Section: Preliminary studies in PPT

STUDY ON THE WAYS OF ACCEPTING AND COPING WITH THE ENDOMETRIOSIS DIAGNOSIS

Elena Drazheva

Psychologist, M.Sc. in Clinical social work - specialization Mental health
Certified positive psychotherapist (Sofia, Bulgaria)
Email: drajevae@gmail.com

Stiliyana Stamova

Psychologist, M.Sc. in Business psychology,
Basic Consultant on PPT (Sofia, Bulgaria)
Email: stamovast@gmail.com

Received 06.11.2023
Accepted for publication 30.12.2023
Published 20.01.2024
DOI: 10.52982/lkj214

Abstract

The present article discusses the topic of chronic ailments and the need for psychological support related to them. We are presenting information on the first-ever study held in Bulgaria of women suffering from Endometriosis, accepting the diagnosis and ways of coping with the macro-traumatic event of receiving the diagnosis. The study illustrates our effort to establish whether there is a difference in the ways women cope with such a hard diagnosis as Endometriosis among patients utilizing psychological support and patients who refrain from it. We also describe the results from the preliminary study aiming to establish to what extent psychological work affects the ways of coping with the Endometriosis diagnosis. .

Keywords: positive psychotherapy, endometriosis, woman, support, diagnosis

Introduction

"People are unique and what we need to do is to take care of the person, not their illness" Hippocrates

Nowadays a plethora of people live with a chronic ailment. One such condition has touched us as well. Endometriosis is considered a socially significant illness worldwide, as it affects 1 in 10 women while information on the topic is utterly insufficient. Due to the illness' symptoms, related to unexpected and inexplicable pains during menstruation (and not only), weariness despite having rested well, intestinal swelling and discomfort, sudden feelings of alarm, depression, etc., women suffering from Endometriosis experience difficulties in maintaining relationships with their families, intimate partners, friends and even professionally. "As per the stressors scale proving there are events with higher stressogenic intensity and events experienced as weakly bothersome, the disease is placed at one of the top positions in the scale of stressful events as per the Holmes and Rahe study 1967; Rahe, 1969, carried out in several countries such as the USA, Sweden, the Netherlands, and Japan, with results mirroring each other in various countries and cultures".

This stressful event affected our lives as well and turned them upside down from the very beginning, as we were not spared the feelings of helplessness, fear and not finding a point to life. However, our professional knowledge and

Section: Preliminary studies in PPT

STUDY ON THE WAYS OF ACCEPTING AND COPING WITH THE ENDOMETRIOSIS DIAGNOSIS

Elena Drazheva

Psychologist, M.Sc. in Clinical social work - specialization Mental health
Certified positive psychotherapist (Sofia, Bulgaria)
Email: drajevae@gmail.com

Stiliyana Stamova

Psychologist, M.Sc. in Business psychology,
Basic Consultant on PPT (Sofia, Bulgaria)
Email: stamovast@gmail.com

Received 06.11.2023
Accepted for publication 30.12.2023
Published 20.01.2024
DOI: 10.52982/lkj214

Abstract

The present article discusses the topic of chronic ailments and the need for psychological support related to them. We are presenting information on the first-ever study held in Bulgaria of women suffering from Endometriosis, accepting the diagnosis and ways of coping with the macro-traumatic event of receiving the diagnosis. The study illustrates our effort to establish whether there is a difference in the ways women cope with such a hard diagnosis as Endometriosis among patients utilizing psychological support and patients who refrain from it. We also describe the results from the preliminary study aiming to establish to what extent psychological work affects the ways of coping with the Endometriosis diagnosis. .

Keywords: positive psychotherapy, endometriosis, woman, support, diagnosis

Introduction

"People are unique and what we need to do is to take care of the person, not their illness" Hippocrates

Nowadays a plethora of people live with a chronic ailment. One such condition has touched us as well. Endometriosis is considered a socially significant illness worldwide, as it affects 1 in 10 women while information on the topic is utterly insufficient. Due to the illness' symptoms, related to unexpected and inexplicable pains during menstruation (and not only), weariness despite having rested well, intestinal swelling and discomfort, sudden feelings of alarm, depression, etc., women suffering from Endometriosis experience difficulties in maintaining relationships with their families, intimate partners, friends and even professionally. "As per the stressors scale proving there are events with higher stressogenic intensity and events experienced as weakly bothersome, the disease is placed at one of the top positions in the scale of stressful events as per the Holmes and Rahe study 1967; Rahe, 1969, carried out in several countries such as the USA, Sweden, the Netherlands, and Japan, with results mirroring each other in various countries and cultures".

This stressful event affected our lives as well and turned them upside down from the very beginning, as we were not spared the feelings of helplessness, fear and not finding a point to life. However, our professional knowledge and

experience in a psychotherapeutic aspect saved us from the spiraling plummeting that, sadly, a lot of women experiences. Knowing from personal experience how difficult to diagnose that condition is and how it can rob patients of their lives, we created a support group on social media that currently exceeds 4800 members. Managing the group, we succeeded at creating a space where women suffering from Endometriosis can talk about any and all problems rooted in their condition – their physical, psychological, emotional, and social functioning.

That is why we aimed at working to increase awareness of this condition and the consequences it brings on a psychological level. We have been working with doctors who realize the need for a multidisciplinary approach to treatment and participate in the present study by directing patients to us and supporting and interpreting the patients' symptoms.

1.1. Grounds of the study

Endometriosis was first described by Daniel Shroen in 1690 г. in his paper "Disputatio Inauguralis Medica de Ulceribus Ulceri". The condition's symptoms were presented by Arthur Duff in 1769, and the first publications with regard to the pathogenesis of the condition appeared in the second half of the 19th century. The condition was described by Karl von Rokitansky in 1860 and he defined it as the existence of an active endometrium outside the uterus cavity.

Endometriosis is a condition where parts of the uterus lining cells expand outside the uterus, causing inflammation that leads to numerous intergrowths in the female body. As a result of regular female menstruation, these lesions swell and bleed internally at the intergrowth locations. Such lesions (hot spots) can be identified as located not only in the pelvic area but also in the gastrointestinal tract, the bladder, the lungs, and even the patient's brain. Endometriosis is a common condition but due to the wide array of symptoms, diagnosing it could potentially happen 8-12 years after its first occurrence. About 2-10% of women experience this condition while in their reproductive stage, 35-50% of them also suffer from fertility issues and pain.

Endometriosis is not a cancer but behaves like one. It is a chronic, hormonally dependent condition found in women of reproductive age, and it is not dependent on race or social status in any way.

People refer to Endometriosis as the "quiet" and "multifaced" condition and very often it has strongly expressed general symptoms, but it is not a rare occurrence that a patient does not exhibit clear symptoms at all. Some of the most frequent symptoms of Endometriosis are:

- Acute pain which is not affected by taking standard painkiller medication
- Pain that lasts for the duration of the whole menstrual cycle
- Pain that starts before the menstrual cycle begins and lasts after it ends
- A very long or very heavy menstrual cycle, sometimes both, lasting longer than 10 days
- Pain during urination or defecation, manifested strongly during the menstrual cycle
- Major swelling in the abdominal area and intestinal pain for the whole duration of the menstrual cycle and not only.
- Weariness which is not affected by hours of sleep
- Higher temperature during a menstrual cycle or stable sub febrility regardless of what day of the month it is
- Miscellaneous

Although pain can be managed by pharmaceutical inhibition of ovulation and menstruation, it is very often that lesions cannot be removed. A surgery most frequently leads to pain subsiding but its effect is usually temporary.

The arguments and dilemmas with regard to this mysterious ailment, its diagnosis and appearance, clinical description, and treatment continue worldwide. Eskenazi's research and his theory that Endometriosis can be found in 10% of the general female population stimulated a number of authors to aim at making the epidemiology of the condition clearer. However, using various data sources and relating them to a number of definitions has led to the fact that despite the large number of publications made on the matter, the argument on how impactful Endometriosis is remains unresolved to date.

Endometriosis is a common chronic gynecological pathology with a huge negative impact on female health. Besides heavy physical symptoms, Endometriosis is linked to a few

accompanying psychiatric conditions, including depression and anxiety.

The Endometriosis stage is not directly related to the severity of the symptoms and repeat symptoms are common. It is believed that the symptoms are related to psychological distress the same way they are in cases of depression and anxiety conditions.

As a result of our practice in psychotherapeutic groups for women suffering from Endometriosis, it is our observation that accepting the diagnosis and living with Endometriosis is largely dependent on whether doctors and family members (significant others) can identify and validate a woman's pain and suffering.

Providing psychotherapeutic help to a patient suffering from Endometriosis is crucial for developing strategies aiming at decreasing the psychological stress and as a result, improving the patient's quality of life. It is a good and promising beginning for women suffering from Endometriosis to accept the diagnosis and improve their own everyday functioning. It has been our observation that women who have sought psychotherapeutic intervention find it easier to accept the condition and identify ways of coping with it in comparison to women who have not.

Methodology

Our study aims to establish whether there are significant differences to be found in the ways women cope with being diagnosed with Endometriosis when they utilize psychotherapeutic help and when they do not. It is our hypothesis that women who receive psychotherapeutic help will exhibit a prevalence of positive ways of coping with the diagnosis whereas women who do not will largely present the negative ones.

The study was carried out in collaboration between gynecological doctors and positive psychotherapists between January 2019 and October 2022. The gynecologists were tasked with finding 44 women suffering from Endometriosis who would like to participate in our research and be supported by psychotherapeutic help in the first six months after being diagnosed, as well as 44 women who would like to participate but are not interested in receiving psychotherapeutic support.

The positive psychotherapists' team provided 44 women with psychotherapeutic help once a week during the first six months after being diagnosed.

Positive and transcultural psychotherapy allows us to build a fuller picture of the patient's ailment, respectively a better doctor-patient connection, "besides, it encompasses any and all ailments of the body and the psyche and can serve as both help in finding our way, as well as a diagnostic tool and a therapeutic approach to all narrower medical fields".

The Positive psychotherapy model "engages with the ailment as well when a primary body reaction to a conflict experience is present, on the grounds of which an organ-pathology finding occurs later on", and that makes it particularly appropriate to use when working with women diagnosed with endometriosis.

2.1. Subjects of the study

88 women of Bulgarian ethnic origin diagnosed with Endometriosis participated in our study. The diagnosed women are of an average age of 31.99 years old (minimal age - 19 and maximum age - 42). Demographic data shows that 47% of them are of higher education, 53% of them have high-school level education, 54% of them are married, 19% of them are divorced and 27% of them are single.

With regard to religious affiliation – 100% of them are Orthodox Christians.

With regard to the condition and the medical data related to it, 100% have gone through laparoscopic surgery for endometriotic cyst removal. All patients have had lesions removed and endometriotic hot spots burnt, and they also went through a histological test proving the presence of Endometriosis.

The research was held in the territory of the cities of Sofia and Varna in Bulgaria.

2.2. Research Instrument

For the purpose of the present study, the subjects participating in it filled in the Brief COPE (Carver, 1997) Questionnaire for measuring the positive and negative ways of coping with situations six months after being diagnosed. The questionnaire consists of 28 questions, divided into 14 scales, each of which includes two questions – positive and negative ways of handling a situation, whereby each of the groups holds 7 scales.

The positive scales are:

Active coping (questions 2 and 7)
Utilizing emotional support (questions 5 and 15)
Positive reformulating (questions 12 and 17)
Planning (questions 14 and 25)
Humor (questions 18 and 28)
Acceptance (questions 20 and 24)
Being religious (questions 22 and 27)

The negative scales are:

Distraction (questions 1 and 19)
Denial (questions 3 and 8)
Substance use (questions 4 and 11)
Instrumental support use (questions 10 and 23)
Behavioral denial (questions 6 and 16)
Expression (questions 9 and 21)
Blaming yourself (questions 13 and 26)

1. I find something to keep me busy or get involved in doing things that keep my attention away from the condition.
2. I direct my efforts to do something to improve my situation.
3. I tell myself "That it cannot be real!"
4. I take alcohol or sedatives to feel better.
5. I receive emotional support.
6. I give up when I try to cope with it.
7. I take certain measures to improve my situation.
8. I refuse to believe this is happening.
9. I say things to chase my negative feelings away.
10. I receive help from people giving me advice.
11. I use alcohol or sedatives to help myself get over it.
12. I am trying to accept it from a different perspective so that it seems a little more positive to me.
13. I blame myself.
14. I am trying to come up with a strategy for what to do.
15. I feel accepted and understood by someone.
16. I have given up on making efforts to cope.
17. I am trying to look at what is happening to me from a positive perspective.
18. I am joking with what has been happening to me.
19. I come up with things to do, for example going to the cinema, watching TV, dreaming, sleeping, or shopping, so that I think about it less.
20. I accept reality and the fact this is happening to me.
21. I express my negative feelings.
22. I try to find solace in my religious beliefs and/or my spiritual convictions.
23. I try to accept the advice and help offered to me by people on what to do.
24. I am learning to live with it.
25. I consider my next steps very carefully.
26. I blame myself for what has been happening to me.
27. I pray and/or meditate.
28. I look at the situation from a fun perspective.

According to the scale's author, it is possible to use separate parts of it independently and selectively, accounting for time constraints in its filling-in or as per the goal of the specific research and need of the testing sample.

The subjects studied filled in the questionnaire anonymously and answered using a 4-level scale in the Likert format from 1 – "I never do that" to 4 – "I do that very often", with no option for neutral opinion.

The result from each of the 14 scales for handling situations represents an average from both answers given and varies between 1 (minimum) and 4 (maximum). The higher values in the 7 positive scales correspond with a higher level of coping with the situation and the highest values in the 7 negative scales correspond with a lower level of coping with the condition.

The Brief COPE questionnaire's reliability is Cronbach's alpha 0,706 on the whole method. As a result:

- with positive ways of coping with the condition (α=0,779);
- with negative ways of coping with the condition (α=0,777)

2.3. Statistical methods

- Cronbach's Alpha – for measuring the reliability of the internal scales agreement;
- Mann Whitney's U Criterion – for measuring the reliability of the differences in the results received in groups
- Kruskal-Wallis Test (H-criterion) – for comparing and evaluating the statistical importance when more than two findings of a given criterion exist;
- The results were processed with SPSS v. 20.0 for Windows.

Results

Tracing the trajectories of the attitude development in the subjects studied – 88 women diagnosed with endometriosis, 44 in an experimental group and 44 in a control group – has revealed the statistical significance of the results in 5 of the positive ways of coping scales (table 1) and 4 of the negative ways of coping scales (table 2).

Table 1.
Positive coping scales data distribution

	v2	v7	v15	v5	v12	v17	v20	v24	v27
Mann-Whitney U	634,5	735,5	500,5	500,5	547,5	547,5	419,5	419,5	638,5
Wilcoxon W	1624,5	1725,5	1490,5	1490,5	1537,5	1537,5	1409,5	1409,5	1628,5
Z	2,97	2,063	4,112	4,112	3,694	3,694	4,794	4,794	2,904
Asymp. Sig. (2-tailed)	,003	,012	,000	,000	,001	,001	,000	,000	,004

Table 2.
Negative coping scales data distribution

	v4	v11	v1	v19	v3	v8	v6	v16
Mann-Whitney U	620,0	620,0	663,0	663,0	681,0	681,0	686,0	686,0
Wilcoxon W	1610,0	1610,0	1653,0	1653,0	1671,0	1671,0	1676,0	1676,0
Z	3,013	3,013	2,520	2,520	2,480	3,013	3,013	4,796
Asymp. Sig. (2-tailed)	,003	,003	,012	,012	,013	,003	,003	,000

In the **Active coping scale,** juxta positioning the answers to **question 2** *"I direct my efforts to do something to improve my situation."* - shows that 84% of the women in the experimental group and 34% of the women in the control group (u=2,97; a=0,003) are inclined to be active not just mentally, but physically as well. There is nothing that stands out in the answers of the women in the control group with regard to a specific activity as per **question 7** *"I take certain measures to improve my situation"*. Only 20,4% of them have their intentions turned into actions, unlike the experimental group where 93,2% of the women switch from intentions to active behavior in reality (u=2,06; a=0,012).

A specificity in the **Utilizing emotional support scale** that we were able to identify is how important the feeling of being accepted and the diagnosis being tolerated is on behalf of the others. 79,5% of the women in the experimental group and almost half of the women in the control one (40,9%) have the feeling they are receiving **emotional** support – **question 5**, *"I receive emotional support"* (u=4,11; a=0,000). There is a significant difference in the results for **question 15** *"I feel accepted and understood by someone"* (u=4,11; a=0,000). 81,8% of the women in the experimental group have a real sense of their own self-worth despite the diagnosis and that is a fact for only 18.2% of the women in the control one.

Judging from the **Positive reformulating scale – question 12:** *"I am trying to accept it from a different perspective so that it seems a little more positive to me"* (u=3,69; a=0,001) and **question 17:** *"I am trying to look at what is happening to me from a positive perspective"* (u=3,69; a=0,001), it is obvious that the women from the experimental group (81.8%) distribute their attitude towards the diagnosis equally in the scope of "I want it to be true and I am managing to achieve it". Almost half of the women in the control group, with a minor difference with regard to the positive aspects of their condition, i.e., question 12 - 43,2% and question 17 – 40,9%, are inclined to not see, feel, or look for a positive reformulating of their diagnosis.

The studied groups' profile in the **Acceptance scale** shows statistically significant differences with regard to the diagnosis. When answering **question 20** *"I accept reality and the fact that this is happening to me"* (u=4,79; a=0,000),

experience in a psychotherapeutic aspect saved us from the spiraling plummeting that, sadly, a lot of women experiences. Knowing from personal experience how difficult to diagnose that condition is and how it can rob patients of their lives, we created a support group on social media that currently exceeds 4800 members. Managing the group, we succeeded at creating a space where women suffering from Endometriosis can talk about any and all problems rooted in their condition – their physical, psychological, emotional, and social functioning.

That is why we aimed at working to increase awareness of this condition and the consequences it brings on a psychological level. We have been working with doctors who realize the need for a multidisciplinary approach to treatment and participate in the present study by directing patients to us and supporting and interpreting the patients' symptoms.

1.1. Grounds of the study

Endometriosis was first described by Daniel Shroen in 1690 г. in his paper "Disputatio Inauguralis Medica de Ulceribus Ulceri". The condition's symptoms were presented by Arthur Duff in 1769, and the first publications with regard to the pathogenesis of the condition appeared in the second half of the 19th century. The condition was described by Karl von Rokitansky in 1860 and he defined it as the existence of an active endometrium outside the uterus cavity.

Endometriosis is a condition where parts of the uterus lining cells expand outside the uterus, causing inflammation that leads to numerous intergrowths in the female body. As a result of regular female menstruation, these lesions swell and bleed internally at the intergrowth locations. Such lesions (hot spots) can be identified as located not only in the pelvic area but also in the gastrointestinal tract, the bladder, the lungs, and even the patient's brain. Endometriosis is a common condition but due to the wide array of symptoms, diagnosing it could potentially happen 8-12 years after its first occurrence. About 2-10% of women experience this condition while in their reproductive stage, 35-50% of them also suffer from fertility issues and pain.

Endometriosis is not a cancer but behaves like one. It is a chronic, hormonally dependent condition found in women of reproductive age, and it is not dependent on race or social status in any way.

People refer to Endometriosis as the "quiet" and "multifaced" condition and very often it has strongly expressed general symptoms, but it is not a rare occurrence that a patient does not exhibit clear symptoms at all. Some of the most frequent symptoms of Endometriosis are:

- Acute pain which is not affected by taking standard painkiller medication
- Pain that lasts for the duration of the whole menstrual cycle
- Pain that starts before the menstrual cycle begins and lasts after it ends
- A very long or very heavy menstrual cycle, sometimes both, lasting longer than 10 days
- Pain during urination or defecation, manifested strongly during the menstrual cycle
- Major swelling in the abdominal area and intestinal pain for the whole duration of the menstrual cycle and not only.
- Weariness which is not affected by hours of sleep
- Higher temperature during a menstrual cycle or stable sub febrility regardless of what day of the month it is
- Miscellaneous

Although pain can be managed by pharmaceutical inhibition of ovulation and menstruation, it is very often that lesions cannot be removed. A surgery most frequently leads to pain subsiding but its effect is usually temporary.

The arguments and dilemmas with regard to this mysterious ailment, its diagnosis and appearance, clinical description, and treatment continue worldwide. Eskenazi's research and his theory that Endometriosis can be found in 10% of the general female population stimulated a number of authors to aim at making the epidemiology of the condition clearer. However, using various data sources and relating them to a number of definitions has led to the fact that despite the large number of publications made on the matter, the argument on how impactful Endometriosis is remains unresolved to date.

Endometriosis is a common chronic gynecological pathology with a huge negative impact on female health. Besides heavy physical symptoms, Endometriosis is linked to a few

accompanying psychiatric conditions, including depression and anxiety.

The Endometriosis stage is not directly related to the severity of the symptoms and repeat symptoms are common. It is believed that the symptoms are related to psychological distress the same way they are in cases of depression and anxiety conditions.

As a result of our practice in psychotherapeutic groups for women suffering from Endometriosis, it is our observation that accepting the diagnosis and living with Endometriosis is largely dependent on whether doctors and family members (significant others) can identify and validate a woman's pain and suffering.

Providing psychotherapeutic help to a patient suffering from Endometriosis is crucial for developing strategies aiming at decreasing the psychological stress and as a result, improving the patient's quality of life. It is a good and promising beginning for women suffering from Endometriosis to accept the diagnosis and improve their own everyday functioning. It has been our observation that women who have sought psychotherapeutic intervention find it easier to accept the condition and identify ways of coping with it in comparison to women who have not.

Methodology

Our study aims to establish whether there are significant differences to be found in the ways women cope with being diagnosed with Endometriosis when they utilize psychotherapeutic help and when they do not. It is our hypothesis that women who receive psychotherapeutic help will exhibit a prevalence of positive ways of coping with the diagnosis whereas women who do not will largely present the negative ones.

The study was carried out in collaboration between gynecological doctors and positive psychotherapists between January 2019 and October 2022. The gynecologists were tasked with finding 44 women suffering from Endometriosis who would like to participate in our research and be supported by psychotherapeutic help in the first six months after being diagnosed, as well as 44 women who would like to participate but are not interested in receiving psychotherapeutic support.

The positive psychotherapists' team provided 44 women with psychotherapeutic help once a week during the first six months after being diagnosed.

Positive and transcultural psychotherapy allows us to build a fuller picture of the patient's ailment, respectively a better doctor-patient connection, "besides, it encompasses any and all ailments of the body and the psyche and can serve as both help in finding our way, as well as a diagnostic tool and a therapeutic approach to all narrower medical fields".

The Positive psychotherapy model "engages with the ailment as well when a primary body reaction to a conflict experience is present, on the grounds of which an organ-pathology finding occurs later on", and that makes it particularly appropriate to use when working with women diagnosed with endometriosis.

2.1. Subjects of the study

88 women of Bulgarian ethnic origin diagnosed with Endometriosis participated in our study. The diagnosed women are of an average age of 31.99 years old (minimal age - 19 and maximum age - 42). Demographic data shows that 47% of them are of higher education, 53% of them have high-school level education, 54% of them are married, 19% of them are divorced and 27% of them are single.

With regard to religious affiliation – 100% of them are Orthodox Christians.

With regard to the condition and the medical data related to it, 100% have gone through laparoscopic surgery for endometriotic cyst removal. All patients have had lesions removed and endometriotic hot spots burnt, and they also went through a histological test proving the presence of Endometriosis.

The research was held in the territory of the cities of Sofia and Varna in Bulgaria.

2.2. Research Instrument

For the purpose of the present study, the subjects participating in it filled in the Brief COPE (Carver, 1997) Questionnaire for measuring the positive and negative ways of coping with situations six months after being diagnosed. The questionnaire consists of 28 questions, divided into 14 scales, each of which includes two questions – positive and negative ways of handling a situation, whereby each of the groups holds 7 scales.

The positive scales are:

Active coping (questions 2 and 7)
Utilizing emotional support (questions 5 and 15)
Positive reformulating (questions 12 and 17)
Planning (questions 14 and 25)
Humor (questions 18 and 28)
Acceptance (questions 20 and 24)
Being religious (questions 22 and 27)

The negative scales are:

Distraction (questions 1 and 19)
Denial (questions 3 and 8)
Substance use (questions 4 and 11)
Instrumental support use (questions 10 and 23)
Behavioral denial (questions 6 and 16)
Expression (questions 9 and 21)
Blaming yourself (questions 13 and 26)

1. I find something to keep me busy or get involved in doing things that keep my attention away from the condition.
2. I direct my efforts to do something to improve my situation.
3. I tell myself "That it cannot be real!"
4. I take alcohol or sedatives to feel better.
5. I receive emotional support.
6. I give up when I try to cope with it.
7. I take certain measures to improve my situation.
8. I refuse to believe this is happening.
9. I say things to chase my negative feelings away.
10. I receive help from people giving me advice.
11. I use alcohol or sedatives to help myself get over it.
12. I am trying to accept it from a different perspective so that it seems a little more positive to me.
13. I blame myself.
14. I am trying to come up with a strategy for what to do.
15. I feel accepted and understood by someone.
16. I have given up on making efforts to cope.
17. I am trying to look at what is happening to me from a positive perspective.
18. I am joking with what has been happening to me.
19. I come up with things to do, for example going to the cinema, watching TV, dreaming, sleeping, or shopping, so that I think about it less.
20. I accept reality and the fact this is happening to me.
21. I express my negative feelings.
22. I try to find solace in my religious beliefs and/or my spiritual convictions.
23. I try to accept the advice and help offered to me by people on what to do.
24. I am learning to live with it.
25. I consider my next steps very carefully.
26. I blame myself for what has been happening to me.
27. I pray and/or meditate.
28. I look at the situation from a fun perspective.

According to the scale's author, it is possible to use separate parts of it independently and selectively, accounting for time constraints in its filling-in or as per the goal of the specific research and need of the testing sample.

The subjects studied filled in the questionnaire anonymously and answered using a 4-level scale in the Likert format from 1 – "I never do that" to 4 – "I do that very often", with no option for neutral opinion.

The result from each of the 14 scales for handling situations represents an average from both answers given and varies between 1 (minimum) and 4 (maximum). The higher values in the 7 positive scales correspond with a higher level of coping with the situation and the highest values in the 7 negative scales correspond with a lower level of coping with the condition.

The Brief COPE questionnaire's reliability is Cronbach's alpha 0,706 on the whole method. As a result:

- with positive ways of coping with the condition (α=0,779);
- with negative ways of coping with the condition (α=0,777)

2.3. Statistical methods

- Cronbach's Alpha – for measuring the reliability of the internal scales agreement;
- Mann Whitney's U Criterion – for measuring the reliability of the differences in the results received in groups
- Kruskal-Wallis Test (H-criterion) – for comparing and evaluating the statistical importance when more than two findings of a given criterion exist;
- The results were processed with SPSS v. 20.0 for Windows.

Results

Tracing the trajectories of the attitude development in the subjects studied – 88 women diagnosed with endometriosis, 44 in an experimental group and 44 in a control group – has revealed the statistical significance of the results in 5 of the positive ways of coping scales (table 1) and 4 of the negative ways of coping scales (table 2).

Table 1.
Positive coping scales data distribution

	v2	v7	v15	v5	v12	v17	v20	v24	v27
Mann-Whitney U	634,5	735,5	500,5	500,5	547,5	547,5	419,5	419,5	638,5
Wilcoxon W	1624,5	1725,5	1490,5	1490,5	1537,5	1537,5	1409,5	1409,5	1628,5
Z	2,97	2,063	4,112	4,112	3,694	3,694	4,794	4,794	2,904
Asymp. Sig. (2-tailed)	,003	,012	,000	,000	,001	,001	,000	,000	,004

Table 2.
Negative coping scales data distribution

	v4	v11	v1	v19	v3	v8	v6	v16
Mann-Whitney U	620,0	620,0	663,0	663,0	681,0	681,0	686,0	686,0
Wilcoxon W	1610,0	1610,0	1653,0	1653,0	1671,0	1671,0	1676,0	1676,0
Z	3,013	3,013	2,520	2,520	2,480	3,013	3,013	4,796
Asymp. Sig. (2-tailed)	,003	,003	,012	,012	,013	,003	,003	,000

In the **Active coping scale,** juxta positioning the answers to **question 2** *"I direct my efforts to do something to improve my situation."* - shows that 84% of the women in the experimental group and 34% of the women in the control group (u=2,97; a=0,003) are inclined to be active not just mentally, but physically as well. There is nothing that stands out in the answers of the women in the control group with regard to a specific activity as per **question 7** *"I take certain measures to improve my situation"*. Only 20,4% of them have their intentions turned into actions, unlike the experimental group where 93,2% of the women switch from intentions to active behavior in reality (u=2,06; a=0,012).

A specificity in the **Utilizing emotional support scale** that we were able to identify is how important the feeling of being accepted and the diagnosis being tolerated is on behalf of the others. 79,5% of the women in the experimental group and almost half of the women in the control one (40,9%) have the feeling they are receiving **emotional** support – **question 5**, *"I receive emotional support"* (u=4,11; a=0,000). There is a significant difference in the results for **question 15** *"I feel accepted and understood by someone"* (u=4,11; a=0,000). 81,8% of the women in the experimental group have a real sense of their own self-worth despite the diagnosis and that is a fact for only 18.2% of the women in the control one.

Judging from the **Positive reformulating scale – question 12:** *"I am trying to accept it from a different perspective so that it seems a little more positive to me"* (u=3,69; a=0,001) and **question 17:** *"I am trying to look at what is happening to me from a positive perspective"* (u=3,69; a=0,001), it is obvious that the women from the experimental group (81.8%) distribute their attitude towards the diagnosis equally in the scope of "I want it to be true and I am managing to achieve it". Almost half of the women in the control group, with a minor difference with regard to the positive aspects of their condition, i.e., question 12 - 43,2% and question 17 – 40,9%, are inclined to not see, feel, or look for a positive reformulating of their diagnosis.

The studied groups' profile in the **Acceptance scale** shows statistically significant differences with regard to the diagnosis. When answering **question 20** *"I accept reality and the fact that this is happening to me"* (u=4,79; a=0,000),

90,9% of the women in the experimental group and only 40,9% of the women in the control one demonstrates understanding and realization that the condition is a fact. Data is distributed in a similar way when answering **question 24** *"I am learning to live with it"* (u=4,79; a=0,000). 88,6% of the women in the experimental group not only accept reality and the fact that they are sick with Endometriosis but direct their efforts at creating conscious strategies to utilize the knowledge of what it is to live with that condition. Only 38,6% of the women in the control group demonstrated the same attitude.

Data obtained in the **Being religious scale** have shown statistical significance only in the answers to **question 27** *"I pray or meditate"* (u=2,90; a=0,004), where 79,5% of the experimental group and 61,4% of the control group utilize faith in salvation that comes from outside (God) and the power of their internal resources. We do not observe statistical significance in the answers to **question 22** *„I try to find solace in my religious beliefs and/or my spiritual convictions"*, which leads us to presume that women from both groups rely more on a miracle than the support of religious or spiritual beliefs.

Age, education, and marital status do not prove to be significant or defining when choosing positive strategies for coping with the condition.

Tracing the trajectories of developing attitudes for negative ways of coping with the condition has shown that the most significant and dominating among the women from the control group (68,2%) is the strategy listed in the **Substance use scale** – **question 4** *"I take alcohol or sedatives to feel better."* (u=3,01; a=0,003). Almost half are the women in the experimental group (34,1%) turn to alcohol in order to feel better. The answers to the systematic substance use in **question 11** *"I use alcohol or sedatives to help myself get over it"* (u=3,01; a=0,003) paint a similar picture, 88,6% of the subjects studied from the control group depend on alcohol and other substances for salvation and avoiding the reality of their condition. Only 27,3% of the members of the experimental group utilize that strategy.

In the **Distraction scale** the results of **question 1** *"I find something to keep me busy or get involved in doing things that keep my attention away from the condition"* (u=2,52; a=0,012) show that in the case of 79.5% of the control group subjects keeping their minds off both thinking about the diagnosis and the conscious strategies for accepting it proves to be a good support strategy. This self-help method is not rejected by the experimental group either, a little over half of the women there (59,1%) are also heavily dependent on it. The situation is identical to the data obtained when answering **question 19** *„I come up with things to do, for example going to the cinema, watching TV, dreaming, sleeping or shopping, so that I think about it less."* (u=2,52; a=0,012), where 88,6% of the control group and 59,1% of the experimental one use their activities and imagination to keep the thought of the condition away. It is obvious that more women in the control group use the distraction strategy, while the women from the experimental group are more moderate and consistent in using distraction as a way not to think about their condition.

There is a statistical significance found in data collected under the **Denial scale**, namely in **question 3** "*I tell myself "That it cannot be real!""* (u=2,48; a=0,013). 86,4% of the subjects in the control group and 40,9% from the ones in the experimental group remain in the denial phase in the context of surviving the crisis of "being diagnosed with an untreatable condition" radically different in the results obtained from answers to **question 8** *"I am refusing to believe this is happening to me"* (u=3,01; a=0,003). 88,6% of the control group demonstrate a "denial reflex" with regard to reality and only 18.2% of the experimental group seek solace in denying in the psychological protection sense.

The last scale that features statistical data significance is the **Behavioral refusal scale**. In **question 6** *"I give up when I try to cope with it"* (u=3,013; a=0,003) 86,4% of the women in the control group lose faith in themselves, their actions, activities, and finding a point to making an effort, whereas that is the case in only 34.1% from the experimental group. Answers to **question 16** *"I have given up on making efforts to cope"* (u=4,794; a=0,000) paint a completely different picture. 90,9% of the subjects in the control group are refusing or have refused on a number of occasions to make an effort to cope, whereas that is the case with only 15.9% of the experimental group.

Age and education level do not show any statistical significance in the negative scales, but there is one to be found under the family status factor in the Denial, Substance Use, and Behavioral Refusal scales (table 3).

Table 3.
Denial, Substance Use, Behavioral Refusal scales data distribution

	v3	v6	v8	v4	v11	v16
Chi-Square	14,901	14,502	14,901	6,148	6,148	14,502
Df	2	2	2	2	2	2
Asymp. Sig.	,001	,001	,001	,026	,026	,001

a. Kruskal Wallis Test
b. Grouping Variable: family status

Answers to the questions in the **Denial Scale** (q..3 and q. 8 - c2 = 14,90; p < 0,001) demonstrate that 30,7% of the married, 13,6% of the divorced, and 5,7% of the singles out of the total of subjects studied (N 88) are refusing to believe and accept their diagnosis. Data leads us to believe that a partner's expectation of parenthood directs married women into refusal as a utilized coping strategy.

Again, 40,9% of the married women constitute the largest percentage of subjects studied in both groups (N 88) inclined to turn to alcohol and use of other substances (**Substance use scale**, q.4 and q.11 - c2 = 6,14; p < 0,026) in order to turn their attention away from the disease. That coping mechanism is utilized by only 12,5% of the divorced and 5,7% of the single women studied.

Married women's share of the results under the Behavioral refusal scale (q. 6 and q.16- c2 = 14,50; p < 0,001) is the largest again – 40,9% compared to 11,4% of the divorced and 13,6% of the singles. The almost identical distribution of results in the divorced and single groups leads us to presume the difference between them and the married women group lies in the attitude they receive from their circle of significant others (husband, partner, mother, etc.) towards women as a whole and the condition in particular.

Analyzing the Brief COPE questionnaire's results allows us to point out that women from the experimental group are inclined to be active not only in their thoughts and ideas **(Future/Sense area)** but also in their actions and activities **(Activities area)**, whereas women from the control group remain "trapped" in their fears and worries. It is obvious from the results that the women from the experimental group have learned to use and rely on emotional support, to find and trust it and not to doubt the patience and attention of their significant others **(Contacts area)**.

To recapitulate, data supports our hypothesis that women utilizing psychotherapeutic help will demonstrate a prevalence of positive ways of coping with the diagnosis whereas women without psychotherapeutic help will demonstrate a prevalence of the negative ones.

Discussion

Data from the study reveals the true picture of women suffering from Endometriosis as we manage to touch their lives unmasked.

The results in the **Active coping scale** demonstrate that women from the control group are refusing to make changes in their current state on the grounds of efforts from an active standpoint and taking actual measures to follow consistently afterward. We could speculate that these women lack the self-confidence that they can cope with activities in real life. They are also unsure and afraid of what results such activities may yield.

That is what leads us to deduce from data in the **Positive reformulating** and **Acceptance scales** that the women in the control group demonstrate how difficult it is for women to accept their condition as a problem that could be sending a different message. Such additional responsibilities that lead to unveiling deeply hidden circumstances that have resulted in the condition in question keep them passive in bearing their pain. "There is nothing to be done, you just have to live with it", "That was my destiny", etc. is the attitude that keeps them away from discovering what function the disease has in their lives.

The results in the **Denial**, **Behavioral denial**, **Distraction**, and **Substance use scales** as self-help strategies show us the difficulties the women from the control group experience when being in contact with others and themselves, which is visible from their unwillingness to work with a psychotherapist. Working with the psyche is something that threatens the status quo and

could provoke making sense of emotions, feelings, and connections, which is worrisome.

Symbolically, Endometriosis could be viewed as a woman's attempt to merge with a person who is a significant other for her. The impossibility of doing so leads her to satisfy that need of hers in a different way – by merging with herself and adopting counter-dependent behavior.

Working with that matter allows us to speculate that Endometriosis reveals itself in an auto-aggressive sense as well – "I am bonding with myself, I am swallowing myself. I cannot give up, I cannot trust, and I control everything at all times. Only I can love truly and candidly, and feel sorry for myself, which is why I am often alone with my pain."

From the standpoint of a language picture, we find the following to be appropriate: the uterus is a house, fireplace, field.

Our psychotherapeutic experience with women suffering from Endometriosis and the results from the current study leads us to deduce that at a psychodynamic level all home related fears (security, safety); the fireplace (love, acceptance, warmth, attention, patience) and the field (trustworthiness, punctuality, clarity in all contacts) could be reflected in the uterus.

Our practice with the experimental group shows that we can identify a number of fears at a psychodynamic level: inability to give birth, giving birth to a sick child, having miscarriages, getting pregnant at the wrong time, getting pregnant from the "wrong" man, shame for not wanting to be a mother, fear of being a bad mother, fear of resembling her own mother, fear of losing a husband due to pregnancy, fear of losing male attention, fear of betrayal and many others. If a woman suppresses such feelings within herself or they become too big to handle, the uterus takes the load on its shoulders.

Results from the experimental group show us that women suffering from Endometriosis and using psychotherapeutic help have improved their emotional closeness to a person (**Contacts area**) and are ready to cooperate in establishing strategies on how to act (**from the Future/sense area to the Activity area)** in order to change the life model that they had lived up to that point. Their ability to dare to comprehend the problem at a deeper level grows, and they are less likely to resort to coping strategies described in the **Distraction scale**.

When exploring their experience after six months of psychotherapeutic support, the women from the experimental group utilize strategies from the **Substance use** scale less and less.

The data described leads to deduce confidently that psychotherapeutic support of women suffering from Endometriosis allows for positive coping strategies to prevail over negative ones.

Positive and transcultural psychotherapy provides the patient with an environment where their disregarded and suppressed abilities flourish and later on become instrumental in the formation of new abilities for coping with hard life circumstances. Respectively, the data described shows that psychotherapeutic help provided to women suffering from Endometriosis via positive psychotherapeutic methods allows for the positive coping mechanisms to prevail unlike when women do not receive any therapy.

Conclusion

Endometriosis is a huge challenge that changes one's way of life on a physical, psychological, emotional, and social level. Besides experiencing pain, women suffering from that condition have a number of psychological tasks ahead of them to solve that are rooted in the nature of the said condition – fear of living with a chronic condition, uncertainty related to its treatment, the potential decrease or even loss of reproductive ability, etc.

The results obtained in the present study demonstrate a number of differences between the control and the experimental group in using positive or negative coping strategies for handling the Endometriosis diagnosis. Women from the experimental group demonstrate a prevalence of positive ways of coping as they have taken advantage of psychotherapeutic support, whereas it is exactly the opposite with the women from the control group. This preliminary study leads to a number of additional questions and new study tasks. Studying the matter in depth will unveil new opportunities for a better understanding of how to provide for the psychotherapeutic needs of patients suffering from Endometriosis.

References:

[1]. **BENAGIANO, G., BROSENS, I., & LIPPI, D.** (2014). The history of endometriosis. *Gynecologic and Obstetric Investigation*, *78*(1), 1–9. https://doi.org/10.1159/000358919

[2]. **ESKENAZI, B., & WARNER, M.** (1997). Epidemiology of Endometriosis. *Obstetrics and Gynecology Clinics of North America*, *24*(2), 235–258. https://doi.org/10.1016/s0889-8545(05)70302-8

[3]. **KAPOOR, R., STRATOPOULOU, C. A., & DOLMANS, M. (**2021). Pathogenesis of Endometriosis: New Insights into Prospective Therapies. *International Journal of Molecular Sciences*, *22*(21), 11700. https://doi.org/10.3390/ijms222111700

[4]. **KIESEL, L., & SOUROUNI, M.** (2019). Diagnosis of endometriosis in the 21st century. *Climacteric*, *22*(3), 296–302. https://doi.org/10.1080/13697137.2019.1578743

[5]. **KIRILLOV, I.** (2023). Evaluation Criteria for Psychosomatic Practice. *The Global Psychotherapist*, *3*(2), 57–69. https://doi.org/10.52982/lkj199

[6]. **KOLLER, D., PATHAK, G. A., WENDT, F. R., TYLEE, D. S., LEVEY, D., OVERSTREET, C., GELERNTER, J., TAYLOR, H. S., & POLIMANTI, R.** (2023). Epidemiologic and genetic associations of endometriosis with depression, anxiety, and eating disorders. *JAMA Network Open*, *6*(1), e2251214. https://doi.org/10.1001/jamanetworkopen.2022.51214

[7]. **OKORO, J.** (2023). Patients Encounter with Diagnoses and Illness in Transcultural Perspective. *The Global Psychotherapist*, *3*(2), 147–152. https://doi.org/10.52982/lkj210v

[8]. **REMMERS, A.** (2022). The Psychosomatic Arc in Therapy. *The Global Psychotherapist*, *2*(1), 69–73. https://doi.org/10.52982/lkj161

[9]. **SARRÍA-SANTAMERA, A., ORAZUMBEKOVA, B., TERZIĆ, M., ISSANOV, A., CHEN, C., & DEL BARCO, Á. A.** (2020). Systematic Review and Meta-Analysis of Incidence and Prevalence of Endometriosis. *Healthcare*, *9*(1), 29. https://doi.org/10.3390/healthcare9010029

[10]. **SMOLARZ, B., SZYŁŁO, K., & ROMANOWICZ, H.** (2021). Endometriosis: Epidemiology, Classification, Pathogenesis, treatment and Genetics (Review of Literature). *International Journal of Molecular Sciences*, *22*(19), 10554. https://doi.org/10.3390/ijms221910554

[11]. **VAN BARNEVELD, E., MANDERS, J., VAN OSCH, F., VAN POLL, M., VISSER, L., VAN HANEGEM, N., LIM, A. C., BONGERS, M. Y., & LEUE, C. (**2022). Depression, Anxiety, and Correlating Factors in Endometriosis: A Systematic Review and Meta-Analysis. *Journal of Womens Health*, *31*(2), 219–230. https://doi.org/10.1089/jwh.2021.0021

[12]. **ГАНЕВА, З. [GANEVA, Z.]** (2013). *Още нещо за рака на гърдата* [One More Thing About Breast Cancer]. Елестра, София. 189. [in Bulgarian]

[13]. **ПЕСЕШКИАН, Н. [PESESCHKIAN, N.]** (1999). *Метод на позитивната психотерапия* [Method of Positive Psychotherapy]. Славена, Варна. [in Bulgarian]

[14]. **ПЕСЕШКИАН, Н. [PESESCHKIAN, N.]** (2003). *Психосоматика и позитивна психотерапия* [Psychosomatics and Positive Psychotherapy]. Славена, Варна. [in Bulgarian]