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Journal of Surgical Case Reports and Images

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Review Article

Comparison of anxiety, stress and depression during menstruation and cleanliness of girls of Ferdowsi University of Mashhad

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Received Date: July 12, 2024; **Accepted Date:** July 26, 2024; **Published Date:** August 02, 2024

Citation: Jaafar T. Sharif, (2024), Comparison of anxiety, stress and depression during menstruation and cleanliness of girls of Ferdowsi University of Mashhad, *J, Surgical Case Reports and Images*, 7(7); **DOI:10.31579/2690-1897/211**

Abstract

Premenstrual boredom disorder is one of the types of mood disorders. 80 to 30 percent of women experience it mildly and 10 to 2 percent experience it severely. The cause of this disorder is not known, but one of the most common theories about it is the high ratio of estrogen to progesterone. The symptoms of the disorder appear mostly in the form of despair, restlessness, emotional instability, anger and physical complaints (headache, breast tenderness and edema). The present study is a comparison with anxiety, stress and depression during menstruation and purity. For this purpose, a sample of 200 unmarried girls of Ferdowsi University was selected and the subjects answered two questionnaires (1- Menstrual symptoms according to DSM-IV2 - the DASS test, which measures the level of anxiety, stress and depression) answered. With the information obtained, we reached the conclusion that among the 200 people in the sample of this research, 47.5% were in the age group of 19 years and 5 50% of them were non-native and 43% of them were middle children (they were not the first and last children). and 61 people (30.5%) during menstruation.

The amount of stress, anxiety and depression in women who were experiencing menstruation was significantly higher than women who were in clean days.

Keywords: premenstrual syndrome; severity of the syndrome; stress; anxiety; depression

Introduction

Depression, anxiety and stress are as old as human history and there are few people who have not felt them (Madadi and Lavasani, 1377, p. 62). Depression is not limited to a certain time, but it is a reaction to stress and it is a state that can happen to anyone at any time and place. It can be safely said that half of adults have suffered from this condition at some point in their lives, and unfortunately, the majority of this population was not aware of their depression and is not (Porafkari, 2011, p. 35). Anxiety causes physiological changes in the body and makes the body alert and ready for intense physical activity and causes some bodily processes to be stimulated and some others inhibited. Usually, due to anxiety, the cardiovascular system is stimulated. The heart beats faster, the blood pressure stays the same or increases. The liver secretes sugar. Adrenal glands produce epinephrine. The action of the digestive system (stomach and intestines) is inhibited and its secretions and smoky movements are reduced. These physical adaptations to anxiety make the organism ready for activity (Keldeberg, 2012). The type of stress that is common among the people of our country today is lifestyle stress or personality type A. This lifestyle can be seen in the behavior of about 30-40% of people in the society. People who show this lifestyle in their behavior have a low quality of life. In other words, their daily actions are performed only in the form of duty and devoid of pleasure (Hassanzadeh, 2014). In this research, we are trying to compare stress, anxiety and depression during menstruation and the cleanliness of girls of Ferdowsi Menstruation Court.

History

Hippocrates was the first person to propose the association between the menstrual cycle and behavioral changes; In the 4th century BC, he proposed a feeling of headache and heaviness before menstruation, and his premise was that the symptoms are caused by anxious blood, which is looking for a way out (Hemti Gorgani, 2008). In 1931, Frank first defined premenstrual syndrome. He gained credibility by using the term premenstrual action and paying attention to the increase in epileptic activity in the late luteal phase in a group of women with epileptic disorders, who were recovering with the onset of heavy menstrual bleeding (ibid).

In the same year 1931, a psychoanalyst named Karen Hammy stated that this syndrome is the result of sexual desire and power (Clock 1985). However, premenstrual syndrome as a broad diagnostic concept was first introduced in 1953 by Green and Dalton in the form of recurrent

symptoms. During the pre-menstrual phase or the first days of menstruation, it was suggested that these symptoms are completely removed in the post-menstrual phase (Qarakhani, 2013). This syndrome was later described in 1987 under the name of late luteal phase dysphoric disorder (LLPDD) by the American Psychiatric Association and in 1992 with the addition of other symptoms such as being out of control under the name of premenstrual dysphoric disorder (PMDD) in the DSM classification. IV was included. Puberty and menstruation When a girl reaches puberty (usually between the ages of 8 and 13), her body and mind begin to change in many ways. Hormones initiate new physical growth in the body, for example breasts begin to grow. About 2 to 2.5 years after the start of breast development, the first menstrual bleeding occurs in a girl. About 6 months before the start of the first menstrual period, the girl may notice an increase in discharge from her genital tract, which is a common problem among girls, and she should not worry about it unless the discharge is very foul-smelling or itchy. The first menstruation occurs when all parts of the female reproductive system are mature and can work together. Baby girls are born with ovaries, uterus and fallopian tubes (tubes that extend from the uterus to the ovaries on both sides). The ovaries are egg-shaped and are located on both sides of the uterus in the lower abdomen, which is called the pelvis, and contain thousands of eggs. Two ovarian tubes (fallopian), thin tubes and They are long, just like a string of pasta (though slightly thicker) with a hole in it. The uterus is in the shape of an upside-down pear, which is located in the middle of the pelvis. After the fetus is complete, the uterus, with its strong muscles, sends the fetus out, and thus the fetus passes through the vagina (the organ that extends from the cervix to the outside of the body). it is found) comes out of the body and thus the baby is born. Therefore, at the beginning of a girl's menstrual period, every month a small egg - very small that cannot be seen with the eye - is released from the ovary, which is called ovulation. The egg enters the fallopian tubes and travels to the uterus. If during this process the egg is fertilized by a male sperm, an egg is created, and the egg goes to the uterus and implants there, and by sticking to the uterine wall, it begins to grow and grow until it becomes a full-fledged baby at the end of 9 months. to be If the egg does not come into contact with the sperm - a problem that happens in most menstrual cycles - the egg is not fertilized and is expelled from the body. In this case, the uterus, which had prepared itself to receive a fertilized egg and by adding mucus, prepared itself for egg implantation, will return to its original state when the egg is not formed (the egg is not fertilized), and for this purpose, the mucus and tissue The excess of the uterus begins to fall. The shedding of tissue and mucus that is bloody is the same as menstrual bleeding. It should be noted that, as explained, menstrual bleeding does not only include blood, but also extra tissue and bloody mucus that is shed from the uterus. These events happen once a month (Nikkho, 2013).

Premenstrual syndrome

The word syndrome, which is translated as syndrome in some Persian sources and refers to a set of symptoms that may occur in a person, so it is not always considered to mean a specific disorder or disease. Premenstrual syndrome is a set of symptoms that may appear physically or mentally a few days before menstruation. This syndrome is a common disorder among women who are of reproductive age and appears cyclically in the luteal phase of their sexual cycle and disappears with the onset of bleeding (Qarakhani, 1379). And it includes a set of physical, psychological and behavioral changes and symptoms that sometimes destroy the social relationships of women and prevent them from doing daily activities. This disorder is only diagnosed in a woman when firstly the mentioned symptoms are clearly related to the luteal phase of the menstrual cycle, secondly these symptoms subside immediately after the onset of menstrual bleeding, thirdly these symptoms are different from the symptoms and psychological symptoms that probably existed in the past, and lastly, that the symptoms of this disorder cause significant disturbances in the daily functions of the patient (Nikkho, 2013). In the revision of the third edition of the Diagnostic and Statistical Manual of Disorders (DSM-IV), premenstrual syndrome was used to define the nature, intensity, and timing of premenstrual emotional and psychological symptoms that harm a person's activities. Most women suffer from physical, emotional and behavioral symptoms of premenstrual syndrome with different intensity and nature; This syndrome arises from the periodic appearance of one or more symptoms from a large set of symptoms, just before menstruation, to a degree that disrupts the person's way of working or living, followed by a period without any symptoms. symptoms (Andrzej Miewica 2006). Types of menstruation - Dysmenorrhea: Painful menstruation or dysmenorrhea is one of the most common problems of women and it is seen in about 50% of women during menstruation. Types of dysmenorrhea are primary dysmenorrhea and secondary dysmenorrhea (Sarmi, 2014).

Hypotheses of premenstrual syndrome Today's medicine generally proposes 3 basic hypotheses more than other hypotheses for the occurrence of PMS, which include the hypothesis of ovarian hormones, the hypothesis of endogenous morphine or beta-endorphin, and the psychosocial hypothesis. In the hypothesis of ovarian hormones, the occurrence of PMS is considered to be caused by an imbalance in the ratio of estrogen to progesterone and a relative lack of progesterone. This hypothesis was presented by Dalton. He believed that PMS is caused by a lack of estrogen, and as a result, he treated his patients with estrogen suppositories. New studies about estrogen levels in women with PMS have given inconclusive and ambiguous results due to the difficulties in the investigation methods. These difficulties include the lack of fixed diagnostic criteria, the lack of available control groups suitable for the subjects under study to compare them, the lack of daily recording of premenstrual symptoms, and the inconsistent duration and severity of symptoms. In the hypothesis of beta-endorphin (which is one of Dorenzad's morphines), it is stated that during the late follicular phase and early or mid-luteal phase, women with PMS become "addicted" to beta-endorphin within themselves. When beta-endorphin levels drop rapidly in the late luteal phase, the patient experiences signs or symptoms similar to withdrawal from opiates. These symptoms include depression, irritability, increased appetite, etc. The psychosocial hypothesis of PMS was presented by Ravan Kavan. This group of behavioral science experts believe that PMS is a self-conscious manifestation of a woman's problems regarding her femininity and maternal emotions. According to psychoanalysts, the physical changes before menstruation remind the woman that she is not pregnant and therefore has not fulfilled her traditional role of femininity. Although many experts with a psychoanalytic or psychoanalytical attitude agree that it is not possible to prove this hypothesis with scientific methods!! (Hemti Gorgani, 2008).

Diagnostic

Criteria Symptoms of premenstrual syndrome and boredomPre-menstruation varies from person to person and appears in different ways, ranging from mild to moderate and up to disability. Taking into account people's reports of their own unique situation, more than a hundred

symptoms have been identified for this syndrome, that's why this disease is called the disease of a thousand faces.

It should be noted that the symptoms are temporary and related to the menstrual cycle and begin during the last week of the luteal phase and end with the onset of menstrual bleeding. These symptoms are periodic and exist in at least two cycles of menstruation and interfere with work or communication and usual activities of a person, in premenstrual boredom they may even prevent work and activity (Nikkho, 2013).

Major signs and symptoms (PMS) can be seen in the following categories:

A) Physical symptoms and pains

b) Psychological symptoms

Although if these symptoms occur severely and cause disturbances in the person's behavior and life, it is (PMDD), but according to the report of the American Psychiatric Association (DSM-IV-TR), to diagnose (PMDD), there must be at least five of the

following symptoms and include one of the main symptoms (the first four symptoms).

1- Depressed mood

2- Anxiety and tension

3- Extreme mood swings

4- Anger, irritability and intense anger

5- Lack of interest in daily activities

6-Feeling sleepy, tired and lack of concentration

7- Severe changes in appetite

8-Severe changes in sleep

9- Feeling of failure, frustration and being out of control of life

10- Physical symptoms

The severity of these symptoms is measured by degrees of occupational or social impairment, which should be considered severe (Kaplan, 2000).

Prevalence and frequency of premenstrual syndrome and premenstrual dysphoria

The prevalence of PMS has been reported to vary between 20 and 90% in different studies due to the variation in symptoms and severity and differences in measurement methods.

Regarding the prevalence of this disorder in Iran, there is no comprehensive information available, the available reports indicate scattered researches that have mainly examined the prevalence based on (IV-DSM). In one case, 66.5% of high schools in Kerman assessed PMS, and 37.6% reported moderate to severe symptoms.

In another case, among high school girls in Kermanshah, the frequency of PMS was 41.5% and the frequency of symptoms (PMDD) was 9.4%.

In the research reports that were conducted among the students of Tarbiat Moalem University, the frequency (PMS) of 98.2 was reported; And in the studies of Mashhad University of Medical Sciences, 48.1% of students had the criteria of premenstrual syndrome.

Etiology and etiology

Most doctors believe that the hormonal balance of estrogen and progesterone is the most likely cause of this disease. (Crody-weliky TA 2003)

It should be noted that although menstruation is a biological procedure, it should be noted immediately that it is placed in a continuous dialectic with psychological and communication conditions. In the meantime, attention should be paid to the mediating role of a person's biological, emotional and cognitive backgrounds. A person's psychological experience includes a range of symptoms that may have different manifestations depending on environmental and individual conditions (Bahrami, Azarian 2017).

Among the possible causes of PMS, the following factors can be mentioned:

1) Chemical changes in the brain: serotonergic theory and brain serotonin deficiency in premenstrual period

2) Hormonal changes: disturbing the hormonal balance of estrogen and progesterone during this period

3) Psychological causes and metacognitive beliefs

4) Deficiency of vitamins: especially vitamins D, B6, E and calcium

5) Prolactin increase

6) Cut off endogenous endorphins

7) Glucose absorption by cells during premenstrual period

8) The influence of genes in this syndrome (same).

While the main cause of PMS has not been determined, it can be said that the main reason is the disruption of the body's hormonal interaction. Estrogen increase and progesterone decrease, fluid accumulation in the body, blood prolactin increase, vitamin B6 deficiency, blood sugar deficiency and decrease or increase of a substance called prostagmins, sensitivity to male hormones, psychological problems, thyroid gland disorder and decrease in messengers. Nervous disorders can be one of the causes of PMS. Of course, the inheritance factor is also involved in the severity and weakness of this syndrome and is effective. (ibid.) Treatment and solutions to reduce premenstrual syndrome

Since the main cause of premenstrual syndrome is not known, there is no single treatment for this disorder. Therefore, efforts have been made in the direction of drug and non-drug treatment, some of which have been successful. The treatment is usually based on identifying the symptom that bothers the person the most, and the choice of treatment is also a symptom. In general, the treatments effective in reducing premenstrual syndrome can be included in two groups of drug and non-drug treatments.
- Pharmaceutical interventions: taking vitamin B6, taking calcium, taking vitamin E, taking fluoxetine and diuretics (spronolactone), mefenamic acid, gamma, linoleic acid

acid, GnRH agonists, contraceptive pills, danazol, alprazolam, nutritional supplements and vitamins, herbal medicines, danazol and placebos
- Non-pharmacological interventions:

Proper nutrition and diet, paying attention to the medication regimen during the menstrual period can be effective in reducing the incidence of PMS symptoms. During menstruation, it is better to reduce the size of each meal and on the contrary, increase the number of meals. This issue is very effective in reducing digestive discomfort and bloating caused by

menstruation. Paying attention to the consumption of fruits and vegetables is also effective in reducing symptoms.

The increase in the consumption of carbohydrates in food causes an increase in the ratio of tryptophan amino acid to neutral amino acids in blood circulation and as one of the precursors of serotonin.

It is necessary to increase its level and as a result improve the mood in people. (Ahmadi Zare, 1385).

Herbal treatment and reduction of PMS symptoms

To reduce the amount of symptoms caused by premenstrual syndrome, they have introduced plants that can be somewhat useful for the aforementioned purpose due to the absence of chemicals in them. There is a plant called Vitex Agnus Castus, which in Farsi is called five fingers plant, and this plant is even known as women's plant due to its significant effects in regulating female hormones. It has been proven that this plant can affect the glands due to its special compounds and control the secretion of hormones through the secretion of hormones by these glands and as a result eliminate female disorders and also due to the presence of substances similar to The hormone present in this plant provides and regulates the hormone needed by people with hormonal disorders

Stress

Stress is the physical, mental and emotional reactions that are experienced as a result of the changes and needs of a person's life. Changes can be big or small. People's responses to life changes are different. Positive stress can be a motivator while negative stress can be created when these changes and needs defeat a person (Kahana, Girija, 2012).

Anxiety

A very unpleasant and often vague feeling of anxiety that is accompanied by one or more physical sensations such as a feeling of emptying of the heart or shortness of breath and chest, heart palpitations, sweating, etc. (definition from the website of the American Psychological Association).

Depression

Depression is a continuous and stable mood change that can include different aspects of a person's life. Depression is characterized by feelings of guilt, feelings of worthlessness, feelings of loneliness, hopelessness, sadness, frequent doubts about one's own sufficiency and ability, etc. Depression is the most common mental disorder (McNazi, 2013). Is there premenstrual depression?

This is so controversial that the DSM-IV committee included "premenstrual dysphoric disorder" in its appendix because, in the committee's opinion, this disorder still needs further study. The characteristics of this disorder are:

In most periods of the last year, emotional changes occur before menstruation, which decrease with the onset of menstruation. and at least five symptoms, including emotional instability, anger, tension, depression, low interest, fatigue, feeling of weakness, difficulty swallowing, changes in appetite, high sensitivity to rejection, changes in sleep, physical symptoms, serious impairment at work with social function due to signs.

In total, at least 40% of adult women suffer from some of these premenstrual symptoms, most of these women evaluate the above symptoms as mild and are not harmed by them, but about 2 to 10% evaluate them as severe. This group may suffer significantly from them. In this collection, depression is a prominent symptom. In a study conducted on 335 women, it was found that 145 of them had the criteria for increased symptoms of premenstrual depression (Halbridge, Endcott, Oney, 1983).

Research method

The data was analyzed with Spss-16 software and using descriptive statistics methods.

Statistical society, sample and sampling method

The target population of this research is unmarried girls of Ferdowsi University of Mashhad, whose age is between 18 and 23. The sample size of this research was 200 people, and the samples were randomly selected from 3 different faculties (educational sciences, literature, theology).

Measuring tool

In this research, we used two types of questionnaires:

1- PMS symptom questionnaire according to DSM-IV-TR

2- DASS questionnaire

Statistical analysis method

The subjects had to choose one of the answers that were presented in four levels (not at all-a little-a lot-a lot). In this test, as in the previous test, there are no wrong questions, and the person must mark one of the states according to his position for each question. The most common cases of occurrence of position symptoms are marked by too many position symptoms and not having any position symptoms at all.

Score mode row

1 not at all 0

2 low 1

3 a lot 2

4 too much 3

In the scoring stage, each of the questions of anxiety, stress and depression indicators were scored separately, for example, a person scored 5 on the anxiety scale, 5 on the stress scale, and 6 on the depression scale. The data in Finally, it was analyzed through descriptive statistics tests.

Conclusion

In general, with the results of the present study, we can emphasize the high prevalence of premenstrual syndrome in students, according to many other domestic and foreign studies, and the need to pay attention to such a problem, which consumes about a quarter of the useful time of one of the most important sections of the society. The dynamics of their ages is involved. Another important point is the lack of a national measurement tool that can evaluate equivalent concepts of the definition of this disorder at the country level and it should be prepared with the consensus of experts and mostly a national plan to avoid many contradictory results that can cause disruption in any Planning in the country should be prevented.

According to the investigations carried out in this study, the information of which was obtained through two questionnaires (the first questionnaire, the PMS symptoms questionnaire according to DSM-IV-TR and the

second questionnaire, the DASS questionnaire, which measures the levels of stress, anxiety and depression) According to research hypotheses including:

• The amount of stress, anxiety and depression during menstruation is significantly higher than during normal days.

We got these results that;

Among the 200 people sampled in this research, 47.5% were 19 years old and 50.5% of them were non-native, and 43 in

100 of them were the middle children of the family (they were not the first and last children). It should be mentioned that among the 200 people in the sample, 139 people (69.5%) are in the clean period and 61 people (30.5%) are in the menstrual period.

The amount of stress in menstruating women was significantly higher than that of women who were clean.

The level of anxiety in women who were experiencing menstruation was significantly higher than women who were in clean days.

The level of depression in menstruating women was significantly higher than in women who were clean.

The higher the level of boredom before menstruation, the higher the level of stress, anxiety and depression. By comparing the level of anxiety, stress and depression with menstruation and purity in Ferdowsi University girls, the result is that the average level of boredom during menstruation is 13 18.18 and during purity 13.99, the average amount of stress during menstruation is 11.70 and during purity 6.56. The average depression during menstruation is 11.21 and during purity is 4.94. The average anxiety during menstruation is 11.39 and during menstruation is 4.02, which indicates that the level of stress, anxiety and depression is higher during menstruation and before.

Through a comparison between the research obtained with other studies conducted in this field, it was determined that there is a correlation between premenstrual boredom and factors affecting the individual and social life processes, including stress, anxiety and depression, nutrition, sexual desire. , counseling, drugs, sports programs, psychological beliefs, there is a significant relationship that can affect the symptoms of the syndrome in a positive or negative way.

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DOI:10.31579/2690-1897/211