

Lesson Plan to Reduce Lupus Symptoms among Black Women

Lupus, Group 8

University of Georgia

HPRB 3850E

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## LESSON PLAN FOR LUPUS SYMPTOM RELIEF

### Introduction

As the diagnosis of lupus begins to increase among communities of color, Black women between the ages of 18 to 45 would benefit greatly from education on reducing lupus flare-ups and advocating for themselves in healthcare facilities. Lupus is a disease that affects individuals for their entire life, so targeting risk behaviors early is necessary. This lifestyle modification plan features intervention for Black women between 18 to 45 that will aid in the reduction of adverse lupus effects and education on self-efficacy and empowerment.

### Pathophysiology and Epidemiology of Lupus

Lupus is a long-term, auto-immune disease that affects various parts of the body. The body's immune system attacks the healthy cells and tissues which leads to inflammation and damage in the organs (Centers for Disease Control and Prevention [CDC], 2024). Lupus most commonly affects the skin, joints, and internal organs such as kidneys and heart. When tissue is affected by inflammation, it causes pain and swelling across the body (Lupus Foundation, 2020).

There are about 1.5 million adults in the United States that are affected by the chronic disease that is lupus (*Lupus Facts and Statistics | Lupus Foundation of America*, n.d.). A combination of genes, hormones, and environmental factors contribute to the development of lupus among Americans. Where you're born, live, work, and age can add to the likelihood of developing lupus (*What Causes Lupus? | Lupus Foundation of America*, n.d.). In recent years, there has been an increased incidence of the chronic condition due to the increased racial and ethnic diversity across the United States (Streed, 2022). Among those affected, it is estimated that 90 percent of people living with lupus happen to be women between the ages of 15 to 44, marking them as a high risk population. Among women, racial minority women are three times more likely to develop lupus compared to their White counterparts (*Lupus Facts and Statistics | Lupus Foundation of America*, n.d.).

### Population at Risk

The population at risk of developing lupus includes women around the age of 15 to 44, Black, have genetic or hormonal disposition contributing to the chronic disease, and women that live in environmental conditions contributing to lupus. Black women experience cardiovascular damage four times greater than their White counterparts and have a three times higher rate of death (Chae et. al., 2019).

### Risk Behavior

The risk behaviors that need to be addressed among Black women recently diagnosed with lupus are primarily environmental and lifestyle factors that contribute to worsening symptoms of lupus. Environmental factors may consist of air pollution, excessive sun exposure with limited sunscreen wear, and poor living conditions. Lifestyle factors may include high stress levels, smoking cigarettes, sleep deprivation, and obesity (*Understanding Lupus Environmental Triggers | Lupus Foundation of America*, n.d.).

### Review of Addressing the Risk Behavior in the Past

Previous interventions addressing lupus management among Black women have focused primarily on improving disease education, stress management, and treatment adherence. Studies by the Lupus Foundation of America (2023) and the Office on Women's Health (2020) found

## LESSON PLAN FOR LUPUS SYMPTOM RELIEF

that culturally tailored education programs significantly improve symptom awareness and health outcomes among minority women. Interventions such as peer-support groups and community-based workshops have been shown to reduce feelings of isolation and increase self-efficacy in managing chronic illness. Additionally, health communication campaigns emphasizing early symptom recognition and regular medical follow-ups demonstrated increased adherence to prescribed medications and decreased frequency of lupus flare-ups. However, many of these initiatives lacked consistent integration of lifestyle modification strategies such as diet, exercise, and environmental awareness. The current lesson plan builds on this evidence by combining education on disease mechanisms, lifestyle behavior change, and patient empowerment into a single, interactive framework tailored specifically to Black women aged 18 to 45.

### Method to Address the Risk Behavior

This intervention uses a culturally relevant and participatory approach to help women identify and manage lupus triggers through sustainable lifestyle modifications. The 25-minute lesson integrates a PowerPoint presentation, an infographic on environmental and lifestyle factors, and a five-day booklet that allows participants to document flare-ups and triggers. A pre- and post-assessment survey evaluates knowledge and self-efficacy related to lupus management. The educational approach emphasizes self-awareness, behavior tracking, and open dialogue to build confidence in navigating patient-provider relationships. Participants are guided in recognizing triggers such as sun exposure, stress, poor diet, smoking, and environmental toxins. Facilitators then model coping techniques such as mindfulness, gentle physical activity, and stress reduction. The method also reinforces empowerment by encouraging women to ask informed questions during medical visits and advocate for culturally sensitive care. This blended method supports self-management while fostering community trust and personal accountability for health outcomes.

### Health Theory

The health theory that will be used to evaluate and stage a lifestyle intervention for Black women recently diagnosed with lupus will be the Health Locus of Control (HLOC). This model consists of internal and external locus of control that influence an individual's perception and belief about the factors that determine their health outcomes. The HLOC framework helps evaluate whether women believe their health is primarily influenced by their own behaviors (internal locus of control) or by external factors such as healthcare providers, fate, or chance (external locus of control) (*Locus of Control | Health Psychology*, n.d.).

This theory allows Black women living with lupus to be empowered, educated, and have supportive patient-provider relationships that can strengthen internal control beliefs and increase confidence in managing symptoms. The HLOC model assesses participants' perceptions of control over lupus flare-ups, their trust in medical professionals, and their belief in the effectiveness of lifestyle modifications such as diet, stress reduction, and consistent medical check-ups. Promoting an internal locus of control through self-management education and culturally sensitive interventions, participants can develop greater self-efficacy and a sense of empowerment to make health-promoting decisions (*Locus of Control | Health Psychology*, n.d.).

### Goals of Approach

## **LESSON PLAN FOR LUPUS SYMPTOM RELIEF**

The main goals of this lesson plan are to:

- Increase participants' understanding of lupus and its impact on the immune system.
- Educate women on lifestyle and environmental modifications that can help reduce lupus flare-ups.
- Strengthen empowerment and self-efficacy by improving communication and trust between patients and healthcare providers.
- Encourage the adoption of preventive behaviors such as consistent medical check-ups, stress management, and dietary improvements.

By the end of the session, participants will feel more confident in managing their condition, identifying triggers, and taking proactive steps toward improving their quality of life.

### **Objectives and Evaluation Plan**

## **LESSON PLAN FOR LUPUS SYMPTOM RELIEF**

### **Summary of Lesson**

This lesson was developed to educate Black women aged 18 to 45 on how lifestyle and environmental factors influence lupus flare-ups and overall health. The 25-minute session begins with an introduction and pre-assessment to gauge existing knowledge. Participants are then introduced to lupus basics, its prevalence among Black women, and key risk factors. The educational portion highlights triggers such as UV exposure, stress, and poor nutrition, followed by strategies to reduce these risks. Activities include developing a five-day trigger tracking booklet and reviewing communication strategies for building stronger patient-provider partnerships. A post-assessment survey measures increases in knowledge, empowerment, and self-efficacy. This intervention is designed to provide culturally relevant education that connects biomedical understanding with personal empowerment. Through interactive learning and reflective exercises, women gain the tools to take control of their health and improve their daily management of lupus.

**Lesson Topic: Lifestyle Modifications to Reduce Symptoms of Lupus**

**Population: Black Women aged 18 to 45**

## LESSON PLAN FOR LUPUS SYMPTOM RELIEF

Length of lesson: 25 minutes

Stage 1 – Desired Results	
<p><b>Content Standard(s):</b> Understand what Lupus is, increase awareness, increase empowerment and self-efficacy in Black women ages 18 to 45 who are disproportionately affected.</p>	
<p><b>Understanding (s)/goals</b> Women should be able to understand:</p> <ul style="list-style-type: none"><li>• What Lupus is and how it impacts the immune system</li><li>• Increase empowerment and self-efficacy between patient-provider interactions</li></ul>	<p><b>Essential Question(s):</b></p> <ul style="list-style-type: none"><li>• What are lifestyle, environmental, and genetic factors triggering Lupus flare ups?</li><li>• Why is consistent check ups and treatments important in improving the health outcome of women with Lupus?</li></ul>
<p><b>Participant Objectives (outcomes):</b> <b>LO.1:</b> Describe Lupus and recognize the symptoms of Lupus <b>LO.2:</b> Explain at least two ways Lupus can be controlled through personal behaviors <b>LO.3:</b> Describe the importance of consistent check ups and how strong patient-provider interactions</p>	
Stage 2 – Assessment Evidence	
<p><b>Performance Task(s):</b></p> <ul style="list-style-type: none"><li>• Assess current lifestyle and environmental factors that contribute to lupus flareups</li><li>• Create a 5-day booklet for Black women with lupus that tracks their flareups and triggers</li></ul>	<p><b>Other Evidence:</b></p> <ul style="list-style-type: none"><li>• Complete the survey before and after the lesson plan on lupus to assess understanding of triggers, reduce flareups, patient-provider interactions, and self-efficacy</li></ul>
Stage 3 – Learning Plan	
<p><b>Learning Activities:</b></p> <p><b>Instructional Materials</b></p> <ul style="list-style-type: none"><li>• 2 copies of the survey per participant</li><li>• A 5-day booklet will be provided to each participant</li><li>• PowerPoint presentation on Lupus</li><li>• Infographic on lifestyle and environmental factors that contribute to lupus flareups</li><li>• Pamphlet on questions to ask medical providers and how to increase patient-provider relationships</li></ul>	

## LESSON PLAN FOR LUPUS SYMPTOM RELIEF

- Pencils/Pens

### Introduction (5 min)

- Introduction of facilitators
- Introduction of participants

### Pre-Assessment (3 min)

- Each participant will receive a survey to assess their knowledge of lupus, triggers, reducing flare-ups, and self-efficacy

### Goals and Objectives (1 min)

- State goals and objectives of the lesson plan

### Relevance of Lupus (1 min)

- Statistics of lupus in the United States and among Black women ages 18 to 45 (incidence/prevalence)

### Lifestyle and Environmental Triggers (2-3 min)

- Sun exposure and stress
- Diet and smoking
- Environmental toxins

### Importance of Lifestyle Modifications (2-3 min)

- Adopt an anti-inflammatory diet
- Engage in gentle physical activity to reduce fatigue and joint stiffness
- Schedule consistent medical check-ups to monitor disease progression and manage early signs of flare-ups

### The Role of Empowerment and Self-efficacy (2-3 min)

- Explain importance of active participation in healthcare decisions, patients who feel heard and respected are more likely to adhere to treatment plans
- Build self-efficacy through education, understanding symptoms and triggers help women feel more control of their health

### Post Assessment (3 min)

- Each participant will retake the survey to assess their knowledge of lupus, triggers, reducing flare-ups, and self-efficacy

### Conclusion (2-3 min)

- Brief summary of lesson
- Re-iterate key points of lesson
  - Small, consistent changes and stress reduction can improve quality of life
- Closing statement: “Today we discussed how understanding lupus triggers, making healthy lifestyle choices, and building confidence in managing your health can empower you to take control and reduce lupus flare-ups”

### Questions

The performance tasks along with this pre- and post-assessment survey will serve to determine the audience's previous and current knowledge on lupus and chronic conditions and diseases, as well as to assess the lesson's impact on the audience's perceptions of whether these national changes can be implemented in the future.

Complete the following survey regarding lupus and the prevention of chronic symptoms

## LESSON PLAN FOR LUPUS SYMPTOM RELIEF

1. Lupus is an autoimmune disease that causes the body's immune system to attack?
  - a. Only the skin
  - b. The body's own healthy tissues and organs
  - c. Bacteria and viruses only
  - d. Only joints
2. Which of the following can increase the risk of lupus flare-ups?
  - a. Sun exposure and stress
  - b. Adequate sleep and hydration
  - c. Gentle exercise
  - d. Regular medical check-ups
3. Which lifestyle change can help reduce lupus symptoms?>
  - a. Skipping meals to lose weight
  - b. Avoiding physical activity to rest more
  - c. Following an anti-inflammatory diet and gentle exercise
  - d. Increasing caffeine to fight fatigue
4. Why are regular medical check-ups important for women living with lupus?
  - a. They help detect flare-ups early and adjust treatments
  - b. They are only needed when symptoms worsen
  - c. They do not affect lupus management
  - d. They are mainly for collecting research data
5. “I feel confident in asking my healthcare provider questions and discussing my lupus management plan”
  - a. Strongly Disagree
  - b. Disagree
  - c. Neutral
  - d. Agree
  - e. Strongly Agree
6. “I believe that making small changes in my lifestyle (i.e., diet, exercise, or stress management) can help me reduce lupus flare-ups”
  - a. Strongly Disagree
  - b. Disagree
  - c. Neutral
  - d. Agree
  - e. Strongly Agree

**Survey questions 1 and 2 will assess the objective to “Describe Lupus and recognize the symptoms of Lupus” (LO.1) by determining participants’ understanding of lupus, its impact on the immune system, and common triggers that may cause flare-ups. Survey questions 3 and 4 will assess the objective to “Explain at least two ways Lupus can be controlled through personal behaviors” (LO.2) by determining participants’ awareness of**

## **LESSON PLAN FOR LUPUS SYMPTOM RELIEF**

effective lifestyle modifications and health management behaviors that can help reduce flare-ups. And survey questions 5 and 6 will assess the objective to “Describe the importance of consistent check-ups and how strong patient-provider interactions improve health outcomes” (LO.3) by determining participants’ confidence in communicating with providers and understanding the role of regular medical monitoring.

### **Reflection of Lesson Plan**

## LESSON PLAN FOR LUPUS SYMPTOM RELIEF

### Introduction

This lesson plan addresses a pressing health disparity: the disproportionately high rates of lupus and related complications among Black women. The program was designed to strengthen participants' self-management skills and empower them to make sustainable lifestyle changes that reduce lupus flare-ups. Using the Health Locus of Control theory, the intervention emphasizes shifting from external to internal control which helps participants recognize that their daily choices, health behaviors, and communication with providers can directly influence their disease outcomes.

### Evaluation

#### *Objectives and their Assessments*

The lesson objectives helped to understand lupus symptoms, identify triggers, and improve self-efficacy which were assessed through a pre- and post-assessment survey. These assessments evaluated participants' knowledge of lupus pathophysiology, awareness of lifestyle factors, and confidence in managing their condition. The comparison of pre- and post-results is intended to show increased understanding of lupus triggers and stronger feelings of empowerment in healthcare settings.

#### *Critical Review Feedback*

Future feedback is expected to highlight the strengths of cultural tailoring, use of interactive materials, and the clear connection between lifestyle modification and health empowerment. Potential areas of improvement may include expanding the duration of the lesson, integrating more visual examples of lupus symptoms, and offering follow-up workshops for continued support.

### Lessons Learned

#### *Strengths and Weaknesses*

Strengths of this intervention include its cultural relevance, concise structure, and focus on empowerment through behavior change. Using relatable examples and an evidence-based framework, the program effectively links disease knowledge to practical self-care strategies. A key lesson learned is the importance of patient-centered education which addresses both medical and social factors that influence lupus management. In future iterations, expanding community partnerships and incorporating peer mentors could enhance trust and sustained engagement among participants.

#### *Future Adaptations*

For future adaptations, the lesson could include a digital symptom-tracking app or peer-support network to encourage ongoing reflection beyond the initial session. Additionally, extending the workshop into a multi-session series could allow for deeper discussion of stress management, diet, and long-term self-care strategies. These adaptations would reinforce internal health control and ensure participants continue applying the skills and knowledge gained from this intervention.

### References

## LESSON PLAN FOR LUPUS SYMPTOM RELIEF

Centers for Disease Control and Prevention. (2024, May 10). *Lupus basics*. U.S. Department of Health and Human Services. <https://www.cdc.gov/lupus/about/index.html>

Chae, D. H., Martz, C. D., Fuller-Rowell, T. E., Spears, E. C., Smith, T. T. G., Hunter, E. A., Drenkard, C., & Lim, S. S. (2019). Racial Discrimination, disease activity, and Organ Damage: The Black Women's Experiences Living with Lupus (BEWELL) study. *American Journal of Epidemiology*. <https://doi.org/10.1093/aje/kwz105>

Health.com. (n.d.). *How to prevent lupus*. <https://www.health.com/lupus-prevention-7105174>

*Locus of Control | Health Psychology*. (n.d.). <https://courses.lumenlearning.com/suny-hvcc-healthpsychology/chapter/venues-for-health-habit-modification/>

*Lupus and women | Office on Women's Health*. (n.d.). OASH | Office on Women's Health. <https://womenshealth.gov/lupus/lupus-and-women>

*Lupus and your skin: Self-care dermatologists recommend*. (2015). Aad.org. [https://www.aad.org/public/diseases/a-z/lupus-self-care?utm\\_source](https://www.aad.org/public/diseases/a-z/lupus-self-care?utm_source)

*Lupus Basics*. (2024, May 15). Lupus. <https://www.cdc.gov/lupus/about/index.html>

*Lupus Facts and Statistics | Lupus Foundation of America*. (n.d.). Lupus Foundation of America. <https://www.lupus.org/resources/lupus-facts-and-statistics>

Lupus Foundation of America. (2020, October 21). *What is lupus?* Lupus Foundation of America; Lupus Foundation of America. <https://www.lupus.org/resources/what-is-lupus>

Mayo Clinic News Network. (2022, June 30). *Lupus rates increasing, communities of color especially vulnerable*. <https://newsnetwork.mayoclinic.org/discussion/lupus-rates-increasing-communities-of-color-especially-vulnerable/>

## LESSON PLAN FOR LUPUS SYMPTOM RELIEF

*Understanding Lupus Environmental Triggers | Lupus Foundation of America. (n.d.).*

Lupus Foundation of America. <https://www.lupus.org/resources/understanding-lupus-environmental-triggers>

*Understanding your risk for Lupus | Lupus Foundation of America. (n.d.). Lupus Foundation of America. <https://www.lupus.org/resources/understanding-your-risk-for-lupus>*

*What causes lupus? | Lupus Foundation of America. (n.d.). Lupus Foundation of America. <https://www.lupus.org/resources/what-causes-lupus>*