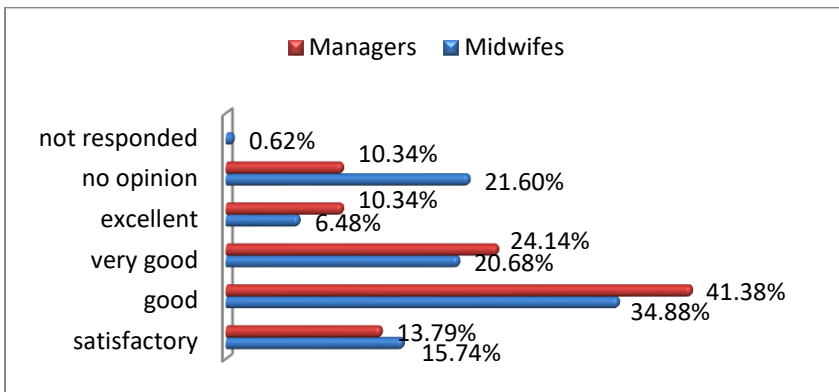
**Fig. 17. Sources of information for professional student development**

A significant number of students (21.43%) state that they make their own decisions. Midwives (15.18%) also have a significant role in the career guidance and development of their future colleagues. Other sources of

information are: parents (9.82%), doctors (8.93%), fellow students (6.25%) and friends (4.46%). The midwives' education as good professionals is a complicated and multi-stage process, and basic education at the university is a solid foundation for professional development and improvement, in which lecturers and midwives play a significant role.

### 3.3. Opinion of health care managers about the continuing education of midwives

In the process of implementing CE, an important role is played by the formal managers of health care – senior and chief midwives/nurses, who plan, organize and support its implementation. In this way, they perform one of their main functions – staff development. Most of the managers have a positive attitude towards CE, (*Fig. 18.*).

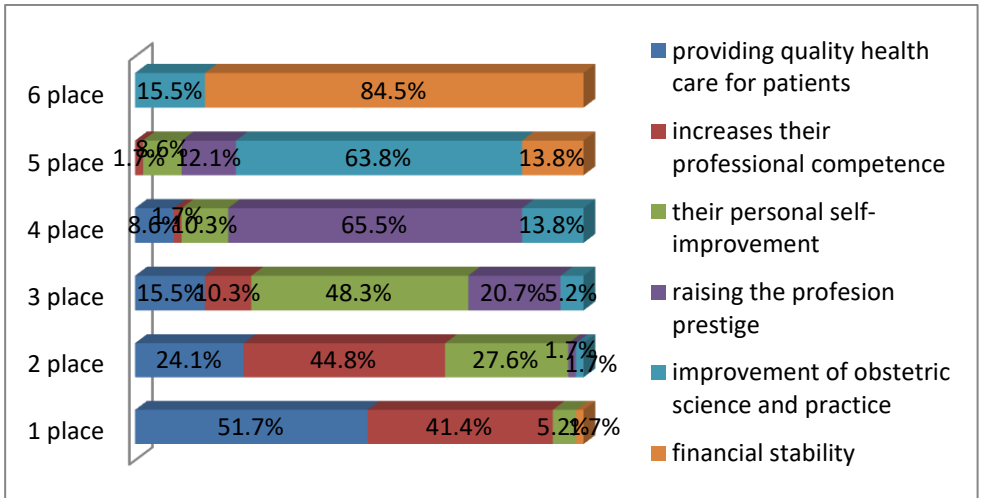


**Fig. 18. Level of continuing education (according to managers and midwives)**

We had compared the opinion of the health care managers and the opinion of the regular midwives about CE and detected that in general the managers declared a higher positive assessment. The nature of the work requires managers to possess and develop a variety of management competencies, as well as to maintain basic knowledge and skills. This makes them more motivated to participate in various trainings, as well as to improve themselves continuously.

We have proposed to managers to rank on a six-point scale how they see the contribution of CE. In the first place more than half of the respondents (51.7%;) put the implementation of quality health care. They are part of the

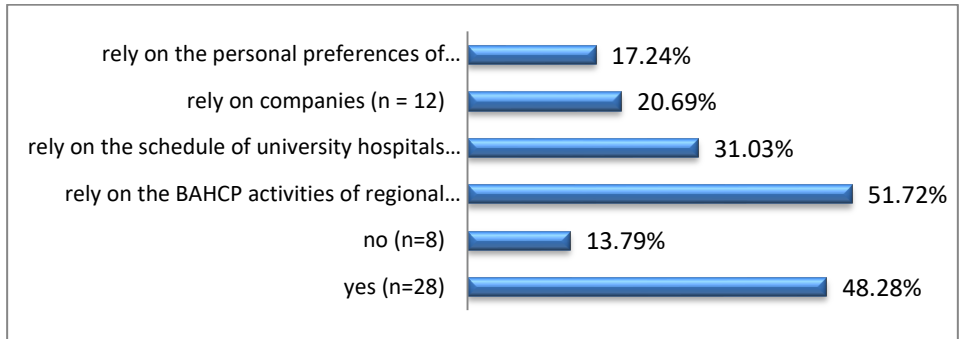
priorities of every medical institution that maintains quality in patient care. In second place the increase of professional competence is ranked, which was associated with the updating of knowledge, skills and the acquisition of new qualifications and the efficient use of human resources (44.8%). The professional competence increase is associated also with the quality of care, and on an individual level with personal development, which managers (48.3%) put in third place (*Fig. 19*).



**Fig. 19. Contribution of continuing education according to managers**

In fourth place, managers (65.5%) put the prestige of the profession. The obstetrics profession is socially significant, but over the years its prestige has been steadily declining and this is due to both the lack of real autonomy and the neglect of the problems of the class – lack of public recognition, lack of funding and opportunities to open independent obstetric practices, low wages. In fifth place managers (63.8%) put the improvement of obstetric science and practice. Most of the respondents find excuses that they are professionally overworked and do not have time to engage in scientific activity, but the knowledge and experience they have are valuable and should be shared. Thus, they can contribute to the development of obstetric theory and practice. In sixth place, respondents (84.5%) ranked financial stability. CE is not tied to financial incentives to motivate midwives, and most employers continue to neglect their responsibility for staff development.

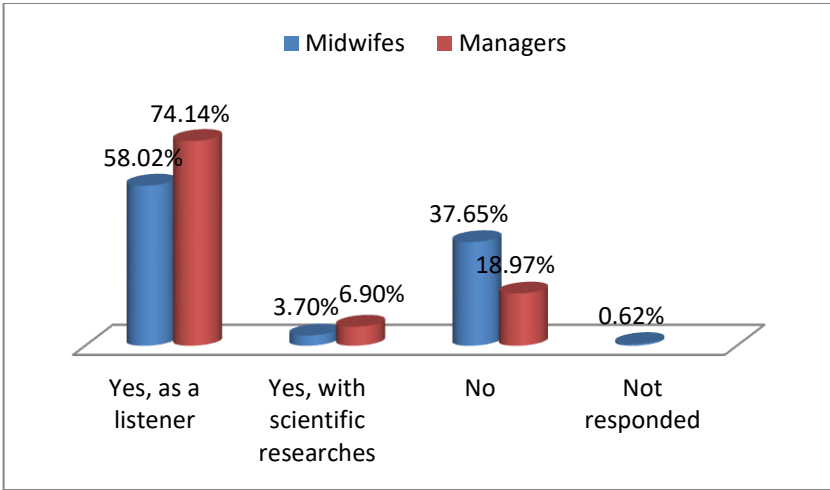
For CE to be effective, it must be properly planned. Managers are required to analyze in advance these needs at all levels: at the level of organization, at the level of professional qualification and at the individual level. 48.28% of managers have a “Continuing Education Plan”. More than half of the chief and senior midwives/nurses (51.72%) rely on BAHCP activities at regional and national level (**Fig. 20.**).



**Fig. 20. Planning of continuing education by managers**  
 (\*The results of the evaluation exceed 100%, as respondents have indicated more than one answer)

One third of managers prefer the schedule of university hospitals and other medical institutions. Only 17.24% of the respondents take into account the personal preferences of the midwives, and they know the best what training they need.

The relative share of the leaders who participate in scientific forums is high (74.79%), but mainly as listeners and only 6.9% of them are involved in scientific developments (**Fig. 21.**).

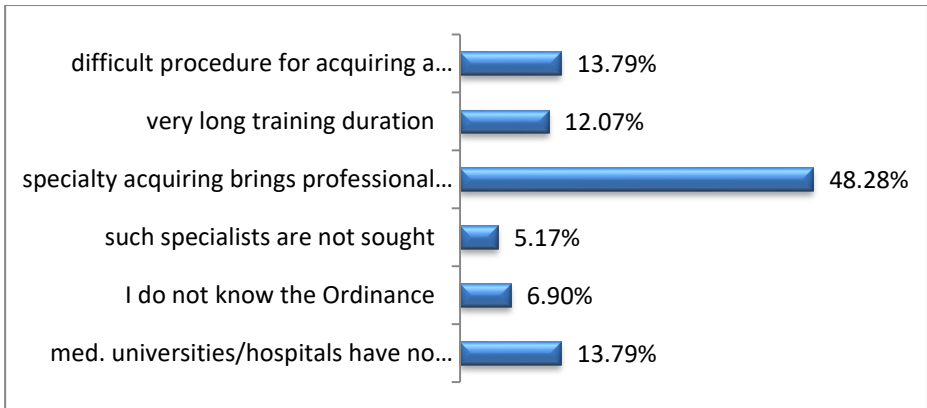


**Fig. 21. Participation in scientific forums (midwives and leaders)**

We have discovered that managers are more active than midwives in participating in scientific forums, as listeners and with research reports. There are no significant differences in the three types of monitored hospitals in terms of the participation of managers in scientific forums. The most active participants with scientific reports are the midwives from the multidisciplinary hospitals (10.34%) and none of the surveyed manager of the university hospitals indicated participation with a scientific report.

The health care managers know best the nature of work in the structures they manage and the need for additional qualifications, so we asked them for their opinion, as experts, on the acquisition of a specialty. The highest is the relative share of the respondents according to which, the acquisition of a specialty brings professional prestige only (48.28%). Managers themselves have not yet realized how important specialization is for staff – it is directly related to the autonomous care that a midwife can provide within her competence. Secondly, managers (13.7%) have stated that medical universities and hospitals have no interest in such specialists. Acquiring a specialty requires time and detachment from work, which is the more likely reason for managers to neglect specializations, (**Fig. 22.**).

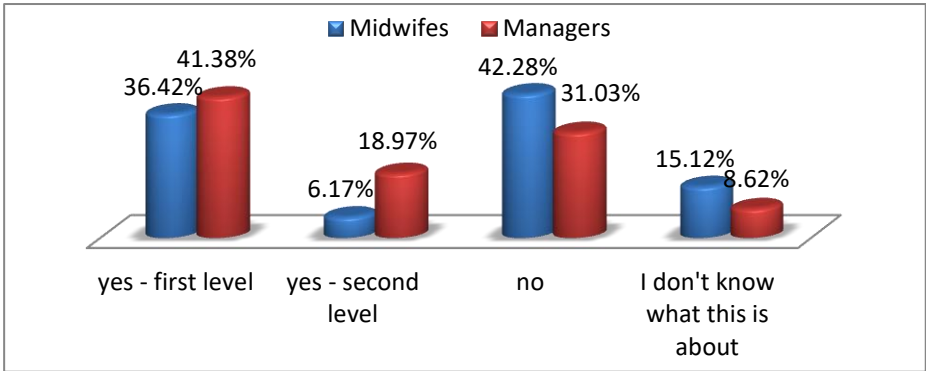




**Fig. 22. The opinion of the managers for the acquisition of a specialty under Ordinance 1**

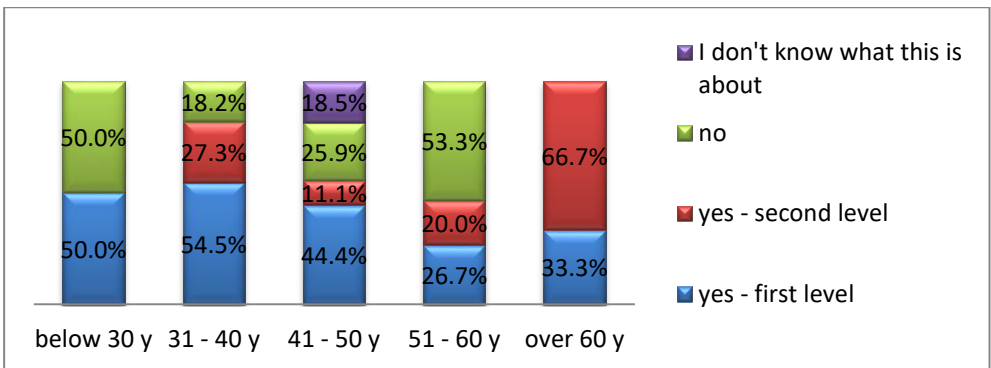
This also applies to employers who do not seek or motivate midwives to specialize. Other reasons given by the managers are that they do not know the Ordinance (6.9%) and do not look for such specialists (5.17%). The shortage of midwives forces employers to hire staff without requiring qualifications for positions such as anesthesiology, operating midwife and others. The trainings are compensated with short-term courses, which does not oblige the employer to pay for the specialty. There are no requirements for the specialty in the procedure for accreditation of medical institutions and this can not affect the quality of health care.

Healthcare managers prove their greater motivation to participate in CE with the presence of higher shares of certificates. We have determined a statistically significant difference in qualification ( $\chi^2 = 13,252$ ,  $n = 382$ ,  $r = -0.091$ ) – it matters whether it refers to a midwife or to a manager (**Fig. 23.**).



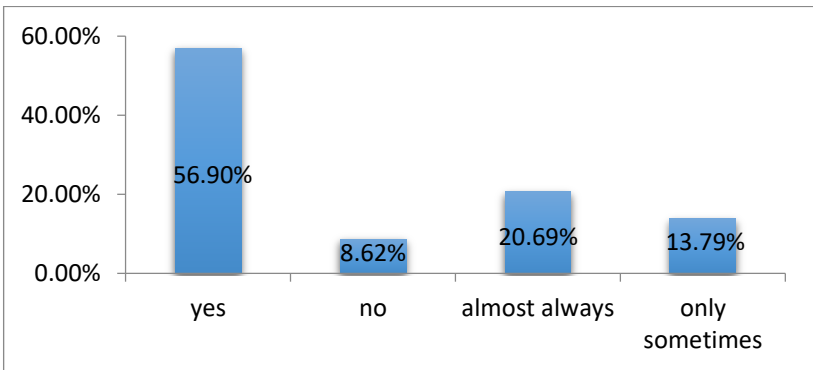
**Fig. 23. Possession of a certificate for professional qualification (midwives and managers)**

Managers are more interested and motivated to participate in CE activities and acquire new competencies. Very weak feedback in the answers “no” and “I do not know what it is about”, but there the midwives have more answers than managers. The relative share of those unfamiliar with certification is concentrated in the group of 41-50 year old managers. The statistical processing of data into the health care managers group demonstrates that the acquisition of a certificate, which is directly related to professional development, is not influenced by both: age or professional experience. The differences in the answers are not statistically significant ( $\chi^2 = 9.037$ ;  $n = 58$ ;  $r = 0.103$ ) at a significance level of  $p = 0.05$ , i.e. the years of work experience do not affect their decision for professional qualification, (**Fig. 24.**).



**Fig. 24. Possession of a certificate of professional qualification by managers (according to age)**

Staff development through education is one of the main functions of managers and should be a priority for both them and employers. We asked health care managers if they found understanding from their employers about midwiferies' CE. Slightly more than half responded positively (57%). Those who hesitate to give a definite answer “yes” or “no” are 35% (“only sometimes” – 14% and “almost always” – 21%). 8% of the managers have given a negative answer. In most medical institutions, employers are not interested in raising the qualification of staff, despite the fact that CE is mandatory from 2016 (*Fig. 25.*).



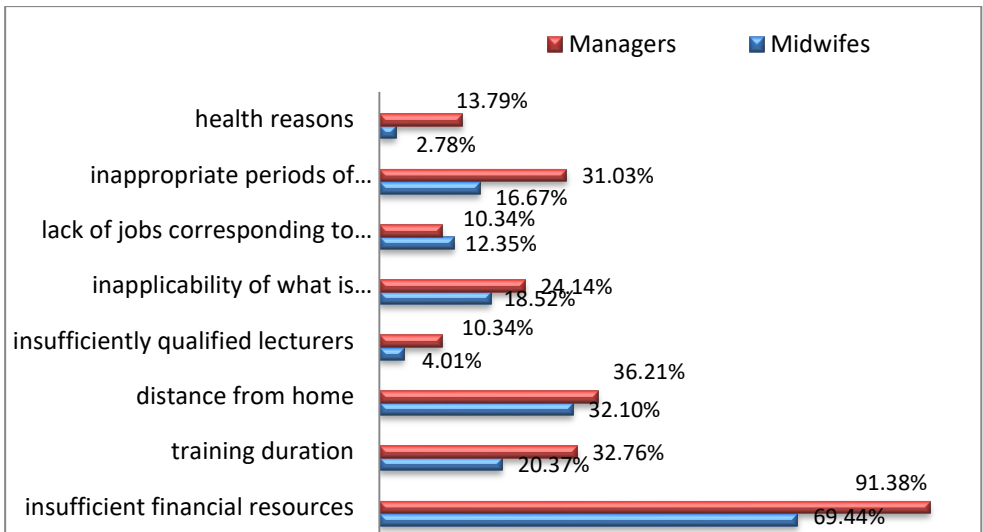
**Fig. 25. Attitude of employers to the continuing education of midwives (according to managers)**

The obtaining of a certificate is not stimulated, there are no regulated stimulus such as paid leave, reimbursement of funds, tax relief to motivate midwives. There is no feedback on the satisfaction and personal preferences of midwives related to education and qualification raising.

When reviewing the midwifery's CE in 30 European countries, we have revealed that in many of them, such as Austria, Belgium, Great Britain, Germany, Denmark, Estonia, Luxembourg, Malta, Switzerland, Sweden, qualification rising is a mandatory requirement of the employer. In Iceland, CE is considered part of the contractual working conditions and midwives are entitled to funding and training leave. In Spain, most employers use an approach called “professional career”, linking successful CE to a pay rise. In Norway, Finland and Sweden, CE requirements are reviewed annually by employers, training is usually free and takes place at the workplace. CE activities are funded entirely by employers in Austria, Belgium, Latvia, Luxembourg, Germany, Italy, Slovenia, Switzerland, Sweden or partially

funded by some compulsory activities (Ireland for specialized courses, and specific knowledge and experience in the field of care). In Hungary, a free, theoretical course is provided annually for all midwives, which is financed from the state budget. Employers also offer other incentives in the form of tax compensation (Italy, France), training leave provided by the employer (Luxembourg – 40 hours; Slovenia – 10 working days; Hungary from 3 to 10 days; Italy – 4 days). Midwives take 14 days of paid training leave each year and are reimbursed up to € 700 for training costs in Malta. Midwives who graduate CE progress faster in their careers and earn more.

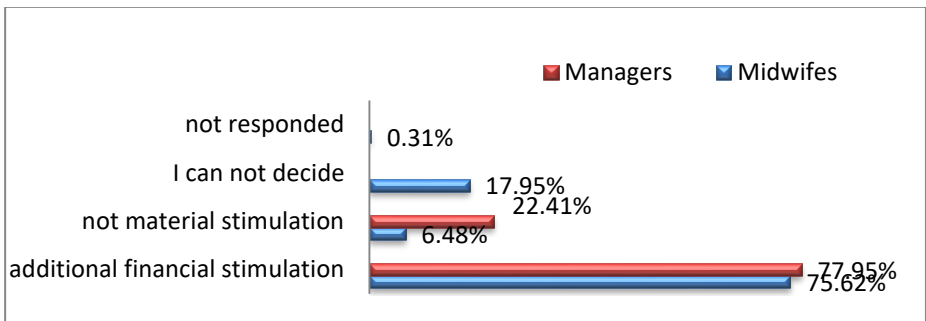
The problems and difficulties that midwives and managers have in carrying out CE activities are identical with a few exceptions. The ranking of the factors hindering CE to third place overlaps. The most sensitive problem is the lack of financial resources in both groups (midwives – 69.44%; managers – 91.38%), (**Fig. 26**).



**Fig. 26. Factors hindering continuing education**  
 (according to midwives and managers)  
 (\*The results of the evaluation exceed 100%, as respondents have indicated more than one answer)

The distance from home is putted on second place, and the duration of education is on third. In all three factors, the relative shares of managers exceed those of midwives. Managers see the problems of the class more clearly and differentiate them more sensitively. Health reasons – managers (13.79%) put in sixth place, significantly ahead of the last, eighth place, which is determined by midwives (2, 78%). Behind this problem, managers see not only health problems, but also problems that create them – overload, stress. Identifying the main barriers – lack of time and resources puts before managers the need to apply flexibility in terms of rational use of staff time and make more efforts, allowing all midwives to engage in CE activities.

The opinion of the surveyed managers regarding the stimulation of continuing education concurs with that of the surveyed midwives. In both groups the answers are categorical that there should be additional financial incentives, (*Fig.27.*).



***Fig. 27. Opinion of midwives and managers to stimulate continuing education***

A significant part of the managers (22, 41%) and part of the midwives (6.48%) believe that there should be intangible incentives – training leave and others. The managers are again more categorical in their opinion, there are no non-respondents and those who cannot judge, unlike the midwives society (17.95%).

### 3.4. Opinion of health care managers, midwives and students from open-ended questions on the continuing midwives' education

Only 12.07% of the health care managers have shared a free opinion about the CE, and most of them are rather negative and critical and refer to the payment of fees and educational costs; poor organization of courses and forums; inappropriate or recurring topics that are no longer relevant; unprepared lecturers, poor training base, mostly theoretical knowledge, without the possibility of practical implementation, lack of information and the need for additional financial stimulation, (*Table №3.*).

*Table № 3. Freely expressed opinion from open questions and recommendations from managers, midwives and students*

| <b>Managers</b>                                                                                                                                                                   |                                                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| <b>Positive opinions and recommendations</b>                                                                                                                                      |                                                        |
| “I encourage and welcome CE, but additional financial incentives for midwives is needed.”                                                                                         | 57 years, master, Shumen                               |
| <b>Negative opinions and recommendations</b>                                                                                                                                      |                                                        |
| “Fees for CE are unaffordable for specialists.”                                                                                                                                   | 53 years, master, Varna                                |
| “Sometimes courses are poorly organized, including scientific forums.”                                                                                                            | 56 years, bachelor, Sofia                              |
| “For many years, the topics of midwives have not been changed and are no longer relevant.”                                                                                        | 52 years, bachelor, Sofia                              |
| “Inappropriate topics repeated over the years, unprepared speakers; poor training base and organization; theoretical knowledge without the possibility of practical realization.” | 57 years, master, Sofia                                |
| “The forms for CE include mainly senior midwives and very rarely full-time specialists, there is a lack of information for specialized courses.”                                  | 49 years old, master,<br>Health Care Management, Sofia |
| „CE topics are old and have not been updated periodically.”<br>.....                                                                                                              | .52 years, master, Shumen                              |
| <b>Midwives</b>                                                                                                                                                                   |                                                        |
| <b>Positive opinions and recommendations</b>                                                                                                                                      |                                                        |
| “There must be additional financial stimulation.”                                                                                                                                 | 35 years, professional bachelor, Ruse                  |
| It is good for every professional to develop her/his knowledge and abilities throughout life.                                                                                     | 45 years, college education , Ruse                     |
| “The desire for CE will increase if there is financial security.”                                                                                                                 |                                                        |

|                                                                                                                                                                                                                                                         |                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
|                                                                                                                                                                                                                                                         | 33 years, bachelor, Varna              |
| “More practical seminars for midwives”.                                                                                                                                                                                                                 | 54 years, college, Gorna Oryahovitsa   |
| “Midwives should to be educated throughout their lives.”                                                                                                                                                                                                | 63 years, college, Veliko Tarnovo      |
| “Continuing education must be linked to more decent pay.”                                                                                                                                                                                               | 53 years, professional bachelor, Sofia |
| <b>Negative opinions and recommendations</b>                                                                                                                                                                                                            |                                        |
| “More specializations or courses corresponding to the profile “Midwife”. It is necessary to make courses and specializations that meet the competencies of the midwife.                                                                                 | 28 years, master, Veliko Tarnovo       |
| “Not enough topics for midwives.”                                                                                                                                                                                                                       | 55 years, college, Dobrich             |
| “I think the CE is not enough. There are very few scientific forums in the field of obstetric gynecological field. The CE courses have been the same for years, too often of poor quality, poorly organized and with insufficiently qualified teachers. | 45 years, master, Sofia                |
| “I am not satisfied with the content of the courses I attend. They are not well enough professionally organized. “                                                                                                                                      | 28 years, bachelor, Sofia              |
| “CE is a waste of money “in the wind”, because there is no return financially and professionally.”                                                                                                                                                      | 27 years, bachelor, Sevlievo           |
| “Working midwives do not have information about the courses and seminars.”                                                                                                                                                                              | 48 years, college, Sliven              |
| <b>Students</b>                                                                                                                                                                                                                                         |                                        |
| <b>Positive opinions and recommendations</b>                                                                                                                                                                                                            |                                        |
| “To pay more attention to those who are trying to improve their skills to stay in Bulgaria.”                                                                                                                                                            | 3rd year, Varna                        |
| “Continuing education must ensure good professional development.”                                                                                                                                                                                       | 3rd year, Shumen                       |
| “Continuing education provides good theoretical and practical training at a very high level.”                                                                                                                                                           | 3rd year, Sliven                       |
| “Continuing education must be connected to stimulation and better pay.”                                                                                                                                                                                 | 3rd year, Sliven                       |
| “Continuing education must be in line with the work process and paid for.”                                                                                                                                                                              | 4th year, Veliko Tarnovo               |
| <b>Negative opinions and recommendations</b>                                                                                                                                                                                                            |                                        |
| “There is a lack of variety in master's programs.”                                                                                                                                                                                                      | 3rd year, Sofia                        |

Few midwives (3,7%) expressed a free opinion. Recommendations for financial incentives, decent payment and critical opinions prevail.

Midwives see a lack of quality in the overall implementation of CE – trainers, organization, topics, information.

The relative share of students who gave recommendations and shared opinions has been 5.76%. They link continuing education with good theoretical and practical training, a high level and professional development. There are recommendations from future midwives for education that is in line with the work process, for incentives and better pay associated with CE, even for the expansion of master's programs. *“To pay attention to those who are trying to improve their skills”* – most likely associated with career development and justified *“to stay in Bulgaria.”* Students are familiar with the advantages and problems of CE, they are critical, but also the most optimistic.

### 3.5. SWOT analysis of the continuing education of midwives

The SWOT analysis of the state of continuing education of midwives in Bulgaria has been conducted on the basis of researched normative documents and the obtained results and opinions of midwives, health care managers, students in Midwifery specialization and habilitated lecturers (*Table №4.*).

**Table № 4. SWOT analysis of continuing education of midwives in Bulgaria**

| Strengths                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Weaknesses                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none"> <li>1. The midwives CE in Bulgaria is legally regulated in the Health Act, Art. 182, para. 1; and in Law for social organization of medical nurses and midwives.</li> <li>2. There is a legal regulatory body - BAPHC, which certifies after training according to rules adopted by Congress.</li> <li>3. CE is mandatory for all practicing midwives since November 2016.</li> <li>3. As an ethical obligation, CE is included in the “Code of Ethics for Professional Ethics”.</li> <li>4. The CE activities are entered personally for each midwife in the “National Professional Register”.</li> <li>5. “Rules for the issuance of a certificate of professional qualification” have been</li> </ol> | <ol style="list-style-type: none"> <li>1. There are no national standards for obstetric care and CE is not included in standards or guidelines for quality of care.</li> <li>2. The unified credit assessment system of the CE does not assess the result of the acquired knowledge, skills and competencies of the midwife.</li> <li>3. The evaluation methodology is based on quantitatively measurable indicators and not on qualitative ones.</li> <li>4. There are no mandatory requirements for including the safety of patients and staff in the CE, according to European directives.</li> <li>5. The specialties for midwives under Ordinance 1/2015 are quite limited, especially in the part “Non-clinical specialties” the only one is “Public Health Care”.</li> </ol> |



developed, through which the provisions of the “Law on the Recognition of Professional Qualifications” are applied in accordance with the European directives.

6. CE is provided through a variety of activities: courses, seminars, conferences, congresses, distance learning and more.

7. Midwives are trained together with obstetricians-gynecologists, pediatricians, neonatologists, nurses and other health professionals, which contributes to improving teamwork and improving the quality of care.

8. The forms of CE are assessed according to the “Unified Credit Rating System by Categories”.

9. There are departments for after diploma education at the medical universities, which offer courses upon prior request.

10. Ordinance 1/2015 provides an opportunity to acquire a specialty in the healthcare system.

11. The midwife has opportunities to acquire a Master's degree in “Health Care Management” and opportunities to develop an academic career in the professional field of “Health and Sports”.

12. The profession of midwife belongs to the regulated professions, acquired in accordance with unified governmental requirements, compliant with European Directive 2005/36 ED, new 2013/55, ED.

14. Ordinance 1/2011 regulates autonomous activities that the midwife can perform independently: health promotion, medical health cares, manipulations, training, rehabilitation, etc.

6. The procedure for acquiring a specialty is quite difficult and “cumbersome” and medical universities and hospitals have no interest in such specialists.

7. The acquisition of a specialty, as well as the other activities of the CE are not required by the employers and are not related to the career development of the midwife.

8. Courses and other CE activities are mainly related to general care and less to obstetric theory and practice.

9. The CE activities financing is mainly at the expense of the midwives.

10. There are not enough developed and legally regulated incentives to motivate midwives to participate in CE /paid leave, reimbursement of funds, tax relief, etc./.

11. The acquisition of a “Certificate” is subject only to a desirable payment under the Labour Code and not in all structures.

12. There is no feedback on the satisfaction and personal preferences related to the activities carried out under the CE.

13. Although the CE is mandatory, there are no sanctions for midwives who are not included in such kind of CE forms.

14. In Bulgaria there is no clinical master's program in higher education for the education of midwives.

**Threats**

**Opportunities**

1. Low socio-economic status due to insufficient payment and subordinated role in the implementation of competencies.
2. Aging class and high share of workers in pre-retirement and retirement age who have no interest in CE.
3. Demotivation for professional development and continuing education.
4. Declining interest in the profession, lack of candidates for education and quality selection of future midwives.
5. Outflow of staff abroad and intentions to work abroad of a significant share of future and working midwives.
6. Displacement and interference in the main competencies by other groups - doulas, doctors.
7. Excessive requirements for the midwife and managers - imposition of non-specific duties and overload in direct work.

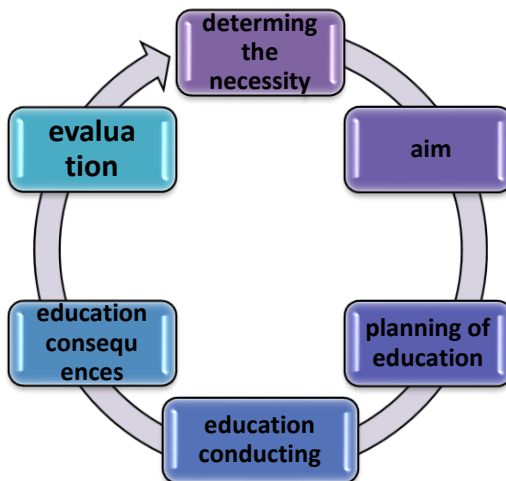
The situation described in this way does **NOT** seem optimistic if there is no:

1. State policy for development of the obstetric profession and CE, which should unite the efforts of BAHCP, educational institutions, employers and midwives.
2. Financing and stimulation of CE activities by the government and employers. This will motivate midwives to improve their skills.
3. Qualitative CE evaluation which should be developed professionally by the midwife, bound by a differentiated salary.
4. Financing of obstetric practices by the National Health Insurance Fund or by projects and development of the autonomous function of the midwife, which will stimulate the acquisition of new knowledge, skills and qualifications.

## IV. INNOVATIVE APPROACHES FOR EVALUATION OF CONTINUING EDUCATION

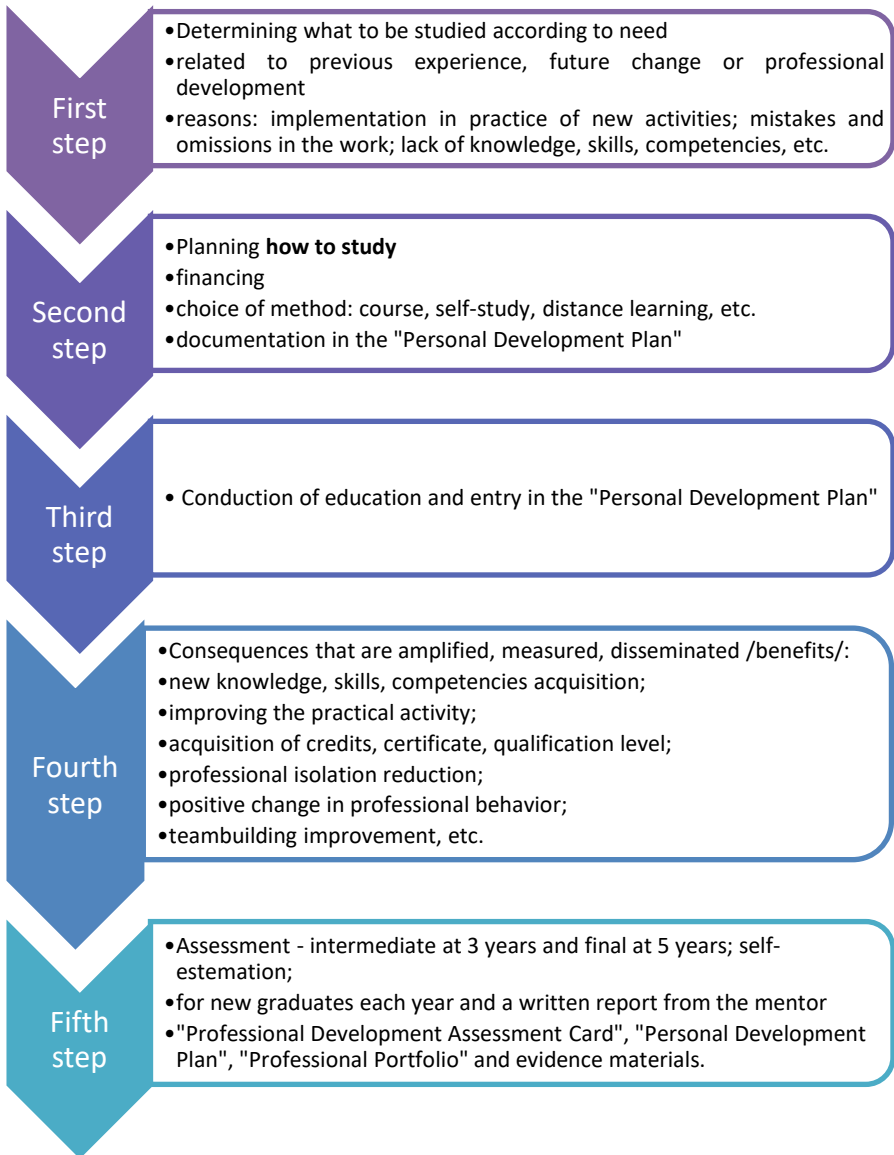
### 4.1. Algorithm for effective management of continuing education

The trend in modern continuing education is the introduction of assessment models based on innovative and effective approaches aimed at effective management of the process itself. The process of effective continuing education is described as a cycle that continues throughout all career road, (*Fig. 28.*).



*Fig. 28. Cycle of effective continuing education*

The inclusion of all components in the cycle makes it completed and overall. The effectiveness of continuing education aims to achieve quality results that are proven by evaluation. According to the Cycle of Effective CE, we have compiled an **Algorithm for effective management of continuing education**, which includes five steps in that the training goes through in order to lead to the desired quality results (*Fig. 29.*).



*Fig. 29. Algorithm for effective management of continuing education*

### First step

Identifying educational needs, answers the question: *What will be taught?* The necessities are primarily individual, but may be at the level of a medical institution, team, etc.

The need can be based on previous experience, preparation for future change or professional development.

Reasons for the emergence of needs: introduction of new technologies and activities; innovations in the organization; lack of knowledge, experience or competencies; mistakes, omissions at work, etc.

Methods for determining the training needs: periodic evaluation of the work results (attestation); SWOT analysis; and others.

### Second step

**Planning of education**, answers the question *How does the study will be conducted?* It includes method/methods definition: course, seminar, self-study, distance learning, training funding. Document the training plan in a “Personal Development Plan” or other document.

### Third step

**Conducting the education** and application of the planned method/methods, entry in the “Personal Development Plan”.

### Forth step

**Consequences of education to reinforce, disseminate and measure results (benefits):** acquisition of new knowledge, skills, qualifications; improving the practical activity; credit points, certification of qualification level; professional isolation reduction; positive change in professional behavior; improving teamwork; organizational culture raising; reduction of stress and burn-out syndrome, etc. Recording the consequences, results and benefits of the training must be recorded in the “**Personal Development Plan**”.

### Fifth step

**Review and evaluation** for effective management of continuing education requires feedback that brings information about the results of the educational process and this is achieved through organized monitoring and evaluation.

Evaluation is an activity that takes into account the progress in achieving the set goals. It has been proven that neglecting this part of the studying process leads to lower quality and vice versa, assessment is a strong motivating factor when it is objective, positive and stimulated. The assessment serves to:

- ✓ establish the level of achievement in relation to the goals;

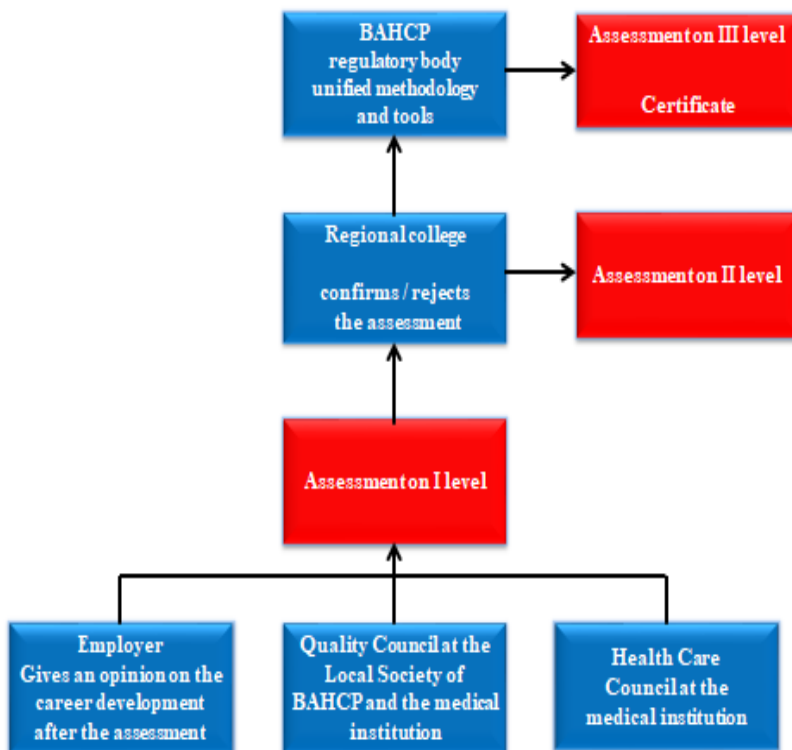
- ✓ offer opportunities for application of acquired knowledge, skills and competencies;
- ✓ establish the future potential of everyone.
- ✓ identify gaps in the implementation of the process of continuing education at the individual and group level.
- ✓ stimulate midwives' participation in CE.

#### **4.2. Model for assessment of continuing education**

In the proposed model, the assessment focuses on the degree of fulfillment of the requirements for the professional development of the midwife – undertaken trainings, acquired competencies during the period preceding the examination. In the context of this assessment, the behavior of the midwife and the relationship with the people and patients receiving care, the behavior towards other team members must also be taken into consideration. This is one of the reasons for the assessment to be carried out at the workplace - there is a possibility for more objective information about the ethical behavior of the midwife. The subjectivity of the evaluation will be avoided by the evaluation carried out by a commission.

The evaluation can be intermediate and final. The period between two evaluations should be sufficient to meet the longer-term goals – acquisition of educational qualification degree, specialization. We offer a 5-years period, and an interim evaluation is performed on the third year. If necessary, an adjustment is made and prescriptions are given to cover the desired result.

We propose to entrust the organization of the evaluation process to the “Quality Council”, formed at the Local Society of the respective medical institution with the participation of a representative (s) of the employer and a representative (s) of the “Health Care Council”, (*Fig. 30.*).



*Fig. 30. Model for evaluation of continuing education*

***Theoretical substantiation of the Continuing education assessment model***

- **“Quality Council” functions:**

1. Analyzes the necessities for continuing education at individual and institutional level.
2. Plans, organizes and supports the implementation of continuing education.
3. Introduces and applies tools and methodology for assessment of continuing education.
4. Promotes continuing education and provides information.
5. Introduces new graduates and entrants to continuing education,

provides guidance and support.

- **Elevation criteria:**
  1. Obtaining of planned knowledge, skills, competencies.
  2. A clear vision for professional development and career.
  3. Shared experience with the evaluator.
- **Tools for assessment of continuing education:**
  - ✓ *Professional development assessment card.*
  - ✓ *Professional development plan, or in a more modern version – Professional portfolio.*

| <b>Professional development assessment card</b>                                                        |  |                |                     |
|--------------------------------------------------------------------------------------------------------|--|----------------|---------------------|
| <b>I. Administrative information</b>                                                                   |  |                |                     |
| Name, Surname, Family                                                                                  |  |                |                     |
| Position and place of work                                                                             |  |                |                     |
| Telephone, e-mail                                                                                      |  |                |                     |
| Total number of points                                                                                 |  |                |                     |
| Final assessment                                                                                       |  |                |                     |
| <b>II. Studying activities</b>                                                                         |  |                |                     |
| <b>Participation in training seminars and courses, incl. distance learning</b>                         |  | <b>classes</b> | <b>credits /cr/</b> |
| 1.                                                                                                     |  |                |                     |
| 2...                                                                                                   |  |                |                     |
| <b>Participation in training seminars and courses related to general care, incl. distance learning</b> |  | <b>classes</b> | <b>credits</b>      |
| 1.                                                                                                     |  |                |                     |
| 2...                                                                                                   |  |                |                     |
| <b>Participation in other courses (language, computer skills, others), incl. distance learning</b>     |  | <b>classes</b> | <b>credits</b>      |
| 1.                                                                                                     |  |                |                     |
| 2...                                                                                                   |  |                |                     |
| <b>Participation in scientific conferences, congresses, symposia</b>                                   |  |                | <b>credits</b>      |
| Participation in conferences as a listener                                                             |  |                |                     |
| 1.                                                                                                     |  |                |                     |
| 2..                                                                                                    |  |                |                     |
| Participation in the conference with a report, poster                                                  |  |                |                     |



|                                                                     |                                                                                                                                                                                            |                                          |
|---------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| 1.                                                                  |                                                                                                                                                                                            |                                          |
| <b>Acquired SQD for the evaluation period</b>                       |                                                                                                                                                                                            | <b>credits</b>                           |
| 1.                                                                  |                                                                                                                                                                                            |                                          |
| <b>Acquired specialty for the evaluation period</b>                 |                                                                                                                                                                                            | <b>50 credits</b>                        |
| <b>III. Activities as a trainer, mentor</b>                         |                                                                                                                                                                                            | <b>10 cr/year</b>                        |
| 1.                                                                  |                                                                                                                                                                                            |                                          |
| 2.                                                                  |                                                                                                                                                                                            |                                          |
| <b>IV. Self-study - scientific journals, specialized literature</b> |                                                                                                                                                                                            | <b>15 cr for .<br/>subscripti<br/>on</b> |
| 1.                                                                  |                                                                                                                                                                                            |                                          |
| <b>V. Participation in a professional, scientific organization</b>  |                                                                                                                                                                                            | <b>credits</b>                           |
| Participation as a member x 1 credit per year                       |                                                                                                                                                                                            |                                          |
| 1...                                                                |                                                                                                                                                                                            |                                          |
| Participation in management bodies x 5 credits per year             |                                                                                                                                                                                            |                                          |
| 1....                                                               |                                                                                                                                                                                            |                                          |
| <b>Total number of credits:</b>                                     | <b>Rating scale</b>                                                                                                                                                                        |                                          |
|                                                                     | <b>Score 4 “Implementation above the requirements”</b> – the planned activities for the period are covered and exceeded ( <b>Credits 150 +</b> )                                           |                                          |
|                                                                     | <b>Score 3 “Execution meet the requirements”</b> – the planned activities have been implemented ( <b>Credits - 150</b> )                                                                   |                                          |
|                                                                     | <b>Score 2 “Acceptable implementation, but with a need for improvement”</b> – the planned activities are implemented below the level, improvement is needed ( <b>Credits below 150 -</b> ) |                                          |
|                                                                     | <b>Score 1 “Unacceptable performance”</b> – the planned activities have not been implemented and are below the level ( <b>Credits below 150 - -</b> )                                      |                                          |
| Commission:<br>1.<br>2.<br>3.                                       | Position:                                                                                                                                                                                  | Signature:                               |
| Data:                                                               |                                                                                                                                                                                            |                                          |

**The professional portfolio** is an innovative educational technology and assessment tool. Creating a portfolio in itself is a significant enough goal, because the emphasis is on positive changes in the midwife's development; the best achievements are stimulated, demonstrated and proven.

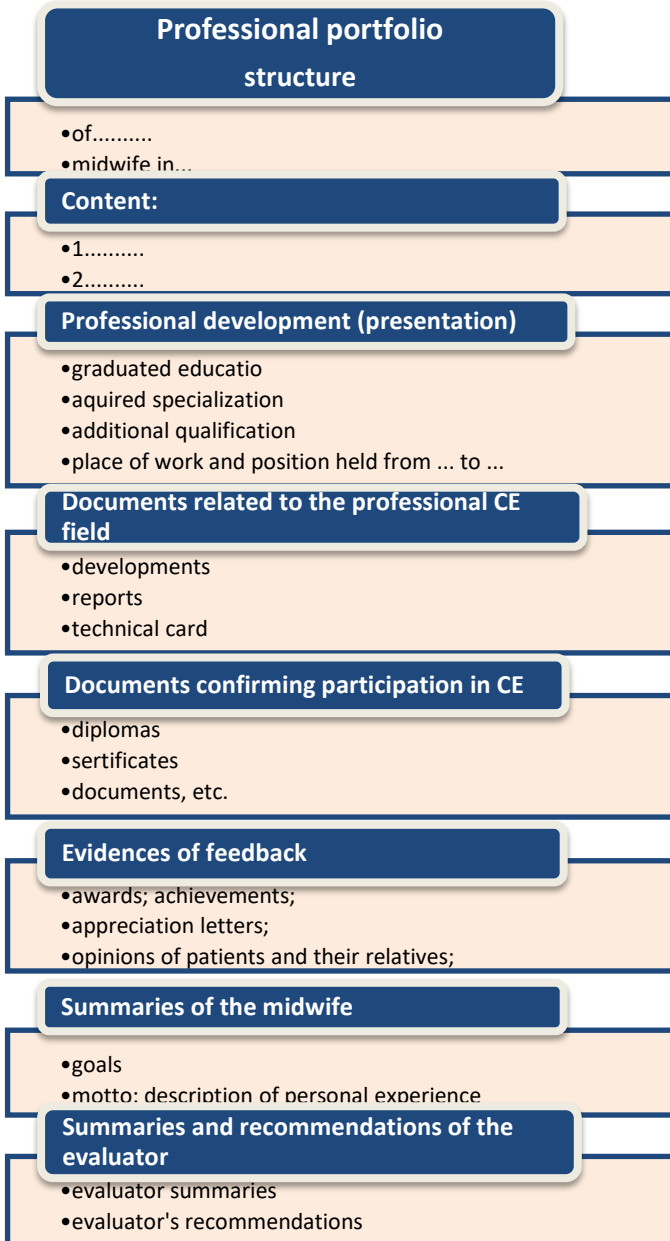
The philosophy of the portfolio is to demonstrate activity on the part of the midwife for professional and personal development. The idea is that she knows what she is capable of and proves it by storing data and evidence from her practical activities. We suppose that maintaining a professional portfolio will help assess the midwife's performance over a period of time.

Key moments in the organization of the portfolio are:

- ✓ the midwife and the evaluator coordinate their activities on the organization of the portfolio;
- ✓ involved midwife, evaluator/evaluation structure;
- ✓ the midwife herself selects and presents the information.

The portfolio contains details from previous experience, achievements and strategies for achieving short-term and long-term goals for professional development.

In (*Fig. 31.*) we present an example of the structure of the professional portfolio of a midwife.



*Fig. 31. Structure of the professional portfolio*

The **Continuing education assessment model** and its tools must become a part of comprehensive quality system and provide reliable information for decision-making on the professional and career development of the midwife. The positive changes that are expected with introduction of continuing education assessment model are summarized in (*Fig. 32.*).



*Fig. 32. Expected changes after the introduction of Continuing education assessment model*

#### **4.3. External evaluation of continuing education – accreditation**

In its recommendations, the WHO includes EQA – external quality assessment. Accreditation is one of the most commonly used forms of external evaluation, based on written standards. It is administered by an independent organizations and carried out by experts in the specified field. The purpose of accreditation is to ensure quality for students and society. It gives public recognition to the institution for providing teaching that is of high quality and meets the optimal rather than the minimum quality levels. European experience shows that the creation of a single specialized and independent accreditation body regulates and facilitates the process of harmonization of crediting, both between the individual institutions in the country providing continuing education and from other countries. Most often, the accreditation body is elected on a quota basis, with the participation of all stakeholders in the process of implementing quality and effective CE. After researching the experience of other countries regarding the most commonly used standards, we suppose that they are applicable in Bulgaria and offer:

### **Standard I *Mission***

The institution that intends to train declares its mission. The training must be in line with the mission and tailored to the needs of midwives and society. This standard includes also institutional objectives, planning, operational strategies, time frames, resources required and methods for the subsequent evaluation of each objective.

### **Standard II *Evaluation of the institution's curriculum, teaching materials and results***

The studying content is planned in advance and constitutes a stable, systematic and consistent educational methodology. Sufficient and appropriate elements of knowledge and skills are included to guarantee results. Curricula and plans show the appropriate scope, consistency and depth in relation to the stated goals and objectives. This standard includes the availability of proprietary software, studying activities, electronic links, and others that support goals and objectives.

### **Standard III *Teaching methods***

The institution uses teaching methods that encourage and motivate participants. Written policies and procedures are in place to ensure that curricula are followed. The teaching methodology is in accordance with the training standards and the individual training needs and goals of the participants.

### **Standard IV *Trainers***

The institution shall ensure that qualified trainers have specialized training, experience, teaching skills and good practice in assessment.

### **Standard V *Training services***

The institution trains only qualified participants, offers services that are suitable for upgrading training and meet the needs of midwives. Ethical and honest relationships with future students are observed.

### **Standard VI *Assessment***

The institution uses appropriate evaluation methods to ensure that the results are consistent with the institution's mission and objectives.

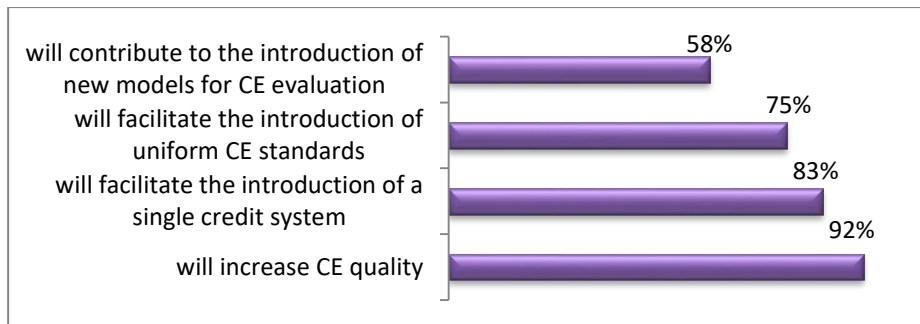
The priority of the accreditation body will be the adoption of a unified system for assessment of the forms for continuing education with unified standards for trainees, organizers and suppliers.

#### 4.4. Expert opinion on the continuing education of midwives in Bulgaria and the proposed innovative assessment models

In the final stage of the study we conducted a semi-standardized interview with experts – habilitated lecturers with basic education in the specialties “Midwife” and “Nurse” (n = 12), two of whom with the academic position of “Professor” and ten with the academic position of “Associate Professor”.

Teachers (42%) describe the midwife's CE as very good and good (33%). The prevailing opinion is that despite the difficulties faced by this type of class, CE continues to develop. Regarding specializations, a large part of the respondents (83%) believe that specializations should be reviewed, expanded and “... *obtaining a specialty should be related to mastering specific competencies, which will then become the basis for differentiated pay*”. According to experts (100%), the most significant contribution of CE is the increase of professional competence.

We have questioned the experts how the establishment of a specialized accreditation body will affect CE (**Fig. 33.**).



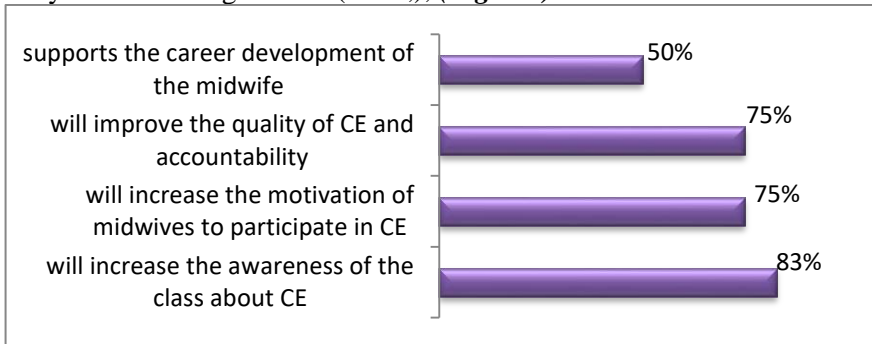
**Fig. 33. Opinion of lecturers for introduction of Accreditation Council**

*(\*The results of the evaluation exceed 100%, as respondents have indicated more than one answer)*

First of all, the lecturers (92%) have designated that the CE quality will increase, which stems from the functions of the Accreditation Council to evaluate. Secondly, the opinion that it will facilitate the introduction of a unified credit system for CE evaluation and thirdly, according to teachers (75%), it will facilitate the introduction of uniform standards for CE among different trainers.

Respondents are unanimous that habilitated lecturers with basic medical education “Midwife” and “Nurse” (100%), midwives/nurses with a Doctor's degree (67%) and chief midwives/nurses (67%) should be involved in the Accreditation Council as experts.

Experts (83%) believe that **Continuing education assessment model** will donate to raise the awareness of the class regarding CE, will increase the motivation of midwives to participate in CE (75%) and will improve the quality of the training offered (75 %.), (*Fig. 34.*).

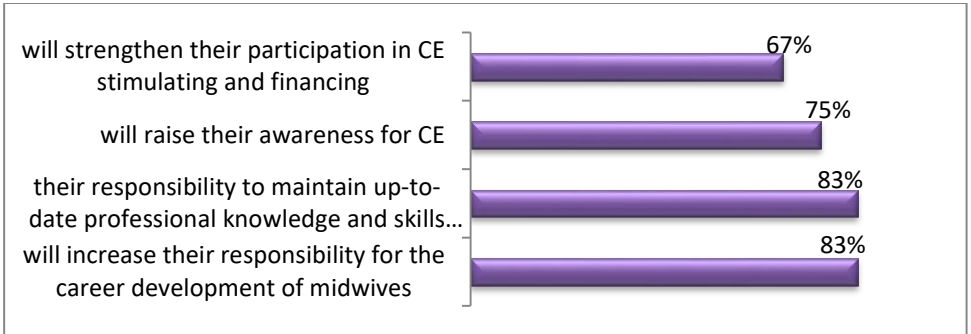


***Fig. 34. Lecturers’ opinion about Continuing education assessment model***

*(\*The results of the evaluation exceed 100%, as respondents have indicated more than one answer)*

Half of the lecturers (50%) are of the opinion that the model will support the career development of midwives. Experts are unanimous in their opinion (100%) that the inclusion of managers in **Continuing education assessment model** will make them more responsible for their own and staff professional development, and it will increase their activity as initiators and organizers in the CE process. For a large number of experts (92%), the involvement of managers in the evaluation process at local level will have a positive effect on their personal motivation and they will become more active in training. “It will make them feel more significant.”

Regarding the involvement of employers in the evaluation process, a large part of the experts (83%) are of the opinion that this will increase their responsibility for maintaining up-to-date knowledge and skills of the staff, as well as for the career development of midwives, (*Fig. 35.*).



***Fig. 35. Opinion of the lecturers for participation of employers in the continuing education assessment***  
*(\*The results of the evaluation exceed 100%, as respondents have indicated more than one answer)*

Two thirds of the respondents (75%) are of the opinion that the awareness of the employers about the problems of the midwives in the CE implementation will increase and their participation in the financing and stimulation of the training process will intensify (67%).

In general, habilitated lecturers believe that the midwifery CE should be pursuant to “*the needs of the labor market*”, “*the personal needs of midwives*” and “*be financially linked to professional realization*”.

Harmonization of certification will expand the opportunities for midwives to be involved in a variety of CE activities, which will affect their training and individual assessment.



## V. CONCLUSIONS, RECOMMENDATIONS AND CONTRIBUTIONS

The research's results are the basis for formulating the following conclusions and recommendations:

### 5.1. CONCLUSIONS:

1. A comparative analysis of continuing obstetric educational systems in Europe reveals that continuing education in Bulgaria meets WHO criteria for legal regulation, organization, training based on research, evidence and competence and is provided through a variety of activities.

2. According to the analysis of normative documents regulating the training of midwives in Bulgaria there are no approved standards for quality of continuing education, the assessment is based on quantitatively measurable indicators, which does not guarantee the quality of acquired knowledge, skills, competencies.

3. Most midwives evaluate positively the continuing education (62%), the leading motives for involvement in activities for qualification rising are the expansion of knowledge and skills (66%), personal self-improvement (35%) and opportunities for better realization in the labour market (25%).

4. Students show more active intentions compared to midwives to improve their qualification skills and develop professionally, especially in terms of acquiring a specialty (students – 46%; midwives – 7%).

5. The problems and difficulties that midwives and managers have in carrying out continuing education activities are identical: insufficient financial resources (69%), distance from home (32%), training duration (20%), inappropriate periods of training, which hinder the combination of work and study (16%), inapplicability of the acquired knowledge and competencies in practice (18%).

6. Healthcare managers are more motivated than midwives to participate in continuing education activities and to acquire new competencies, regardless of age and length of professional service.

7. The synchronization of professional competence with European strategies and policies, the partial autonomy of the regulated profession of “Midwife”, scientific progress and mobility are basic reasons to undertake the development of innovative models for quality assessment of continuing education, which ensure effective professional practice and safety for patients.

8. **Continuing education assessment model** developed by us will strengthen the control over the implementation of the activities, will motivate

midwives to participate the continuing education and will activate the employers for involvement in the professional development of the staff.

## **5.2. RECOMMENDATIONS:**

### **To BAHCP**

1. BAHCP in its capacity as a regulatory body to initiate a procedure for unified accreditation of CE of midwives, which will unite after graduation education and CE, conducted by BAHCP in a unified system for CE.

2. To strengthen the control over the CE implementation by introducing a Continuing education assessment model with the relevant tools and methodology, adopted by the National Quality Council at BAHCP.

3. To the powers of the National Quality Council at BAHCP – to include conducting of continuous education accreditation.

### **To employers:**

1. Professional trainings for rising the qualification of the staff at the workplace, which to be partially or fully financed by the medical establishment, to be introduced and obligatory required.

2. The career development in the medical institution to be connected with conducted activities under the CE and the result of the assessment for professional development.

3. Differentiated pay, according to the individual assessment of professional development, as well as additional incentives for acquiring additional qualifications to be introduced.

### **5.3. CONTRIBUTIONS:**

#### **With a theoretical character:**

1. An analysis of the current operative regulations in Bulgaria and Europe, regulated the issues of midwifery CE and the safety of obstetric practices, is done.

2. The international experience in 30 European countries concerning the regulation, organization, accreditation, financing and stimulation of the CE for midwives is studied.

3. A detailed SWOT analysis of the continuing education of midwives in Bulgaria is executed.

4. A survey of regular midwives, students and health care managers is conducted and the leading motives for participation of midwives in continuing education and the attitudes of students to be included in the process concerning their professional growth are determined.

5. The leading factors hindering the effective continuing education of midwives are identified.

6. A Continuing education quality assessment model for midwives is theoretically substantiated and the need for introduction of unified accreditation of continuing education is proved through an executed standardized interview with habilitated lecturers.

#### **With practical-applied character:**

1. The importance of the midwife's continuing education for providing quality and safe care in the obstetric practice is proven.

2. An **Algorithm for effective continuing education operation** is developed.

3. A **Continuing education assessment model** and tools are created, including a **Professional development assessment card** of the midwife and a **Professional portfolio**.

4. A proposal for unified accreditation of continuing education is done, which contains: accreditation body, procedure for its establishment and accreditation standards.

## PUBLICATIONS ON THE TOPIC OF DISSERTATION

1. *Pavlovska, ZH.* The role of health care managers for continuing education of midwives, Proceedings of the XIII National Forum of Health Care Specialists with International Participation “Health Cares – Present and Future”, Shumen 2017, pp. 328-335, ISBN: 978-619-978-619-221-168-4.
  
2. *Pavlovska, ZH. Y. Markova.* Comparative analysis of the continuing education of midwives in the EU countries and Bulgaria, Proceedings of the XIII National Forum of Health Care Specialists with International Participation “Health Care – Present and Future”, Shumen 2017, pp. 336-342, ISBN: 978-619-978-619-221-168-4.
  
3. *Pavlovska, ZH.* The concept of continuing education of midwives in EU regulatory documents and other sources, Nursing,staff, no. 1, 2019, pp. 39-44.
  
4. *Pavlovska, ZH.* Innovative educational approaches for assessment of the continuing education of the midwife, Health care no. 3, 2019, 36-41.