

# A case study of the relief of menopause symptoms with shea butter and MCT oil vaginal cream infused with *Cannabis sativa* flowers

## Abstract

Menopause is a significant transition in a woman's life, often accompanied by symptoms such as hot flashes, vaginal dryness, mood swings, sleep disturbances, and decreased libido. Hormone replacement therapy (HRT) is the conventional treatment but raises safety concerns, prompting interest in alternative remedies. This study investigates the effectiveness of a vaginal cream formulated with shea butter, medium-chain triglyceride (MCT) oil, and *Cannabis sativa* flowers in alleviating menopause-related symptoms. The exploratory trial involved ten women aged 45 to 60, each presenting various symptoms. Participants applied the cream nightly for four weeks. The formulation, containing 5% THC and 2.5% CBD, provided significant improvements in hot flashes, vaginal dryness, mood stability, sleep quality, and libido. Additionally, participants reported reduced overeating and a sense of overall calmness. Results suggest that the cannabinoids in the cream modulate the endocannabinoid system, alleviating symptoms and enhancing overall well-being. While findings highlight the promise of this natural alternative to HRT, further research with larger sample sizes and controlled trials is needed to confirm its safety and efficacy.

**Keywords:** menopause, vaginal dryness, hot flashes, mood swings, sleep disturbances, libido, *cannabis sativa*, CBD, THC, shea butter, MCT oil, endocannabinoid system, natural alternative, hormone replacement therapy (HRT)

Volume 14 Issue 4 - 2024

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**Received:** November 22, 2024 | **Published:** December 18, 2024

## Introduction

Menopause marks a significant transitional period in a woman's life, typically occurring between the ages of 45 and 55, characterized by the cessation of menstruation and a variety of symptoms such as hot flashes, night sweats, vaginal dryness, mood swings, sleep disturbances, and decreased libido. These symptoms stem primarily from the reduced production of estrogen and progesterone, which disrupts various physiological processes.<sup>1</sup> While hormone replacement therapy (HRT) has traditionally been the standard treatment, concerns about its long-term safety have led to increased interest in natural and alternative therapies.<sup>2</sup> This case study focuses on ten women, aged 45 to 60, who participated in a trial involving a vaginal cream formulated with shea butter, MCT oil, and *Cannabis sativa* flowers. The cream aimed to alleviate menopause-related symptoms, providing a natural alternative to HRT. Each participant presented with a range of symptoms, including hot flashes, vaginal dryness, mood swings, sleep disturbances, and decreased libido.

## Methodology

This article is the result of a study conducted by Mariju for all, a nonprofit association based in Boulder Creek California, USA and Florianopolis, Brazil. Ten women over the age of 45 who were experiencing menopause-related symptoms participated in an exploratory trial. They applied a vaginal cream nightly, which was formulated with shea butter and MCT oil as base ingredients and infused with *Cannabis sativa* flowers. The cream contained a full-spectrum extract with 5% THC (1500 mg) and 2.5% CBD (750 mg). The selection of shea butter and MCT oil was strategic due to their beneficial properties. Shea butter is renowned for its moisturizing and anti-inflammatory effects, which can alleviate skin irritation and dryness—common complaints during menopause.<sup>3</sup> MCT oil, derived from coconut oil, serves as an effective carrier for cannabinoids, enhancing their absorption through the skin.<sup>4</sup>

## Participants:

1. Participant 1: A 52-year-old woman experiencing severe hot flashes, night sweats, skin itching, and vaginal dryness.
2. Participant 2: A 55-year-old woman with mood swings, sleep disturbances, and decreased libido.
3. Participant 3: A 45-year-old woman struggling with hot flashes, skin itching, vaginal dryness, and anxiety.
4. Participant 4: A 47-year-old woman reporting sleep disturbances, mood swings, and reduced sexual desire.
5. Participant 5: A 53-year-old woman suffering from vaginal dryness, night sweats, and irritability.
6. Participant 6: A 54-year-old woman with severe hot flashes, skin itching, decreased libido, and mood swings.
7. Participant 7: A 56-year-old woman experiencing vaginal dryness, anxiety, and sleep disturbances.
8. Participant 8: A 60-year-old woman with hot flashes, skin itching, reduced libido, and mood swings.
9. Participant 9: A 51-year-old woman reporting severe vaginal dryness, mood instability, and sleep disturbances.
10. Participant 10: A 57-year-old woman suffering from hot flashes, skin itching, night sweats, and decreased libido.

**Treatment Protocol:** Each participant was instructed to apply approximately 0.25 gr of the cream in the labia of the vagina nightly for four weeks. The cream was formulated with shea butter and MCT oil as base ingredients, infused with *Cannabis sativa* flowers. The full-spectrum extract included 5% THC (1500 mg) and 2.5% CBD (750 mg). As well as all the cannabinoids from the original plant.

## Results

**Reduction in hot flashes, skin itching, and night sweats:** Participants 1, 3, 6, 8, and 10 reported a significant reduction in the frequency and intensity of hot flashes, skin itching, and night sweats within the first week of using the cream. For these women, the relief was sustained, with only mild symptoms returning after a week without applying the cream. The rapid reduction in symptoms aligns with research suggesting cannabinoids can modulate the endocannabinoid system (ECS) to regulate body temperature. The moisturizing properties of shea butter, combined with the anti-inflammatory effects of cannabinoids, likely contributed to this improvement.

**Improvement in vaginal dryness:** Participants 1, 3, 5, 7, and 9 experienced significant relief from vaginal dryness, reporting that discomfort during intercourse was markedly reduced. The moisturizing properties of shea butter, already mentioned combined with the anti-inflammatory effects of cannabinoids, likely contributed to this improvement.

**Stabilization of mood swings:** Participants 2, 4, 6, 8, and 9 noted a considerable reduction in mood swings, feeling more emotionally stable throughout the treatment period. Cannabinoids, especially CBD, are known for their anxiolytic and antidepressant properties, which could explain the observed mood stabilization.

**Enhanced sleep quality:** Participants 2, 4, 7, and 9 reported improved sleep quality, with fewer awakenings during the night. The calming effects of cannabinoids, along with their potential to regulate sleep cycles, likely played a role in these improvements.

**Increased libido:** Participants 2, 6, 8, and 10 experienced an increase in libido, noting an improvement in sexual desire and satisfaction. The reduction in vaginal dryness and the mood-enhancing effects of cannabinoids may have contributed to this outcome.

**Reduction in overeating:** Participants 5, 7, 8, and 9 observed a decrease in binge eating or overeating behaviors, leading to more controlled eating habits. This aligns with findings suggesting that cannabinoids can influence appetite regulation through the ECS.

**Overall calmness and patience:** All participants reported feeling calmer and more patient, which they attributed to the consistent use of the cream. The anxiolytic properties of cannabinoids, particularly CBD, may have contributed to these psychological benefits.

## Discussion

For participants 1, 3, 6, 8, 10 the outcome was significant reduction in hot flashes, skin itching, and night sweats within the first week, with mild symptoms only returning after discontinuation. Cannabinoids may modulate the endocannabinoid system (ECS) to help regulate body temperature, leading to the observed decrease in symptoms.<sup>5</sup> Participants 1, 3, 5, 7, 9 had noticeable relief from vaginal dryness, reducing discomfort during intercourse. The moisturizing properties of shea butter and the anti-inflammatory effects of cannabinoids likely contributed to alleviating vaginal and skin dryness.<sup>3,6</sup> Participants: 2, 4, 6, 8, 9 showed marked reduction in mood swings, resulting in greater emotional stability. The anxiolytic and antidepressant properties of CBD may explain the stabilization of mood observed in these participants.<sup>7</sup>

Participants 2, 4, 7, 9 have improved their sleep quality with fewer nighttime awakenings. The calming effects of cannabinoids and their potential to regulate sleep cycles likely contributed to better sleep.<sup>8</sup> Participants 2, 6, 8, 10 noted an increase in libido with improved

sexual desire and satisfaction. The reduction in vaginal dryness and mood enhancement from cannabinoids may have positively impacted libido.<sup>9</sup> Participants: 5, 7, 8, 9 show a decrease in binge eating or overeating. Cannabinoids may influence appetite regulation through their interaction with the ECS, leading to more controlled eating habits.<sup>9</sup> The calmness and more patience reported is due to the anxiolytic effects of CBD that may have contributed to it.<sup>10</sup>

The study's results indicate that the cannabinoids in the vaginal cream effectively modulate the endocannabinoid system (ECS) present in the ovaries and uterus, leading to a significant reduction in menopausal symptoms like hot flashes, skin itching, night sweats, and vaginal dryness. This aligns with research showing that cannabinoids can regulate body temperature and alleviate dryness through the ECS.<sup>2,5,6</sup>

The stabilization of mood swings and improved sleep quality observed among participants is consistent with the anxiolytic and antidepressant properties of CBD, which has been documented to reduce anxiety and enhance emotional stability.<sup>7,8</sup> Additionally, the increase in libido and decrease in overeating may result from cannabinoids' effects on mood, sexual function, and appetite regulation through CB1 receptors.<sup>9</sup> The calming effects reported are likely due to CBD's interaction with serotonin receptors, promoting relaxation and stress reduction.<sup>10,11</sup> These findings suggest that the shea butter and MCT oil vaginal cream infused with *Cannabis sativa* flowers could offer a natural alternative to hormone replacement therapy (HRT) for managing menopausal symptoms. Cannabinoids have been shown to modulate the ECS, affecting mood, pain, and inflammation, with THC and CBD working synergistically to enhance therapeutic effects.<sup>12</sup> The additional benefits observed, such as reduced overeating, improved sleep, and increased libido, further support the potential of cannabinoids in addressing menopause-related issues.<sup>13</sup> However, the study's small sample size and lack of a control group highlight the need for further research, including larger, randomized controlled trials, to confirm these findings and evaluate the long-term safety of cannabis-infused products.<sup>14</sup>

The observed reduction in menopausal symptoms suggests that the cannabinoids in the vaginal cream may effectively modulate the endocannabinoid system (ECS), which is involved in regulating physiological processes such as body temperature, mood, and appetite. The significant reduction in hot flashes and night sweats can be attributed to the ability of cannabinoids to influence the ECS and help regulate body temperature, as noted in prior research.<sup>5</sup> The moisturizing properties of shea butter, combined with the anti-inflammatory effects of cannabinoids, likely contributed to the relief of vaginal dryness, a common menopausal symptom.<sup>2,6</sup> The marked stabilization of mood swings observed among participants may be explained by the anxiolytic and antidepressant properties of CBD, which have been documented to reduce anxiety and promote emotional stability.<sup>7</sup> Furthermore, the improvement in sleep quality, characterized by fewer nighttime awakenings, aligns with findings that cannabinoids can regulate sleep cycles and promote relaxation.<sup>8</sup> The increase in libido among participants might be attributed to the combined effects of reduced vaginal dryness and enhanced mood, as cannabinoids have been linked to improved sexual function and arousal.<sup>9</sup> The reported decrease in binge eating or overeating suggests that cannabinoids might influence appetite regulation through their interaction with the ECS, particularly by modulating the activity of CB1 receptors involved in hunger and satiety.<sup>9</sup> Finally, the overall calmness and patience reported by participants could be linked to the anxiolytic effects of CBD, which have been shown to reduce stress and promote relaxation without the psychoactive effects of THC.<sup>10</sup> This

aligns with studies indicating that CBD can interact with serotonin receptors and modulate neurotransmitter systems to stabilize mood.<sup>11</sup>

These findings indicate that the shea butter and MCT oil vaginal cream infused with *Cannabis sativa* flowers could offer a promising natural alternative to hormone replacement therapy (HRT) for managing menopausal symptoms. However, further research with larger sample sizes and controlled trials is necessary to confirm these preliminary results and explore the long-term efficacy and safety of such treatments. The rapid onset of symptom relief within less than a week highlights the efficacy of this formulation, providing a potential solution for women seeking alternatives to HRT.

The use of cannabinoids in treating menopause symptoms is supported by a growing body of literature. Cannabinoids have been shown to modulate the ECS, which is involved in regulating several physiological processes, including mood, pain, and inflammation. The presence of both THC and CBD in the cream is particularly noteworthy, as studies have demonstrated that these cannabinoids can work synergistically to enhance their therapeutic effects.<sup>12</sup>

Moreover, the additional benefits observed, such as reduced overeating, improved sleep, and increased libido, underscore the potential of cannabinoids to address a broad spectrum of menopause-related issues. These findings align with previous research indicating that cannabinoids can positively impact appetite regulation, sleep quality, and sexual health.<sup>13</sup>

Recent studies have explored the potential of CBD to reduce anxiety and promote relaxation without the psychoactive effects associated with THC.<sup>14</sup> The ability of cannabinoids to interact with serotonin receptors and modulate neurotransmitter systems further supports their potential role in stabilizing mood and reducing stress.<sup>11</sup> Additionally, while the study focused on the benefits of the cream, it is essential to monitor and evaluate any potential long-term effects of using cannabis-infused products, particularly those containing THC.

## Conclusion

Shea butter, derived from the nuts of the African shea tree (*Vitellaria paradoxa*), is widely recognized for its skin-moisturizing and anti-inflammatory properties. It helps retain moisture, calm redness and irritation, and soothe conditions such as dryness or itchiness. This makes it an excellent ingredient for skincare products, particularly for sensitive or mature skin. Shea butter is non-comedogenic, meaning it doesn't clog pores, making it suitable for daily application even on acne-prone skin. Additionally, its antioxidant properties may help protect against environmental stressors and support skin health.

When paired with ingredients like medium-chain triglyceride (MCT) oil, which enhances the absorption of active compounds, shea butter's efficacy in skincare formulations can be further optimized. This combination can provide deep hydration and potentially aid in delivering cannabinoids or other therapeutic ingredients effectively through the skin. The use of a vaginal cream made from shea butter and MCT oil infused with *Cannabis sativa* flowers has demonstrated significant potential in alleviating a wide range of menopausal symptoms. This natural alternative not only addresses the physical discomforts of menopause but also improves emotional well-being, sleep patterns, and sexual health.

Given the positive outcomes observed in this small study, further research with a larger sample size is warranted to confirm these findings. However, the initial results suggest that this cream could offer a viable, natural option for women seeking relief from

menopausal symptoms without the risks associated with conventional hormone therapies.

As with any treatment, it is essential for individuals to consult with their healthcare provider before beginning any new regimen, especially one involving cannabis derivatives. Nonetheless, this study opens the door to a promising new approach to managing menopause naturally and effectively.

## Acknowledgments

We sincerely thank the Ecologic Project for their invaluable insights and guidance on the medicinal cannabis initiative, which played a key role in the success of "Mariju for All," a nonprofit organization dedicated to providing oil for patients.

## Conflicts of interest

The authors declare no conflict of interest.

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