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Psychophysical preparation of the pregnant women for childbirth in a prenatal care

Psychofizyczne przygotowanie kobiety w ciąży do porodu w opiece prenatalnej

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ABSTRACT

Objective: We found out the opinions and attitudes of the pregnant women to the quality level of courses of a psychophysical preparation. We also found out how many medical professions led the courses and which professions were being preferred by the women.

Subjects and Methods: Our research was based on a random sample of respondents. The study included 277 respondents. They were divided in to two groups – puerperas and midwives. For each group of respondents was used method of questionnaires. The results were being processed through a statistic program SPSS, version 14.0 on the base of mathematic – statistic methods (arithmetic average calculation, result of Chi-square test, Crombach coefficient Alfa).

Results: We found out, that the biggest attention was being paid in the courses to breast feeding, childbirth mechanism and particular childbirth phases. Psychoprophylactic preparation courses play an important role in preparation of pregnant women to the childbirth in physical, psychic and a social sphere. Opinions about course leading were different in each group of respondents – puerperas prefer a physician and midwife in leading the course.

Conclusion: We recommend to synchronize the knowledge in the education content not only from a medical aspect but also from a psychological and social aspect. In the aspect of law we also recommend to solve providing services in the psychoprophylactic preparation courses to be lead obligatory for every pregnant woman by the midwives with

STRESZCZENIE

Cel: Celem badania było poznanie opinii i postaw kobiet w ciąży do poziomu jakości kursów przygotowania psychofizycznego. Okazało się też, jak wiele zawodów medycznych prowadziło tego typu kursy i przedstawiciele których zawodów byli preferowani przez kobiety.

Tematy i metody: Badania przeprowadzono na podstawie losowo wybranych respondentów. Badaniem objęto 277 respondentów. Zostali oni podzieleni na dwie grupy – położnice i położne. Dla każdej z grup badanych zastosowano metodę kwestionariuszy. Wyniki były przetwarzane za pomocą programu statystycznego SPSS, wersja 14.0 na podstawie metod matematyczno-statystycznych (obliczenia średniej arytmetycznej, wynik testu zgodności chi-kwadrat, współczynnik alfa Cronbacha).

Wyniki: Okazało się, że największą uwagę poświęca się w kursach karmieniu piersią, mechanizmowi porodu i poszczególnym fazom porodu. Kursy psychoprofilaktycznego przygotowania do porodu odgrywają ważną rolę w przygotowaniu kobiet w ciąży do porodu w sferze fizycznej, psychicznej i społecznej. Opinie na temat prowadzenia kursu były różne w każdej grupie respondentów – położnice wolą, gdy zajęcia są prowadzone przez lekarza i położną.

Wnioski: Zalecamy, aby zsynchronizować wiedzę w treści kształcenia, nie tylko z medycznego aspektu, ale również w aspekcie psychologicznym i społecznym. W aspekcie prawnym polecamy również wprowadzenie obowiązkowych dla każdej kobiety w ciąży usług w zakresie psychoprofilaktycznych kursów przygotowujących do porodu, prowadzonych

a certificate. We suggest to regularize by-law to be courses of psychophysical preparation paid by an insurance company. **Key words**: Childbirth assistance – Prenatal care – Psychophysical preparation for childbirth

przez położne z certyfikatem. Proponujemy prawne uregulowanie kursów przygotowania psychofizycznego opłacanych przez firmy ubezpieczeniowe.

"Life is a flame that is always burning itself out, but it catches fire again every time a child is born." (G. B. Shaw)

Introduction

In our society, there is a woman's - mother's mission values as one of the most valuable wealth. To give birth and to grow up a healthy child is one of the basic biological role and desire of a healthy woman. Indeed, there are few women who wouldn't long for a child, who wouldn't long for achieving the highest goal of their life. The role of a prenatal care is to keep the right pregnancy conduct, to fight against premature childbirth, to prepare mother to the childbirth and to see to childbirth of a healthy child, to support a positive relationship with an expecting child, to prepare responsibly woman to fulfilling the maternity duties, to breast/feeding and child care [1].

World Health Organisation in its programme "Health 21 - health for everyone in the 21st century: defined clearly, that care about normal pregnancy should be: de-medicalised, based on the certain processes, local available, multibranches, holistic, family oriented, cultural relevant and creating a space for co - decision of a pregnant woman [2].

Inevitable services for the pregnant women are preventive checkups, consultancy and health education, pointing to none - smoking, rational nutrition, psycho - hygiene, preparation to the childbirth, care about child after a birth.

Modern childbirth assistance has its place in all parts of medical services where it could importantly contribute to getting better its quality. It represents integral part of medical system. Important role in prenatal care plays complex and effective psychophysical preparation that is assumption of coping with physiologic pregnancy and physiologic childbirth [3,4].

Psychophysical preparation

Even in the primitive societies exists an effort to suppress a childbirth pains by a various magic acts. Psychiatry expansion, anaesthetics discovery, hypnosis development and others discoveries in the first part of the 19th century, remark a progress and it influenced a childbirth analgesia aboutissement. These medicated preparations in its special way, more or less, influenced the state of a mother and a newborn [5, 6, 7].

Non-medicated methods to make childbirth painless began to develop as a result of the popular, widespread medicated childbirths, in the first part of the 20th century. To the first we file hypno-suggestive method that was used in all European countries. The authors of the hypnosuggestive methods follow from the Pavlov's theory that was based on cortex's irritation and inertia. Creating the temporal connection, organism has adapted to the impulses of an external environment. The knowledge from the second phase of the paradox suggestion about impulses influence was used in an application of the psychophysics methods to make child birth painless. Aboutissement of the others methods was based on these principles. A goal of these methods was to use a psychological, physical and non - pharmaceutics elements in a prevention of a childbirth pains. An importance of Pavlov's conception was in using the physiologic, psychological and methodology's elements in analgesia as well as in obstetrics. In a post - war era methods of Velvovsky, Read and Lamazov were popular.

According to a G.D. Read method, some social and cultural factors in parries invoke a fear, stress that are the reasons of a childbirth pain. Read tried to eliminate a fear and a stress. He especially emphasise a relaxation. Lamaze followed from Pavlov's theory. The goal of a childbirth preparation he understood in a fear's reduction through the information, relaxation and rhythmic breathing in every uterine contraction, "to make mind free oneself the body" [8, 9,10].

Nowadays prenatal programmes expand their influence in behalf of mother, child and family. Pregnancy and childbirth is not only a physiologic matter, but it is also an important event in the family's life.

Attitudes of a "physiological childbirth" and "psychoprophylaxy" was the alternatives to overmedicament obstetrics, with a liberal using of a medicaments remissive the pain after operative childbirth [9].

The goal of a psychophysical preparation is to prepare the pregnant women to master psychically and physically the stress in a pregnancy, to teach them cooperate during the childbirth, allay childbirth pains, introduce the women into a care in puerperium and inform them about newborn and infant care [10, 11, 12].

Present society, pregnant women' demands and an individual approach require a change in pregnant women' and their families' care. Modern prenatal courses expand this easy goal.

Program's goal in the prenatal courses is:

- Creating a intrauterine bond with a prenatal child
- To identify the complications and reduce them
- Using non pharmacologic techniques to reduce a childbirth pains

- Using pharmacologic analgesia to reduce a childbirth pains
- Reduce post partum complications
- Preparation for the parenthood [13].

An importance of a psychoprophylactic preparation:

- A pregnant woman learns how to understand a pregnancy and a childbirth as a physiologic process
- Woman gets to know a base knowledge about childbirth, its normal process and feelings coming during a childbirth
- Woman forgets the childbirth's fear and she actively cooperate. Woman's behaviour more or less stands a normal childbirth and its successful ending
- Good psychoprophylaxy contains even prevention. Pregnant women get to know healthy regime, dressing, increasing a body weight, danger of an oversize weight increase. It is possible sometimes to avoid the complications in pregnancy, childbirth and puerper by a psychophysical preparation and a correct instruction.
- It is pointing to post partum phase to the problems after childbirth. At the same time a pregnant woman get to know a child care, its' nutrition, a breast feeding preparation and an importance of a natural child nutrition [14,15].

Content of the prenatal courses is aimed at:

- Right health habits
- Stress facing and anxiety reducing
- Coaching non pharmacologic techniques to reduce a pain. Coaching relaxing and breathing techniques
- Provision base information about the signs of beginning childbirth
- Self confidence fortifying
- Fortifying the preparation and a help of the supporting persons
- Fortifying a assurance of a parental pair
- Facing the successful breast feeding
- Successful post partum adaptation
- Ability to care about child at home [16,17].

In parallel with individual examinations in prenatal clinic, there exist for a pregnant woman a psychoprophylactic preparation courses. With a psychophysical preparation it is appropriate to begin in 3-4 month of pregnancy with a 50 minutes exercising [18, 19].

To begin in 7-8 month it should not be so effective. In a higher pregnancy level women harder get to know breathing techniques and childbirth phases acts. In one course, there should be maximally 6 women. The base of a success is an individual approach to every pregnant woman. In a higher amount is not possible to have a serious and good personal contact between a course leader and each woman. In course supervision is required high

professional knowledge of a midwife from all branches that are needed for good supervision.

Systematic preparation of pregnant women helps to take childbirth for shorter, keeping good psychic condition, and marking down the per cent of a premature delivery. It significantly lows down thrombolytic occurrence, back pains and down limbs edemas. It gets better the bowels peristalsis [20]. Theoretical part {seminars} and practical part {exercising} has to fill up appropriate

Research's problem:

Adherence of a WHO's recommendations in prenatal care about physiological pregnancy.

Research's goals:

- Find out the opinions and attitudes of the pregnant women to the courses of a psychophysical preparation
- Find out how many medical professions lead the courses and which professions are being preferred by the women.

Research's hypothesis

H1 – it is being predicted that there is more puerperas satisfied with attention given to each fields in the courses of the psychophysical preparation, but the satisfaction would differ because of the age and education.

H 2 – it is being predicted that there is more puerperas that absolving the course of psychophysical preparation has an importance in childbirth than those for whose to absolve a course was unimportant.

H 3 – it is being predicted that puerperas prefer midwives as a leader of a course than others professionals.

Methods of inquiries

We have chosen as a main method of inquiries the multi-item questionary {one for puerperas and other for midwives}. Its choice was influenced by a character and research's goal. The questionnaire was anonymous and voluntary. Except the identification data it consists of opened, closed and semi-closed questions. Respondents had a choice between more possibilities, eventually to write down. The questionnaire was distributed in Slovak language. It was being administrated in April – December 2006 on the department of puerpera, in ambulances of prenatal care and in courses of psychophysical preparation in Trnava, Skalica and Bratislava. Pilot study we performed in November 2005 in the sample of 20 respondents.

Files were ordered into a three parts. First part was for finding out the identification data – age, education, number of born children. Second part was connected to counselling and health education. It was oriented to information about process of physiologic pregnancy, childbirth and motherhood. Third part found out opinions and attitudes, of the women, on the courses of psychophysical preparation.

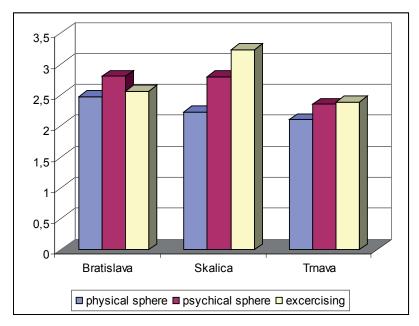


Fig. 1. Attendance in the courses (averages according to the regions)

Ryc. 1. Udział w kursie (średnie w odniesieniu do regionów)

Table 1. An importance of preparation to childbirth

Tab. 1. Znaczenie przygotowania do porodu

Answers			Comme		
		Bratislava Skalica		Trnava	Sum
Certainly yes	N	12	1	6	19
	% in a city	35,3%	8,3%	24,0%	26,8%
yes	N	11	2	8	21
	% in a city	32,4%	16,7%	32%	29,6%
no	N	4	1	2	7
	% in a city	11,8%	8,3%	8,0%	9,9%
I do not know	N	7	8	9	24
	% in a city	20,6%	66,7%	36,0%	33,8%
Total	N	34	12	25	71
	% in a city	100,0%	100,0%	100,0%	100,0%

Questionnaire backflow was 95, 52 % {from 290 came back 277}. Data processing was done by a double – level sorting. The results were being processed through a statistic program SPSS, version 14.0 on the base of mathematics – statistic methods, arithmetic average calculation.

Chi-square test was used in checking out the homogeneity in tables of frequency adduced activities {in contingent tables}.

Reliability was checkout as validity from the aspect of inner consistency {homogeneity} of the instrument. The constant of reliability was Crombach coefficient Alfa. To calculate real and failure variability was used method of diffusion analyses {ANOVA}.

Characteristic of the subjects

220 puerperas and 57 midwives of a various age groups and education had joined the research. File was consisting

of puerperas – women who was confined for the first time, second time, who was confined more times and midwives with several children. Respondents were chosen by a casual selection.

Results

These questions responded only 71 (32, 1%) puerperas, that had attend the course of psychophysical preparation.

On the base of your experiences from the course of psychoprophylactic preparation, sum up the attention paying to each files.

Each file of the questionnaire was being separated for better lucidity into a three parts. The reliability was being checkout with a Crombach Alfa test. The sum of all files of the question but also the particular blocks I, II and III was being evaluated every separate. Crombach coefficient $\alpha=0.944$ for sum, $\alpha=0.869$ for block I, $\alpha=0.928$ for block II and $\alpha=0.931$ for block III.

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1	Bratislava	Skalica	Trnava	Σ	
Leader		76	69	76	221
midwife	N	16	5	18	39
mawne	%	21,1	7,2	23,7	17,6
:	N	15	13	16	44
midwife and physician	%	19,7	18,8	21,1	19,9
	N	5	2	3	10
psychologist	%	6,6	2,9	3,9	4,5
instructor	N	9	1	2	12
instructor	%	11,8	1,4	2,6	5,4
other	N	0	1	1	2
other	%	0	1,4	1,3	0,9

Table 3. Course's leader (midwives)

Tab. 3. Lider kursu (położne)

Answers		Bratislava	Skalica	Trnava	Σ
		20	17	20	57
سه نیاب ناف	n	10	10	15	35
midwife	%	50	58,8	75	61,4
midwife and physician	n	8	7	9	24
midwife and physician	%	40	41,2	45	42,1
nsychologist	n	3	3	2	8
psychologist	%	15	17,6	10	14
instructor	n	3	2	2	7
	%	15	11,8	10	12,3
other	n	0	1	1	2
	%	0	5,9	5	3,5

According to 41, 4% {29} puerperas, they pay a maximal attention to a breast feeding. 37, 2 % {26} of the puerperas answered adequate. To childbirth and childbirth's phases was being paid maximal attention according to a 40, 6% {28}. 40, 6% {28} of the respondents consider attention for an adequate. To the sexual life in pregnancy was being paid the smallest attention, 21 puerperas consider it for maximally deficient. In the psychical field there was maximal attention being paid to father's role {39/62, 5% women}, minimal to the depression's problem 30, 2% {19} respondents.

Breast exercising were being paid biggest attention {70, 1% / 47 women} and the smallest one to gravidjoga. Respondents with a higher or university's education would appreciate paying bigger attention to psychic problems.

Has the psychic and physical preparation an importance for you?

"Yes" answer 29, 6% (21) of the women, "certainly yes" answer 26, 8% (19) women. Psychic and physical preparation has not any importance for 9, 9% (7) of the women and 33, 8% (24) of the women do not know to consider an importance of the psychic and physical preparation in a pregnancy.

Specify what you had missed in preparation for childbirth, eventually in what way you would have improved it on!

This item was open and respondents had the choice to express their notes and proposals that would get better the level of the course of psychoprophylactic preparation. Only 16 puerperas, so only 7, 27 % answered the question. According to their opinion should especially change the behaviour of the medical staff. In the psychoprophylactic preparation they consider for rushing moment that every meeting of a course is open for a new pregnant women and leader has to present theme that were already spoken on the last meetings.

Who should be a leader of a psychoprophylactic preparation course?

The biggest group 19, 9% form puerperas (44), according to, a course should be leaded by a physician with midwife. Midwife as a most appropriate person to lead the course consider 17, 6% (39) of the respondents (Chi-square test, p=0,024). Statistically important is that less puerperas (7,2%) from Skalica think that course leader should be midwife assistant towards 21,1% from Bratislava and 23,7% from Trnava. 10 puerperas (4,5%) thought

that courses should be leaded by psychologist. Opinion that an instructor should be a course leader have 5, 4% $\{12\}$ respondents from whole file. There was a significant difference between a regions $\{\text{chi-square test}, p=0.021\}$.

Puerperas from Bratislava 11, 8% should absolve a course with an instructor as s course leader, but in Trnava 2, 6% and in Skalica only one woman wants an instructor as a course leader.

These preferences of midwives to the leader of a psychoprophylactic preparation course are being mentioned. 61, 4 % {35} midwives prefer midwife, 42, 1% {24} prefer midwife and a physician, 8 {12, 3%} psychologist and 7{3, 5} instructor. Two respondents think it should be a person that has appropriate education.

Discussion

The object of our research was finding the attitudes of puerperas and midwives to the particular fields of psychophysical preparation. To find out the information about pregnancy and childbirth process, preferences about psychoprophylactic preparation courses.

The basic research orientation followed out the WHO's recommendations for providing care during normal pregnancy. In this context we have conceive as even the individual items.

The biggest attention was being paid in the courses to breast feeding, childbirth mechanism and particular childbirth phases. According to 41, 4% {29} puerperas, they pay a maximal attention to a breast feeding. 37, 2 % {26} of the puerperas answered adequate. To childbirth and childbirth's phases was being paid maximal attention according to a 40, 6% {28}. 40, 6% {28} of the respondents consider attention for an adequate. To the sexual life in pregnancy was paid the smallest attention, 21 puerperas consider it for maximally deficient. In the psychical field there is maximal attention pay to father's role {39/62, 5% women}, minimal to the depression's problem 30, 2% {19} respondents. Breast exercising were being paid biggest attention {70, 1% / 47 women} and the smallest one to gravidjoga. Respondents with a higher or university's education would appreciate paying bigger attention to psychic problems. Hypothesis 1 has to be approved.

To this question answered only 71 women who attended the course of psychoprophylactive preparation, what is only 32, 1% of the whole sum. According to the results, course has importance for 21 {29, 6%} women, surely has the preparation a meaning for 40 women. 24 women did not know to consider the importance of the preparation. We do not found any differences in age and education. Psychoprophylactive preparation courses play an important role in preparation of pregnant women to the childbirth in physical, psychic and a social sphere. Hypothesis 2 has to be approved.

According to the results, we do not disapprove third hypothesis. The biggest group consists of 19, 9% of puerperas, according to the course should be leaded by a physician and midwife. Midwife as the best person to lead the course consider for 17, 6% respondents. Only 7, 2% of the puerperas from the Skalica prefer midwife as the best person to lead the course towards 21, 1% from Bratislava and 23, 7% from Trnava. According to 61, 4% of midwives the course should be leaded by a midwife. Midwife and a physician prefer 42, 1% of the midwives. Puerperas prefer a physician and midwife in leading the course. Hypothesis has to be approved.

In the last few years care about a pregnant woman went through big changes that respect natural needs of the pregnant women. It was not our goal to comment upon a work of the midwives in prenatal care, but to support a level of childbirth assistance in a pregnancy.

We recommend from the reality we have found out in a research of this problems to consider this arrangements that would help to solve this problems:

- In the education content synchronize the knowledge not only from a medical aspect but also from a psychological and social aspect
- In the aspect of law solve providing services in the psychoprophylactic preparation courses to be leaded obligatory for every pregnant woman by the midwives with a certificate.
- Regularize a by- law to be courses of psychophysical preparation paid by an insurance company.

Summary

Present condition of a prenatal care as well as the increasing demands for health care providing; bring the changes in conception of obstetrics practice as well as their providers [21].

A pregnancy means for a woman an intensive process that is needed to be paid attention. In its process a maternal organism copes with adapting changes in the biological, psychological and social field and a new human being is being developed.

A healthy life start has to be a priority of each society. Normal physiologic childbirth makes a base for healthy human being development. The programme of the World Health Organisation "Health 21" define the goals; identify the fields that leads to building the conditions for the pregnancy and maternity. Even the midwives can contribute to fulfil the goals by improving the quality of a care about pregnant women in prenatal phase.

Birth of a human being is still a great secret. A life begins with a conception even we can not see it or feel it. During a zero year, the base for postnatal life of a human being is being shaped prenatally.

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