

Perspective

Unlocking Independence: The Promising Role of Occupational Therapy in Enhancing Quality Functioning for Individuals with Thalassemia

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A B S T R A C T

Thalassemia patients struggle with symptoms like exhaustion, weakness, stunted growth, joint discomfort, cardiac issues, and emotional difficulties. They may benefit from occupational therapy, which aids people with physical, mental, or developmental disabilities in achieving their goals. Occupational therapists can assist with energy conservation, joint protection, patient education and training, emotional support, restoration and adaptations. Individuals with thalassemia may benefit from comprehensive care that includes occupational therapy. Occupational therapists can assist people with thalassemia in enhancing their quality of life, achieving their objectives, playing their roles, and keeping up with their routine by addressing the physical, emotional, and environmental problems presented by the condition. According to the evaluation, occupational therapy holds promise for improving the quality of life for people with thalassemia. Further study is required in this field.

Keywords: Occupational Therapy, Thalassemia, Energy Conservation, Joint Protection Techniques

Introduction

Thalassemia is an inherited blood disorder that affects the production of haemoglobin, a protein in red blood cells that carries oxygen throughout the body.^{1,2} People with thalassemia can experience a range of symptoms, including fatigue, weakness, shortness of breath, and delayed growth and development.^{3,4} Some of the functional deficits associated with thalassemia⁵ may include:

- **Fatigue and Weakness:** People with thalassemia may experience chronic fatigue and weakness, which can make it difficult to perform daily activities.^{6,7}

- **Delayed Growth and Development:** Thalassemia can affect physical growth⁸ and development, particularly in children. This may lead to delayed milestones, such as walking and talking.⁹
- **Shortness of Breath:** Thalassemia can cause shortness of breath, particularly during physical activity.¹⁰
- **Joint Pain and Stiffness:** Thalassemia can cause joint pain and stiffness, particularly in the hands and feet.¹¹
- **Heart Problems:** In severe cases, thalassemia can cause heart problems, such as heart failure and arrhythmias.¹²
- **Iron Overload:** People with thalassemia may require regular blood transfusions, which can lead to iron

overload in the body. This can cause a range of complications, including organ damage and joint pain.^{13,14}

- **Emotional challenges:** Living with a chronic condition like thalassemia can be challenging, both physically and emotionally.¹⁵ People with thalassemia may experience anxiety, depression, and social isolation.¹⁶

Occupational therapy is a healthcare profession that focuses on helping individuals with physical, mental, or developmental challenges achieve their goals through the use of everyday activities.¹⁷ Occupational therapists work with people of all ages to improve their ability to perform activities of daily living, such as dressing, grooming, and feeding themselves.¹⁸

In the context of thalassemia, occupational therapy can play an important role in helping individuals manage the physical and emotional challenges associated with the condition.¹⁹ Here are some plausible intervention methods in which occupational therapy can be helpful²⁰ for people with thalassemia:

1. **Energy Conservation:** People with thalassemia often experience fatigue and weakness and it becomes difficult to perform daily activities. Occupational therapists can work with individuals to develop strategies for conserving energy, such as pacing themselves throughout the day, taking breaks when needed, and using assistive devices to reduce the amount of physical effort required for certain tasks.²¹
2. **Joint Protection:** Thalassemia can cause joint pain and stiffness, particularly in the hands and feet. Occupational therapists can teach individuals how to protect their joints during daily activities, such as using ergonomic tools and modifying their body mechanics.²²
3. **Patient education and training:** Occupational therapists can provide education and resources to help individuals with thalassemia manage their condition. It can include information about nutrition, exercise, and self-care techniques to help prevent complications.²³
4. **Emotional Support:** Living with a chronic condition like thalassemia can be challenging, both physically and emotionally. Occupational therapists can provide emotional support and counselling to help individuals cope with the stress and anxiety associated with their condition.²⁴
5. **Adaptations:** In some cases, individuals with thalassemia may need to make adaptations to their home or work environment to accommodate their physical limitations. Occupational therapists can assess the individual's needs and make recommendations for modifications, such as installing grab bars or adjusting the height of furniture.²⁵

In a nutshell, occupational therapy can be an important and integral part of the comprehensive care team for individuals with thalassemia for their independence and quality of life. By addressing the physical, emotional, and environmental challenges caused due to the condition, occupational therapists can help individuals improve their quality of life, achieve their goals, fulfil their roles and meet their routines.

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