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Formation Of Psychological Comfort In Women With Habitual Miscarriage Of Pregnancy Against The Background Of Their Daily Wearing Of Medicinal Prophylactic Trousers.

Bikbulatova AA*.

Russian State Social University, st. V. Pika, 4, Moscow, Russia, 129226

ABSTRACT

Habitual miscarriage of pregnancy is an important problem of modern medicine attracting researchers' attention as before. Existing psychological peculiarities in such pregnant women promote the formation of functionally unfavorable vegetative provision of their bodies what aggravates the existing pathology. In this respect it seems to be very important to conduct state correction of pregnant women with habitual miscarriage of pregnancy taking into account the dynamics of their psychological state, and try to apply medicinal impacts which positively influence their psychological state. Aim: to find out the possibility of psychological comfort formation in pregnant women with habitual miscarriage of pregnancy against the background of their daily wearing of medicinal prophylactic trousers. Pregnant women with habitual miscarriage of pregnancy at the beginning of the third term are characterized by high personal anxiety, presence of low self-estimation and dissatisfaction by life quality. Low motivation to wearing of medicinal prophylactic trousers is typical for these women. Their daily application from the 28th week up to 38th week of pregnancy promoted significant increase of satisfaction with life quality and the level of self-estimation in the given group of women lowering their anxiety. Besides, motivation of patients with habitual miscarriage of pregnancy to wearing of medicinal prophylactic trousers significantly increased in the course of application what indirectly pointed at its high efficiency.

Keywords: habitual miscarriage of pregnancy, women, pregnancy, medicinal prophylactic trousers, psychological comfort.

**Corresponding author*

INTRODUCTION

Habitual miscarriage of pregnancy is a serious problem of modern medicine demanding keen attention of researchers [1]. Its frequency among women in developed countries remains to be rather high and is equal to 10-25% of all the pregnancies [2]. This state is a bright ailment indicator of a woman's reproductive system. It points at the presence of some factors in her body which steadily lead to fetus rejection [3]. To provide carrying of a pregnancy by such women – is a very complicated task which demands efforts of various experts in the course of the whole pregnancy. Special attention at that should be devoted to the dynamics of their psychological state which strongly influences womb tone and mostly determines the possibility of full child-bearing [4].

It is known that pregnant women with the diagnosis – “miscarriage of pregnancy” – are emotionally unstable, rather irritable; have high personal anxiety and inadequate self-estimation [5]. Existing in such pregnant women psychological peculiarities promote the formation of functionally unfavorable vegetative provision of their bodies which mostly aggravates the existing dysfunctions [6]. In this respect it seems to be very important to conduct state correction of pregnant women with habitual miscarriage of pregnancy taking into account the dynamics of their psychological state, and try to apply medicinal impacts forming the sense of psychological comfort in them [7].

The possibilities of various medicinal impacts were considered earlier [8,9] including non-pharmacological impacts. They were aimed at somatic indices of a body and psychological processes [10]. Taking into account high perfection of pharmacological treatment applied at habitual miscarriage of pregnancy [11] it seemed to be expedient to conduct the search of non-pharmacological impacts which could strengthen pharmacological therapy and provide a woman with the state of psychological comfort. Medicinal prophylactic trousers (MPT) were considered as a variant of non-pharmacological impact on the body of a pregnant woman with habitual miscarriage of pregnancy. High efficiency of medicinal prophylactic clothes among various groups of patients in respect of their somatic characteristics was shown earlier [11]. At the same time, the possibility of positive impact on psychological indices of pregnant women with habitual miscarriage of pregnancy with the help of MPT remains to be studied rather poorly. In this respect we put the following aim in our research: to find out the possibility of psychological comfort formation in pregnant women with habitual miscarriage of pregnancy at their daily wearing of MPT.

MATERIALS AND METHODS

The conducted research was approved by the Local Ethic Committee of the Russian State Social University in May, 17th, 2016 (Record №5). All the examined women gave written informed agreement on participation in the conducted research. The research involved pregnant women in the third term living in Central Russia (Moscow city and Moscow region). The age of all the observed women was 22-30 years. Under observation we took women either without deviations in the reproductive field (the control group) or having habitual miscarriage of pregnancy (two groups of observation).

The control group was composed 35 of clinically healthy pregnant women being at the term of 28 weeks with two and more physiological childbirths in the anamnesis. The women from this group were known to have favorable obstetrical anamnesis, absence of spontaneous abortions and other obstetrical disturbances.

The criterion of involvement into the groups of observation was the following one – habitual miscarriage of pregnancy, i.e. the presence of three and more spontaneous abortions iteratively at the terms before 22 weeks in the anamnesis of a woman. There were formed two groups of observation out of the examined pregnant women with habitual miscarriage of pregnancy. The first group of observation was composed of 42 women being at the term of 28 weeks' pregnancy and receiving standard maintaining pregnancy therapy. The second group of observation involved 44 women with habitual miscarriage of pregnancy also at the term of 28 weeks. The women from the second group of observation, except traditional therapy maintaining pregnancy, daily wore the author's variant of MPT.

Applied MPT had front and back halves. The upper part of the front half was made as a cut out detail of elastic material with raised belt-line and enlarged free fitting allowance. The upper part of trousers' back half was cut out of elastic material. Vertical leather stripes were stitched on it. They formed pockets where rigid

plates were put. Similar leather stripes were also stitched on the upper part of trousers' front part. The lower line of vertical leather stripes' stitching had semicircular form on the front half of trousers and smoothly descended from the point 8-12cm lower than the top of the side seam till the point 10-15cm higher than the connection point of pace and middle seams of trousers. Besides, on the front half of trousers in the fields of side seams at the level of vertical leather stripes' disposition in MPT there were stitched some rebounded regulating details which were provided by the band VELKRO. Its reciprocal fragments were situated on the back half of trousers. Vertical leather stripes were 2.5-3 cm wide and were evenly stitched on the front and back halves of trousers. Used for MPT production rigid plates were made from fluoroplastic and were 1-3 mm thick [12].

Pregnant women from both groups of observation were under dynamic control with examination according to mentioned below methods at 28 weeks' and 38 weeks' pregnancy terms. The control group was observed and examined in the same terms. In the result of absence of reliable differences between both results of researches the control values are presented by one value – arithmetic average between both examinations.

We determined the level of signification of basic priorities in life in all the examined patients. They were offered to mark the most important one of the following positions: career, bright life, family, material welfare, friends, health [13].

Estimation of the examined persons' satisfaction with life quality was conducted in the form of questioning. They were offered to determine one variant which gives the fullest characteristics of perception of their own life by them: fully satisfied, satisfied on the whole, partially satisfied and unsatisfied [13].

Detection of anxiety level was conducted in the observed persons with the help of the test "The scale of personal anxiety" [13]. A patient was asked 40 questions according to techniques. The answers were processed and interpreted what allowed estimating the level of anxiety.

The techniques "Staircase" [13] was used for clarification of self-estimation state. After processing and interpreting of the results we made the conclusion about self-estimation level: overestimation, adequate estimation and underestimation.

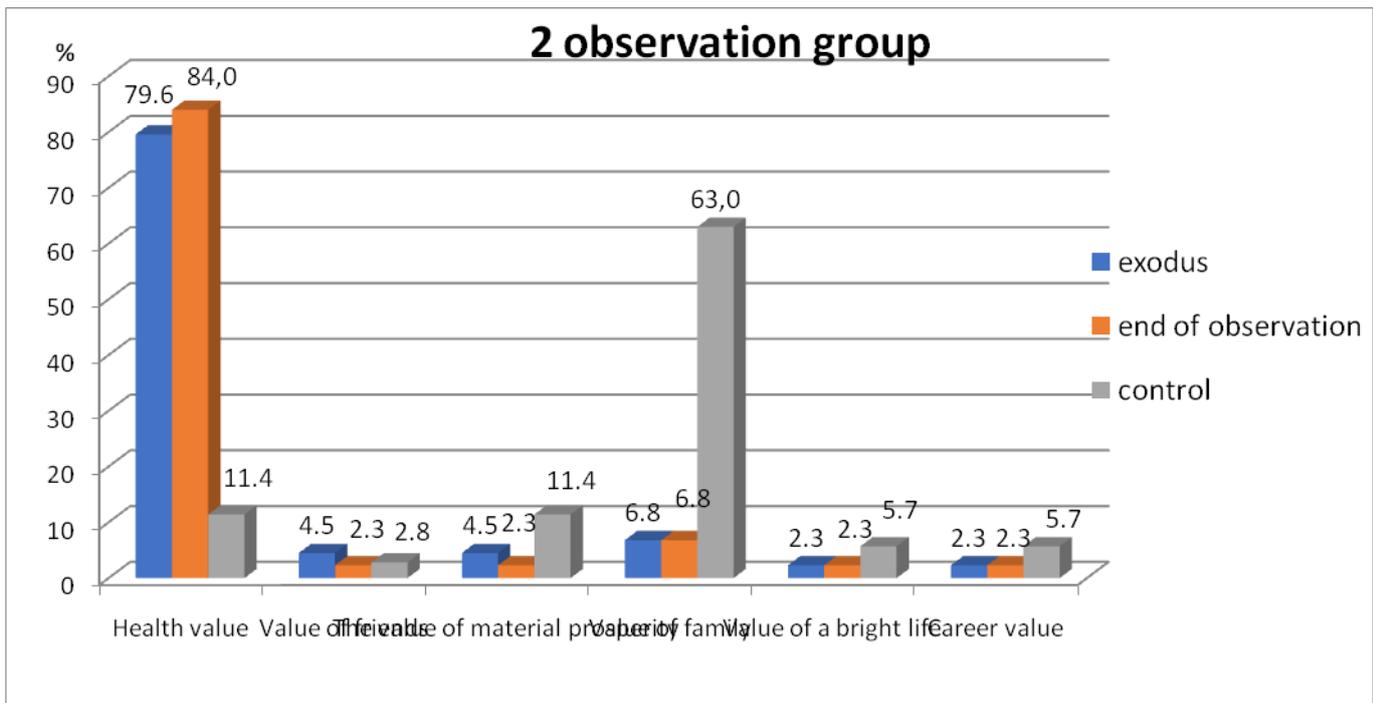
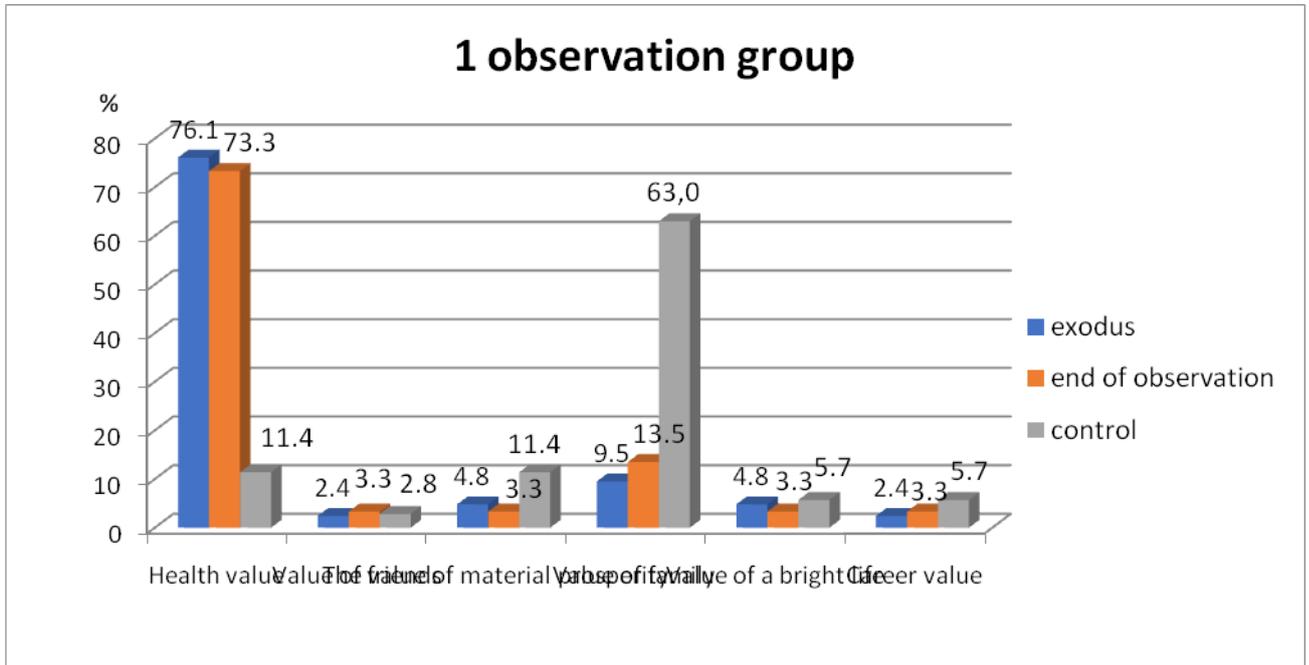
The author's questionnaire [14] was used for level estimation of MPT wearing motivation. It consisted of 10 questions. A patient should choose only one variant of answering them. The relation of a pregnant woman to MPT was estimated at processing and interpreting the results. Evident positive relation was estimated in 3 points; positive relation was estimated in 2 points; neutral answer (I don't know, It happens differently and so on) was estimated in 1 point; the answer which allowed women the negative relation of a child to MPT, was estimated in 0 points. Five levels of MPT wearing motivation were determined on the basis of the received data: the first level – high level of motivation to MPT; the second level – good motivation; the third level – positive relation to MPT; the fourth level – low motivation to MPT; the fifth level – negative relation to MPT. The control group was examined once. Received in our research results were processed by Student's t-criterion.

RESULTS OF INVESTIGATION

Dynamic observation of the pregnant women from both groups of observation showed that only women wearing MPT managed in 100% of cases to maintain pregnancy till the term of 38 weeks and fulfill delivery as it was planned with receiving of alive full-term newborns. This group of pregnant women in the course of the third term of pregnancy was noted to have satisfactory general state and normal womb tone; fetal heartbeats were clearly heard and genital tracts' discharges were absent. In the first group of observation only 30 women (71.4%) reached 38 weeks' term of pregnancy with consequent planned delivery. Pregnancy came to a standstill in two women from this group (4.8%) at the terms of 30 and 32 weeks. The rest women (23.8%) were registered to have preterm delivery with receiving of alive premature newborns in all the cases.

Life priorities in the control group were rather manifold. The attention of women from the given group to their health was rather low. Only 11.4% considered it to be a priority. At the same time, patients from both groups of observation at the beginning and by the end of observation considered health to be a priority

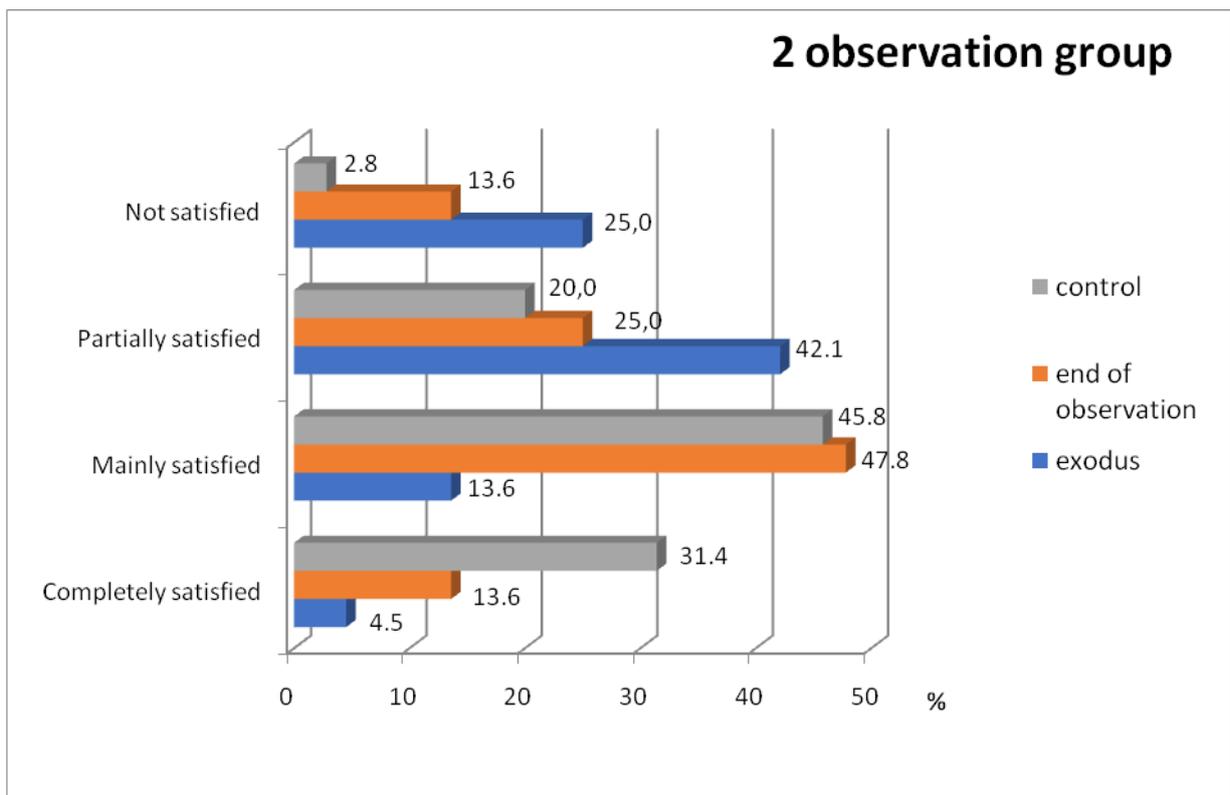
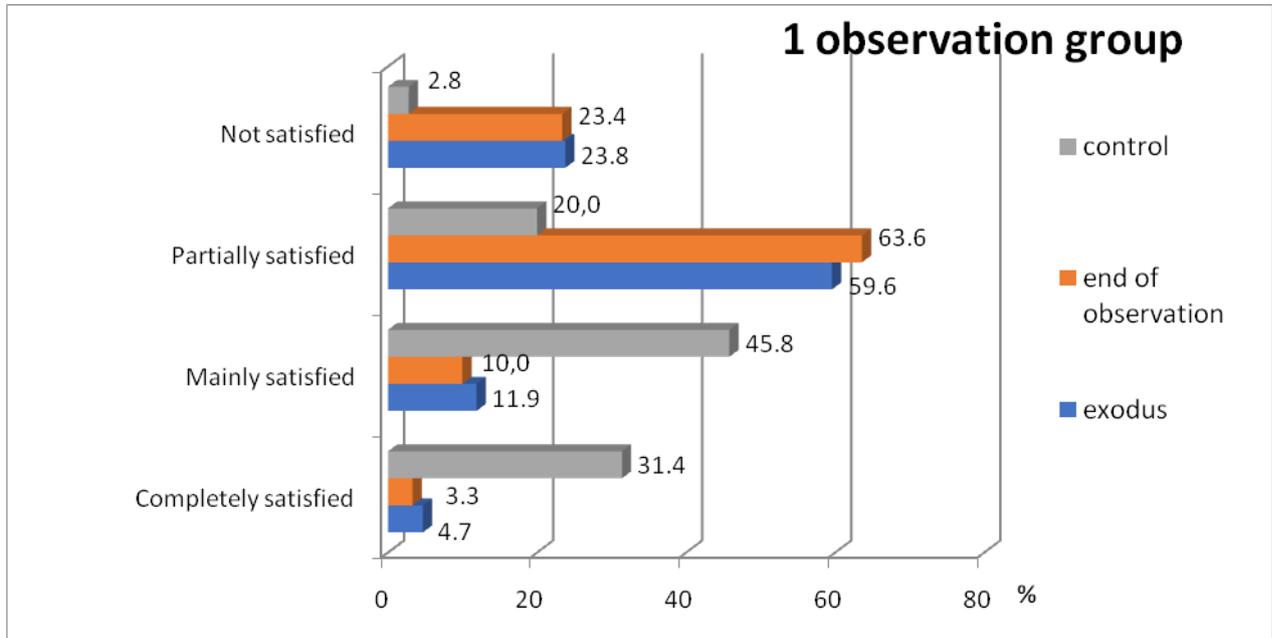
(at the beginning – 79.6% and 84.0%, by the end of observation – 84.0% and 73.3%, respectively). Other life guidelines in these groups significantly yielded to it (Picture 1).



Picture 1: Signification of values in life of women with habitual miscarriage of pregnancy in the course of observation

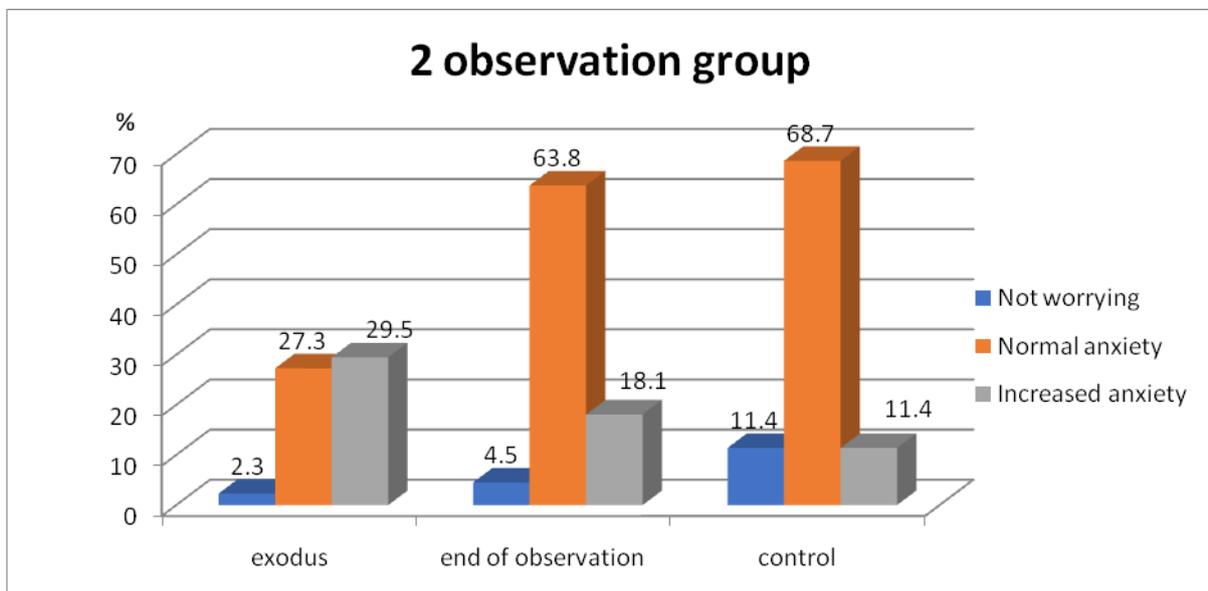
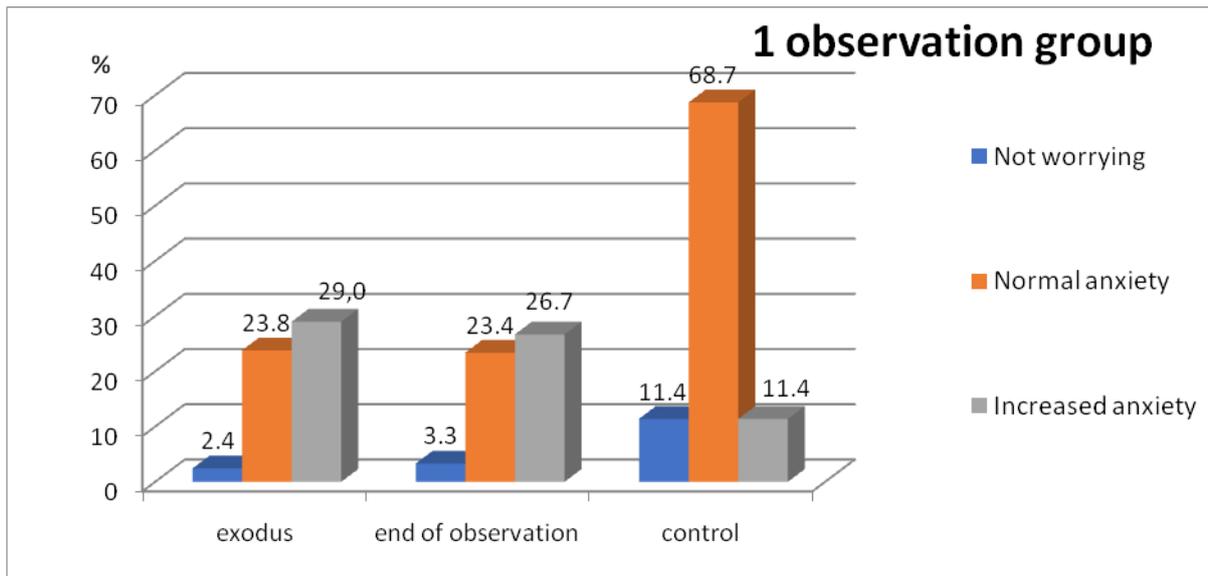
The control group was noted to have high degree of satisfaction with life (full satisfaction or on the whole was summarily equal to 77.2%). In groups of observation satisfaction with life quality was significantly lower at the beginning. When pregnant women with habitual miscarriage of pregnancy were involved into the research most of them noted that they were not satisfied or partially satisfied (summarily – 67.1%). Among

women wearing MPT the quantity of satisfied to a variable degree women with their life decreased to 38.6%, and among those women who wore no MPT the figures remained on the same level (Picture 2).



Picture 2: The degree of satisfaction with life of pregnant women with habitual miscarriage of pregnancy in the course of observation

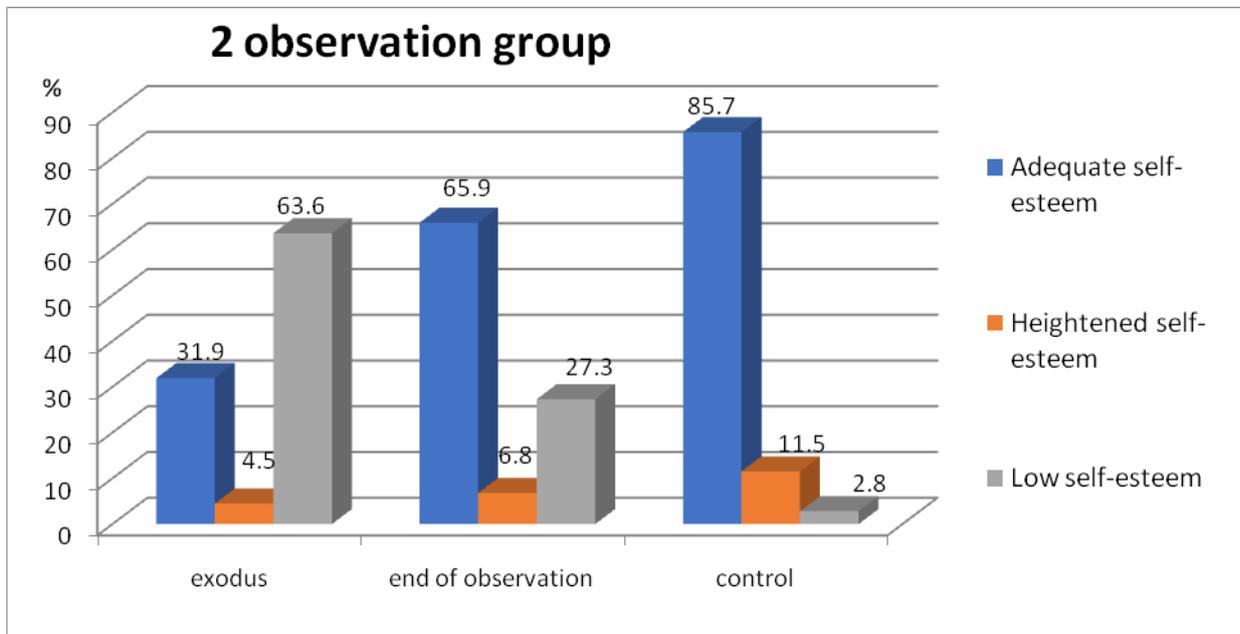
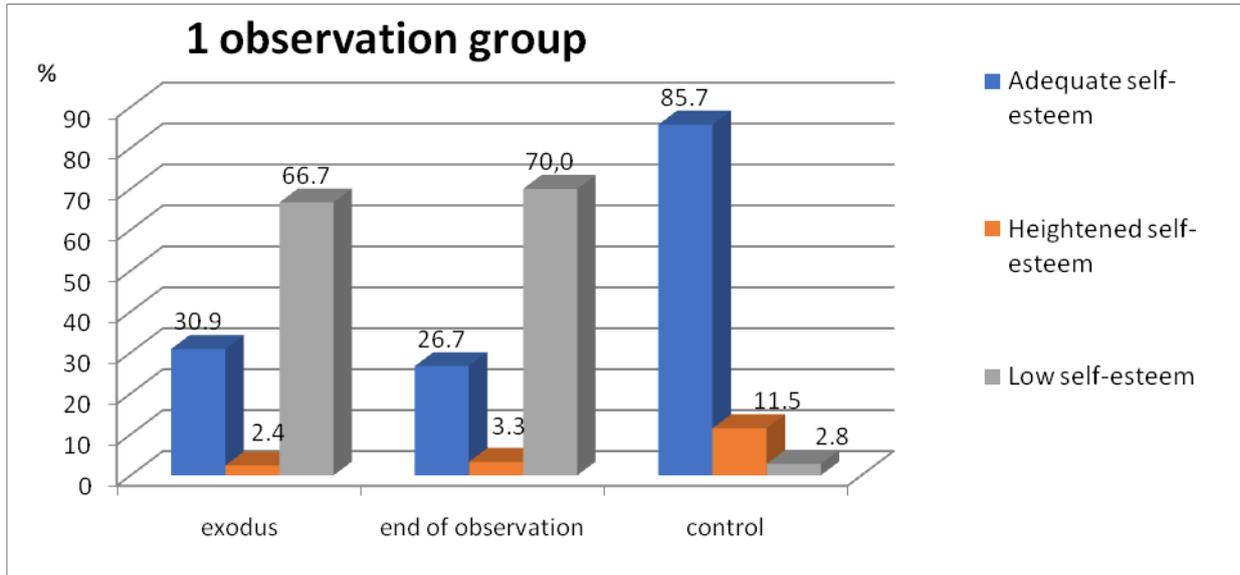
The results of examination of taken under observation women with the help of a test on personal anxiety are presented in Picture 3.



Picture 3: The dynamics of personal anxiety of pregnant women with habitual miscarriage of pregnancy in the course of observation

Initially (at the 28th week of pregnancy) the pregnant women with habitual miscarriage of pregnancy were noted to have great occurrence of increased anxiety (29.5%), high anxiety (34.1%) and very high anxiety (6.8%). In the result of MPT application these indices significantly lowered and by the 38th week of pregnancy were equal to 18.1%, 5.7% and 2.8%, respectively. At the same time, the quantity of patients with normal anxiety and without it among these women nearly reached the control level by the end of observation. In the group of pregnant women who wore no MPT the dynamics of personal anxiety level wasn't noted.

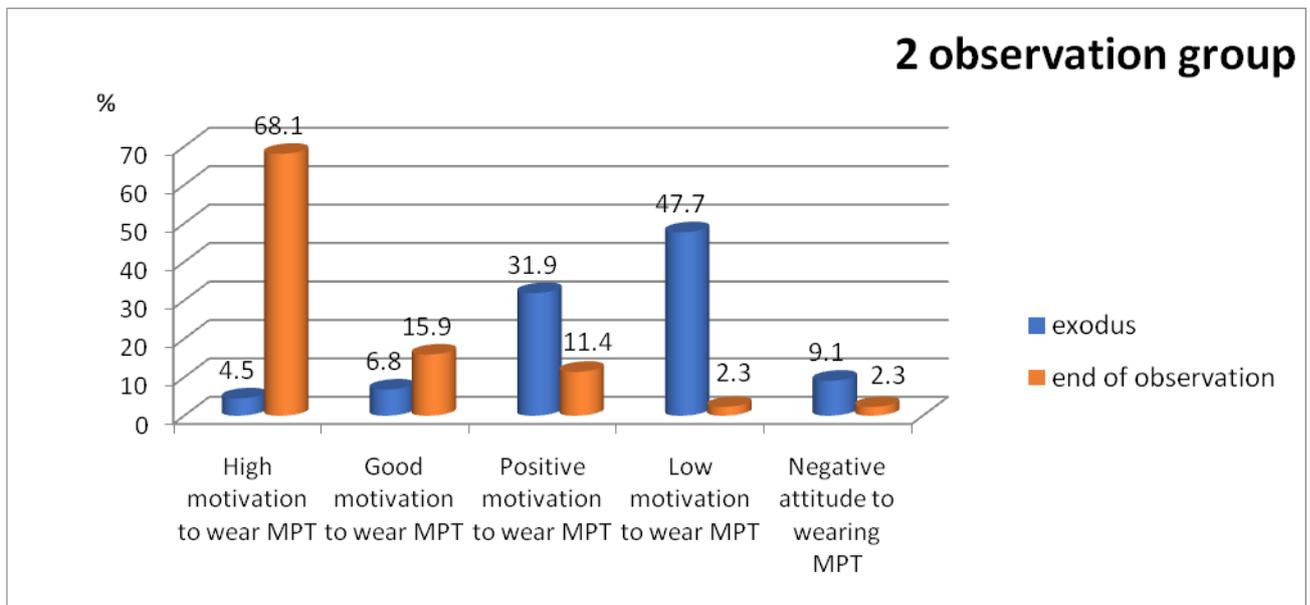
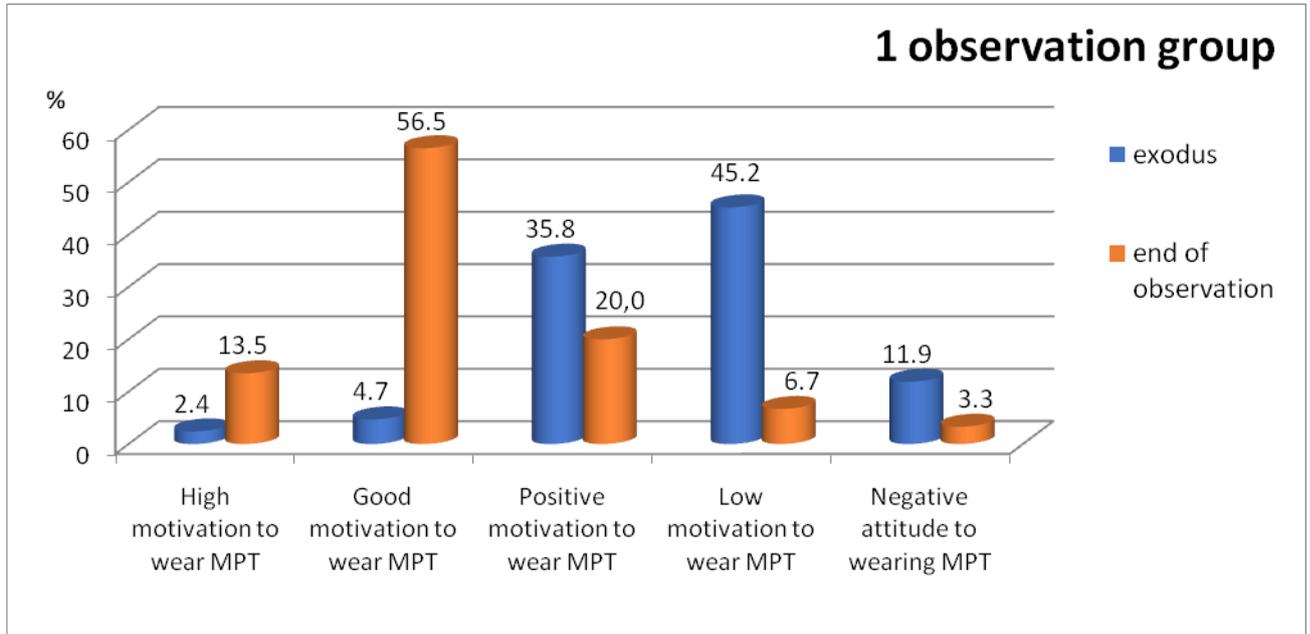
The results received with the help of self-estimation determination techniques "Lesenka" in the observed pregnant women are presented in Picture 4.



Picture 4: The dynamics of self-estimation level in pregnant women with habitual miscarriage of pregnancy in the course of observation

When the patients with habitual miscarriage of pregnancy were involved into the research it was established that over estimation and adequate self-estimation were typical only for 4.5% and 31.9% of them whereas underestimation was noted in 63.6% of patients. Daily MPT wearing was accompanied in the observed women by significant rise of their self-estimation (adequate self-estimation – 65.9%, underestimation – 27.3%, overestimation – 6.8%). In the group of observation where women wore no MPT, the dynamics of the given index was not found.

In the course of observation we estimated motivation of women with habitual miscarriage of pregnancy to MPT wearing (among women who wore MPT) (Picture 5).



Picture 5: The dynamics of motivation level to MPT wearing in pregnant women with habitual miscarriage of pregnancy

At the beginning of MPT application the motivation to its wearing in pregnant women was not high (high – in 4.5%, good – in 6.8%, positive – in 31.9%). By the end of MPT application the pregnant women were noted to have level rise of the given index (high motivation – in 68.1%, good motivation – in 15.9%, positive motivation – in 11.4%).

DISCUSSION

Notwithstanding the efforts of modern medicine it hasn't yet managed to solve the problem of habitual miscarriage of pregnancy. It conditions preservation of high frequency of this pathology occurrence at present. It is mostly connected with the fact that for a long time this pathology was considered to be only in the fields of obstetrics and endocrinology [3]. Last time this state started to be studied from psychological point of view [15]. It was noted that habitual miscarriage of pregnancy was always accompanied by deep

emotional experiences of a woman which aggravated already existing dysfunctions of vegetative nervous system and hormonal background.

Some connection between psychological state and somatic status of a human being was tracked long ago. It actively functions in both directions [16]. That's why bright negative emotional experiences of a woman can lead to disturbances in the gestational process and its abortion. It becomes more and more evident that in the course of pregnancy maintenance it is necessary to take into account the influence of the applied impacts on psychological state [17]. Non-pharmacological means which can potentiate the conducted pharmacological treatment of such women are rather promising in this respect. So, they minimize not only somatic but also psychological disturbances [18,19] and suppress their progression [20].

In the conducted research it's confirmed that habitual miscarriage of pregnancy is accompanied by the rise of anxiety. Besides, presence of the given state lowers a woman's self-estimation which can be disturbed under the impact of often existing in her body light hypoxia of the brain cells. Given situation forms psychological discomfort in these women and uncertainty in themselves leading to psychological deadadaptation. Increased attention of women with habitual miscarriage of pregnancy to their health and low satisfaction with their own life quality look natural against this background. It can explain weak confidence of patients in favorable outcome of treatment and low initial motivation level to MPT wearing in spite of planned explanatory work.

In the conducted research it was noted that regular MPT wearing promoted carriage of pregnancy by women suffering from its habitual miscarriage. Constant preservation of physiologically favorable body posture optimizes blood circulation in organs of small pelvis and abdominal cavity of these women. Given situation leads to the inflow of nutrients' and oxygen necessary quantity to the womb and endocrine glands of the women causing active washing out of toxic products out of them. All this provides these patients with strengthening of anabolic processes in a body what lowers the risk of pregnancy abortion. Appearing alterations in a body form optimal conditions for strengthened macroergs' resynthesis [21,22]. Besides, the synthesis of nucleic acids and proteins in tissues [23,24] is stimulated rising adaptation level of a woman's body to existing conditions of the environment [25,26].

The achievement of positive psychological alterations against the background of MPT wearing is one of the most significant indices of its quality. Their development points at the formation of physiological enough MPT construction for pregnant women with habitual miscarriage of pregnancy. First of all, it can be connected with the achievement of strict accordance of a product's surface in statics and dynamics to the surface of a body and production of necessary rigidity degree of all its components [27,28]. Given circumstance promoted stabilization of emotional background of pregnant women with habitual miscarriage of pregnancy against the background of MPT wearing. Lowering of anxiety and rise of self-estimation promoted the formation of positive inner mood in them and significantly rose adaptation to the environment [29,30]. At the same time, existing in taken into the research women memories about previous pregnancy abortions provided preservation of high attention level to their health [31]. At the same time, the increase of estimation level of their own life quality proved stable improvement of their general state at MPT wearing [32]. Detected motivation rise to MPT wearing in the course of its application [33,34] is one more indubitable evidence of its constructive perfection and comfort in wearing.

It can be considered that MPT wearing by women with habitual miscarriage of pregnancy between the 28th and the 38th weeks of pregnancy promotes the formation of psychological comfort in them. It allows speaking about great availability of MPT wearing involvement into the complex of medicinal events at habitual miscarriage of pregnancy [35]. Increasing in patients high motivation to daily MPT wearing can be considered as the basis for their future mass application.

CONCLUSION

Pregnant women with habitual miscarriage of pregnancy in the third term are characterized by high personal anxiety, presence of low self-estimation and dissatisfaction with life quality. Daily wearing of medicinal prophylactic trousers by them from the 28th up to the 38th week of pregnancy turned out to be able to rise significantly the degree of satisfaction with life quality and the level of self-estimation in the given group of women lowering the level of anxiety. Besides, in the course of application of medicinal prophylactic

trousers the patients with habitual miscarriage of pregnancy were noted to have significant rise of motivation level to its wearing what was an indirect marker of its constructive completeness and high efficiency.

Conflict of interest: No Conflict of interest to declare.

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