

## ORIGINAL ARTICLE

# CURRENT ISSUES ON PROVISION OF SERVICES TO WOMEN DURING PREGNANCY AND POSTPARTUM PERIOD BY FAMILY DOCTORS

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**The aim** is to determine the types of medical services that family doctors should provide to women during pregnancy and in the postpartum period and the competencies they should have to provide these services and the most acceptable ways to acquire them.

**Materials and methods:** During the study, the method of expert assessment, statistical method and method of structural and logical analysis were used. 50 obstetricians and gynaecologists who provide women with outpatient care and 50 family doctors acted as independent experts in the study.

**Results:** The types of medical services that family doctors should provide to women during pregnancy and in the postpartum period and the competencies that they should have to ensure the provision of these services were determined by experts. The most acceptable ways to acquire the necessary competencies, as well as the benefits and risks of providing these services at the primary level of health care were designated.

**Conclusions:** The implementation of the proposed types of medical care by family doctors will increase the availability and quality of medical care for women during pregnancy and in the postpartum period.

**KEY WORDS:** Women, pregnancy, postpartum period, medical care, family doctors, types of services, competencies

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**INTRODUCTION**

In the course of reforming the health care system of Ukraine, the development of primary health care on the basis of general medical practice – family medicine has been identified as a priority [1,2]. At present, primary health care is legally and financially differentiated from specialized medical care and acquires a certain level of trust in the population of the country [3,4], which has the right to freely choose a family doctor [5]. In this case, family doctor, being the doctor of the first contact of the population with the health care system, determines medical route of a patient [6]. At this stage of the reform, the Ministry of Health of Ukraine has approved the Procedure for providing medical care by family doctors [7], which includes the provision of primary obstetric and gynaecological medical care to women during pregnancy and in the postpartum period [8]. But so far the list of services in this area, which should be provided by a family doctor and competencies the specialist should have for this purpose, has not been determined.

The above mentioned defined the relevance of this study.

**THE AIM**

To determine expertly the types of medical services that family doctors should provide to women during pregnancy and in the postpartum period and the competencies they should have to provide these services. Identify the most

acceptable ways to acquire the necessary competencies, as well as the benefits and risks of providing these services at the primary level of health care.

**MATERIALS AND METHODS**

During the study, the method of expert assessment, statistical method and method of structural and logical analysis were used. Systematic approach became the methodological basis of the study. Using a specially designed questionnaire, the experts identified the types of medical services that family doctors should provide to women during pregnancy and in the postpartum period and the competencies they should have to ensure the provision of these services. As well as the most acceptable ways for family doctors to acquire the necessary competencies and the benefits and risks of providing these services at the primary level of care. 5 obstetricians-gynaecologists, 5 health care organizers, 5 family doctors and 3 scientists in the specialty “Social Medicine” took part in the development of the used questionnaire. Independent experts involved: 50 obstetricians and gynaecologists who provide women with outpatient care and 50 family doctors. Statistical processing of the results was performed using Microsoft Excel and Statistica – 6. Services and competencies, which are positively assessed by less than 50% of experts, are not recommended for use at the primary level of medical care.

**Table 1.** Types of medical services to be provided to women during pregnancy and in the postpartum period by family doctors (based on the results of expert assessment)

Competences	Obstetricians - gynaecologists		Family doctors	
	Absolute	%±m	Absolute	%±m
Informing women about the first signs of pregnancy	47	94,0±1,2	49	98,0±0,7
Motivation of women to seek medical attention early in the event of signs of pregnancy	45	90,0±1,5	50	100,0
Motivation of women to regular medical supervision during pregnancy	45	90,0±1,5	50	100,0
Introducing pregnant women to the optimal lifestyle during pregnancy	43	86,0±1,7	46	92,0±1,4
Providing advice on sexual activity during pregnancy	37	74,0±2,2	41	82,0±1,9
Recommendation for women on the optimal diet during pregnancy	40	80,0±2,0	47	94,0±1,2
Explaining to women the possible harm due to self-medication during pregnancy	45	90,0±1,5	49	98,0±0,7
In the presence of extragenital pathology, organization of consultations with relevant specialists	47	94,0±1,2	50	100,0
Organization of examination of pregnant women in accordance with the current Clinical Protocol	43	86,0±1,7	45	90,0±1,5
Informing married couples about the physiological course of pregnancy	38	76,0±2,2	44	88,0±1,6
Informing married couples about the physiological course of fetal development	34	68,0±2,3	37	74,0±2,2
Informing married couples about the symptoms of pregnancy complications	47	94,0±1,2	49	98,0±0,7
Informing married couples about the symptoms of fetal developmental disorders	42	84,0±1,8	44	88,0±1,6
Diagnosis of pregnancy	44	88,0±1,6	47	94,0±1,2
Diagnosis of fetal development	38	76,0±2,1	41	82,0±1,9
Referral of a pregnant woman for consultation with an obstetrician-gynaecologist in case suspected disorders of pregnancy or fetal development with determination of the method of transportation	42	84,0±1,8	43	86,0±1,7
Fulfilment of the consulting doctor recommendations	48	96,0±1,0	45	90,0±1,5
Referral for routine hospitalization at high risk of complications or miscarriage	40	80,0±2,0	46	92,0±
Referral to emergency hospitalization determining the method of transportation in the event of threatening symptoms during pregnancy	48	96,0±1,0	50	100,0
Home nursing of a pregnant woman in order to get acquainted with the living conditions of the pregnant woman and the conditions for the unborn child	47	84,0±1,8	50	100,0
In case of inappropriate social, material and sanitary and hygienic living conditions of a pregnant woman and unborn child - official notification of the social security authorities	47	84,0±1,8	50	100,0
Organization of medical supervision of women in the postpartum period	41	82,0±1,9	44	88,0±1,6
Providing recommendations on the optimal lifestyle and the course of the postpartum period	41	82,0±1,9	44	88,0±1,6
Diagnosis of postpartum complications	40	80,0±2,0	43	86,0±1,6
Informing women about the symptoms of postpartum complications	40	80,0±2,0	44	88,0±1,6
Determining tactics in the event of postpartum complications	41	82,0±1,9	44	88,0±1,6
Organization of the «School of Responsible Parenthood»	47	94,0±1,2	49	98,0±0,7
Cooperation with specialized obstetric (perinatal) institutions for the provision of medical care to women during pregnancy and in the postpartum period	50	100,0	50	100,0
Advanced training in providing medical care to women during pregnancy and in the postpartum period	50	100,0	50	100,0

## RESULTS AND DISCUSSION

The first step in the study was establishing by independent experts a list of services provided by family doctors to women during pregnancy and in the postpartum period. The results obtained during the study are given in Table 1.

The analysis of the data given in Table 1 indicates that the experts in obstetrics and gynaecology the highest evaluated the provision by family doctors of the following services to women during pregnancy and in the postpartum period: cooperation with institutions of specialized

**Table II.** Benefits of providing medical services to women during pregnancy and in the postpartum period by family doctors at the primary level of medical care (according to the results of expert assessment)

Possible risks	Obstetricians - gynaecologists		Family doctors	
	Absolute	%±m	Absolute	%±m
Increasing the territorial availability of medical care for women during pregnancy and in the postpartum period	41	82,0±1,9	50	100,0
Reduction of duplication of medical care for women during pregnancy and in the postpartum period	35	70,0±2,3	39	78,0±2,1
Improving resource efficiency	27	54,0±2,5	35	70,0±2,3
Reducing the level of untimely hospitalization of pregnant women with complications	43	86,0±1,7	44	88,0±1,6
Improving intra-sectoral cooperation in providing medical care to women during pregnancy and in the postpartum period	37	74,0±2,2	45	90,0±1,5
Higher level of early medical supervision of pregnant women	44	88,0±1,6	46	92,0±1,4

**Table III.** Possible risks of providing medical services to women during pregnancy and in the postpartum period by family doctors at the primary level of medical care (based on the results of expert assessment)

Possible risks	Obstetricians - gynaecologists		Family doctors	
	Absolute	%±m	Absolute	%±m
Low level of interaction between primary care service and obstetrics and gynecology service	44	88,0± 1,6	49	98,0±0,7
Low level of professional readiness and qualification of family doctors	47	84,0±1,8	33	66,0±2,4
Low level of professional readiness and qualification of family nurses	49	96,0±1,0	33	66,0±2,4
Lack of motivation of primary health care workers to provide this area of medical services	45	90,0±1,5	29	58,0±2,5
Low level of public confidence in primary health care workers	46	92,0±1,4	23	46,0±2,5
Increased duplication of medical services for women during pregnancy and in the postpartum period	42	84,0±1,8	29	58,0±2,5
Low level of inter-sectoral medical cooperation in providing care to women during pregnancy and in the postpartum period	45	90,0±1,5	42	84,0±1,8

obstetric (perinatal) care on providing medical assistance to women during pregnancy and in the postpartum period and advanced training in providing medical care to women during pregnancy and in the postpartum period (100.0%), referral to emergency hospitalization defining the method of transportation in case of threatening symptoms during pregnancy and fulfilment of consulting doctor's recommendations ( $96.0 \pm 1.0\%$ ), in the presence of extragenital pathology, organization of consultations with relevant specialists, informing women about the first signs of pregnancy, informing married couples about the symptoms of pregnancy complications and organization of the "School of Responsible Parenthood" ( $94.0 \pm 1.2\%$ ). Informing married couples about the physiological course of fetal development has received a low rating from experts of obstetrics and gynaecology ( $68.0 \pm 2.3\%$ ), providing recommendations on sexual activity during pregnancy at the primary level of medical care – ( $74.0 \pm 2, 2\%$ ), informing married couples about the physiological course of pregnancy and diagnosis of fetal development by family doctors – ( $76.0 \pm 2.2\%$ ).

The following services were fully supported by independent experts – family doctors for women during pregnancy and in the postpartum period at primary level of health care: motivating women to seek medical attention early in case of pregnancy, motivating women to see a doctor regularly during pregnancy, referral for emergency hospitalization with the definition of the method of transportation in the event of threatening symptoms during pregnancy, home nursing of a pregnant woman in order to get acquainted with the living conditions of a pregnant woman and the conditions for unborn child and official notification of social security authorities in case of inappropriate social, material and sanitary conditions of pregnant woman and unborn child (100.0%). Informing of married couples about the physiological course of fetal development by family doctors received the lowest level of support from both family doctors and obstetricians and gynaecologists ( $74.0 \pm 2.2\%$ ).

Next, the results of the expert assessment of the benefits of providing services to women during pregnancy and in the postpartum period by family doctors were analyzed. The results of the study are shown in Table II.

**Table IV.** Competences of family doctors to provide medical services to women during pregnancy and in the postpartum period (based on the results of expert assessment)

Competences	Obstetricians - gynaecologists		Family doctors	
	Absolute	%±m	Absolute	%±m
Ability to inform women about the first signs of pregnancy	48	96,0±1,0	48	96,0±1,0
Ability to motivate women to seek medical attention early in the event of signs of pregnancy	46	92,0±1,4	49	98,0±0,7
Ability to motivate women for regular medical supervision during pregnancy	46	92,0±1,4	50	100,0
Ability to familiarize pregnant women with the optimal lifestyle during pregnancy	45	90,0±1,5	46	92,0±1,4
Ability to provide advice to married couples on sexual activity during pregnancy	35	70,0±2,3	42	84,0±1,8
Ability to provide advice to women on the optimal diet during pregnancy	40	80,0±2,0	47	94,0±1,2
Ability to provide explanations to women of possible harm due to self-medication during pregnancy	44	88,0±1,6	48	96,0±1,0
Ability to detect the presence of extragenital pathology and organize consultations with relevant specialists	48	96,0±1,0	50	100,0
Knowledge of the current Clinical Protocol for the supervision of pregnant women with the physiological course of pregnancy	45	90,0±1,5	45	90,0±1,5
Ability to organize the examination of pregnant women in accordance with the current Clinical Protocol	45	90,0±1,5	45	90,0±1,5
Ability to inform married couples about the physiological course of pregnancy	37	74,0±2,2	44	88,0±1,6
Ability to inform married couples about the physiological course of fetal development	35	70,0±2,3	39	78,0±2,1
Ability to inform couples about the symptoms of pregnancy complications	46	92,0±1,4	48	96,0±1,0
Ability to inform couples about the symptoms of fetal developmental disorders	42	84,0±1,8	44	88,0±1,6
Ability to diagnose pregnancy	46	92,0±1,4	45	90,0±1,5
Ability to diagnose fetal development	39	78,0±2,1	43	86,0±1,7
Ability to refer a pregnant woman for consultation to an obstetrician-gynaecologist in case of suspected disorders of pregnancy or fetal development with determination of the method of transportation	42	84,0±1,8	45	90,0±1,5
Ability to ensure fulfilling the recommendations of consulting doctor	50	100,0	45	90,0±1,5
Ability to refer a woman to a planned hospitalization at high risk of complications or miscarriage	41	82,0±1,9	45	90,0±1,5
Ability to ensure the referral of a woman to emergency hospitalization with the definition of the method of transportation in the event of threatening symptoms during pregnancy	48	96,0±1,0	50	100,0
Ability to provide home nursing for pregnant women in order to get acquainted with the living conditions of the pregnant woman and the conditions for the unborn child	48	96,0±1,0	50	100,0
Ability to provide official notification of social security authorities in case of inappropriate social, material and sanitary-hygienic living conditions of a pregnant woman and conditions for unborn child	48	96,0±1,0	50	100,0
Ability to organize medical care for women in the postpartum period	42	84,0±1,8	44	88,0±1,6
Ability to provide advice to women on the optimal lifestyle and information about the postpartum period	41	82,0±1,9	45	90,0±1,5
Ability to diagnose postpartum complications	42	84,0±1,8	43	86,0±1,7
Ability to inform women about the symptoms of postpartum complications	41	82,0±1,9	45	90,0±1,5
Ability to determine the tactics of action in the event of postpartum complications	42	84,0±1,8	44	88,0±1,6
Willingness and ability to organize the work of the «School of Responsible Parenthood»	48	96,0±1,0	49	98,0±0,7
Ability to cooperate with institutions of specialized obstetric (perinatal) care in providing medical care to women during pregnancy and in the postpartum period	50	100,0	50	100,0
Willingness for advanced training on providing medical care to women during pregnancy and in the postpartum period	50	100,0	50	100,0

**Table V.** The most acceptable ways to acquiring necessary competencies for the provision of medical services to women during pregnancy and in the postpartum period by family doctors (based on the results of expert assessment)

Ways to acquire the necessary competencies	Obstetricians - gynaecologists		Family doctors	
	Absolute	%±m	Absolute	%±m
Thematic improvement courses	42	84,0±1,8	45	90,0± 1,5
Short-term trainings on the basis of the regional training center	45	90,0±1,5	43	86,0± 1,7
Remote webinars	30	60,0±2,4	36	72,0± 2,2
Seminars in the primary care center	26	52,0±2,5	45	90,0±1,5
Scientific periodicals	9	18,0±1,9	9	18,0± 1,9
Methodical literature	25	50,0±2,5	23	46,0±2,5
Workplace internship in a women's clinic	35	70,0±2,3	39	78,0±2,1
Workplace internship in a maternity hospital	19	38,0± 2,4	21	42,0±2,5
Scientific and practical conferences	11	22,0±2,1	8	16,0±1,8
Teleconsultations with obstetricians and gynecologists	25	50,0±2,5	32	62,0±2,4

Analysis of the results of a survey of independent experts showed that most experts as an advantage noted the increased territorial availability of medical care for women during pregnancy and in the postpartum period, while obstetricians and gynaecologists praised the following benefits: higher level of early medical supervision of pregnant women ( $88.0 \pm 1.6\%$ ) and a decrease in the level of untimely hospitalization of pregnant women with complications ( $86.0 \pm 1.7\%$ ), and family doctors pointed at such advantages as a higher level of early medical supervision of pregnant women ( $92.0 \pm 1.4\%$ ) and improvement of intra-sectoral cooperation in providing medical care to women during pregnancy and in the postpartum period ( $90.0 \pm 1.5\%$ ).

According to set aim, the next step of the study was to identify possible risks of providing medical services to women during pregnancy and in the postpartum period by family doctors. The obtained data are given in table III.

Experts obstetricians and gynaecologists rated the highest risks as low level of professional readiness and qualification of family nurses ( $96.0 \pm 1.0\%$ ), low level of public confidence in primary care ( $92.0 \pm 1.4\%$ ), lack of motivation of primary care employees to provide this area of medical services and low level of inter-sectoral medical cooperation in providing care to women during pregnancy and in the postpartum period ( $90.0 \pm 1.5\%$ ). Family doctors indicated possible risks such as low level of interaction between primary care and obstetrics and gynaecology service ( $98.0 \pm 0.7\%$ ), low level of inter-sectoral medical cooperation in providing care to women during pregnancy and in the postpartum period ( $84.0 \pm 1.8\%$ ), low level of professional readiness and qualification of family doctors and family nurses ( $66.0 \pm 2.4\%$ ).

Based on the data obtained during the study, the competencies required by family doctors to provide medical services to women during pregnancy and in the postpartum period were identified. The results of the experts'

assessment of the competencies required by family doctors are given in Table IV.

The analysis of the competencies recommended by experts – family doctors and their comparison with the list of medical services for women during pregnancy and in the postpartum period indicated their certain compliance. This means that the experts recommended acquiring by family doctors of competencies necessary to provide the medical services recommended by them.

We also examined the most acceptable ways for family doctors to acquire the necessary competencies to provide medical services to women during pregnancy and in the postpartum period. The results obtained are given in Table V.

According to the experts both obstetricians and family doctors, the most acceptable ways for family doctors to acquire the necessary competencies to provide medical services to women during pregnancy and in the postpartum period are thematic improvement courses, short-term trainings on the basis of the regional training centre, remote webinars and internships for family doctors in the workplace in a women's clinic. Experts rated the possibility of using scientific-practical conferences and scientific periodicals to acquire the necessary competencies the lowest.

## CONCLUSIONS

The study identified the types of medical services that family doctors should provide to women during pregnancy and in the postpartum period and the competencies they should have to provide these services and the most acceptable ways to acquire the necessary competencies, as well as the benefits and risks of providing these services at the primary level of medical care. The implementation of the proposed types of medical care by family doctors will increase the availability and quality of medical care for women during pregnancy and in the postpartum period.

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**Conflict of interest:**

*The Authors declare no conflict of interest.*

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