



Palestinian NGO's Network (PNGO)

The Situation of Thalassemia Patients amid the Ongoing Genocide in the Gaza Strip



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Introduction

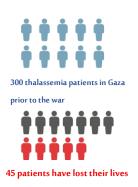
Thalassemia is one of the most severe chronic hereditary blood disorders, as it impairs hemoglobin production and leads to persistent, severe anemia. This condition necessitates that patients rely on regular blood transfusions and continuous medication to remove the excess iron accumulated in their bodies. Any disruption to this care regimen can result in life-threatening complications, including heart and liver failure, posing a direct threat to patients' survival¹.

Since 7 October 2023, the large-scale Israeli assault and the imposed blockade on the Gaza Strip have led to the near-total collapse of the health system, depriving thousands of patients of their right to life-saving treatment². The forced displacement has further added an additional burden on patients and their families, compelling them to leave the medical centers where they had been receiving care, which disrupted their access to the remaining limited health services. Many were also forced to reside in overcrowded shelters that fail to meet minimum health and humanitarian standards. Thalassemia patients are among the most vulnerable and marginalized groups in this context, due to their complete dependence on continuous care and the absence of locally available therapeutic alternatives.

This paper aims to review the current situation of thalassemia patients in the Gaza Strip, highlighting the scale of the humanitarian crisis that threatens their survival, and emphasizing urgent response priorities and practical recommendations to safeguard their lives and ensure their right to treatment and dignified living, in accordance with the principles of international humanitarian law and international human rights instruments.

Thalassemia Patients in the Gaza Strip

There are more than 300 thalassemia patients in the Gaza Strip, according to data from the Ministry of Health in 2019³, including around 80 children who lack the medicines and regular treatment necessary for survival⁴. These patients constitute approximately one-third of all thalassemia patients in Palestine (866 patients⁵), with the remainder residing in the West Bank. The carrier rate of the thalassemia gene in the population is estimated at around 3–4%, according to the World Health Organization⁶, making the disease a continuing genetic burden despite the implementation of a mandatory premarital screening program since 2000.



The majority of thalassemia patients in Gaza suffer from the most severe form of disease. Data indicate that 73% are affected by thalassemia major, which requires lifelong, regular blood transfusions. About 35% of patients require more than 24 transfusions per year, approximately twice a month, further increasing their complete dependence on the availability of blood units and

¹ Mayo Clinic. 6 May 2025. Thalassemia: Symptoms and Causes https://www.mayoclinic.org/diseases-conditions/thalassemia/symptoms-causes/syc-20354995

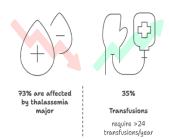
² World Health Organization (WHO). 5 May 2025 https://apps.who.int/gb/ebwha/pdf_files/WHA78/A78_13-en.pdf

³ Blood Encyclopedia. Last updated 20 December 2021 https://bloodencyclopedia.com

⁴ United Nations Office for the Coordination of Humanitarian Affairs (OCHA). 17 April 2024. https://www.ochaopt.org/ar/content/hostilities-gaza-strip-and-israel-flash-update-157

⁵ Blood Encyclopedia. Last updated 20 December 2021 <u>https://bloodencyclopedia.com</u>

⁶ Eastern Mediterranean Health Journal. Accessed 25 August 2025. https://applications.emro.who.int/EMHJ/V29/06/1020-3397-2023-2906-425-435-eng.pdf?ua=1



supportive medications. Care for these patients is concentrated in three main facilities: Al-Shifa Medical Complex, the European Hospital, and Al-Rantisi Children's Hospital, which have sustained severe damage or have repeatedly ceased operations during the war, depriving hundreds of patients of the essential treatment regimen required for their survival.

Since the outbreak of the most recent war, no fewer than 45 patients have lost their lives, including 31 who died because of treatment disruptions and malnutrition, and 14 who were

killed in attacks. It is estimated that around 244 patients are currently unable to access regular treatment or life-saving blood transfusions, reflecting the magnitude of the crisis that threatens their very survival⁸.

Medical Care for Thalassemia Patients

Before the outbreak of the war, thalassemia patients in Gaza relied on a defined medical care regimen that included regular blood transfusions to maintain normal hemoglobin levels, in addition to iron chelation therapy through essential medications to prevent complications from iron overload in the heart, liver, and endocrine glands. This care also required routine laboratory monitoring, including assessments of liver and cardiac function as well as measurements of iron stores in the body.

However, this treatment regimen has completely collapsed in the Gaza Strip since 7 October 2023. Continuous bombardment and the blockade have led to the disruption of blood transfusion services and the depletion of chelation drugs, depriving patients of the most basic elements of care. With the destruction of many hospitals and the closure of more than 80% of health centers, patients have been unable to access regular transfusion sessions, resulting in the rapid deterioration of their health and the onset of life-threatening complications such as hepatomegaly and heart failure.

Blockade and Shortages of Medicines and Blood Supplies

Since 7 October 2023, the Israeli occupation has imposed a tightened blockade on the Gaza Strip, effectively preventing the entry of medicines, including life-saving iron chelation therapies. This severe shortage has left patients with no means of managing iron overload resulting from repeated blood transfusions, placing their lives, including those of approximately 80 children, at risk of developing hemochromatosis, a serious condition that can lead to heart failure, liver fibrosis, and other fatal complications⁹.

 $^{^7}$ Interview with Friends of Thalassemia Patients Association. 08 September 2025

 $^{^8}$ Palestinian Center for Human Rights (PCHR). 10 August 2025 $\underline{\text{https://pchrgaza.org}}$

⁹ United Nations Office for the Coordination of Humanitarian Affairs (OCHA). 24 April 2024 https://www.ochaopt.org

Disruption of Essential Health Services for Thalassemia Patients

Access to regular blood transfusions is the lifeline for thalassemia patients to maintain stability in their health conditions. However, even prior to the war, the Gaza Strip was already facing chronic shortages in blood supplies and difficulties in storage due to frequent electricity outages and hospitals' reliance on limited fuel-powered generators. With the outbreak of war on 7 October 2023, the crisis escalated catastrophically; the rising number of casualties placed immense pressure on the blood bank reserves, while famine and widespread malnutrition rendered much of the population ineligible to donate. Electricity blackouts and fuel shortages further undermined the preservation of blood and its components.

According to the Director of Al-Shifa Medical Complex, approximately 10,000 units of blood and blood products were dispensed in June 2025, including 3,500 units transferred from the West Bank, with the remainder collected from donors in Gaza despite their suffering from famine and malnutrition. In addition, blood banks across the Gaza Strip, including the Central Blood Bank at Al-Shifa, sustained extensive destruction because of Israeli bombardments, leading to the loss of large quantities of stored blood and severely impairing hospitals' ability to meet patients' basic needs¹⁰.

Thalassemia patients also require continuous and reliable access to hospitals and health centers. Yet, with the destruction of more than 94% of the health system and the shutdown of most hospitals¹¹, access has become virtually impossible. Patients face immense challenges due to ongoing bombardments, the lack of transportation, and the suspension of ambulance services. While thalassemia patients typically require transfusions every three weeks, the deteriorating overall health situation and malnutrition have increased this need, making transfusions necessary roughly every two weeks¹². Furthermore, the restrictions imposed on border crossings have denied patients the possibility of accessing life-saving treatment abroad.

As a result, hundreds of patients in Gaza have been deprived of their regular transfusion sessions, leading to severe complications such as acute anemia, profound weakness, and cardiac and hepatic failure. These conditions have already claimed the lives of dozens of patients in recent months. Hemoglobin levels among patients have dropped to below 5 g/dL, compared to the previous baseline of no less than 7 g/dL^{13} , a dangerous decline that directly threatens their survival

""A unit of blood is my lifeline. Without it, I suffer from severe headaches and constant dizziness. Yet accessing it has become a real ordeal, as the continuous needs of the wounded have made blood supplies increasingly scarce." ¹⁴

¹⁰ Al Jazeera Net. 16 July 2025. When Blood Donation Becomes "a National Duty": The Crisis of Blood Units Worsens in Gaza Hospitals. Politics

¹¹World Health Organization (WHO). 22 May 2025. <u>Health system at breaking point as hostilities further intensify in Gaza, WHO warns</u>

¹² Interview with Friends of Thalassemia Patients Association. 08 September 2025.

 $^{^{\}rm 13}$ Interview with Friends of Thalassemia Patients Association. 08 September 2025.

Young Thalassemia Patient, Al Jazeera Net. <u>Thalassemia Patients in Gaza Fight for Their Lives. News</u>

The Impact of Famine on Thalassemia Patients

The suffering of thalassemia patients in the Gaza Strip has been further compounded by acute famine and widespread food insecurity. The Integrated Food Security Phase Classification (IPC) has confirmed that Gaza City is experiencing famine (Phase 5 – Catastrophe), marking the first such case in the Middle East. It is estimated that around 640,000 people are facing catastrophic famine conditions, while an additional 1.14 million people are in Emergency (Phase 4) ¹⁵.

This reality has deprived thalassemia patients of doctor-recommended foods such as white meat, fish, and fruits, exacerbating anemia, weakening immunity, and accelerating chronic complications. This dual deprivation of both treatment and adequate nutrition represents a compounded threat to patients' survival and underscores the urgent need for a response that ensures the entry of sufficient and appropriate food as an integral component of life-saving medical interventions.

Recommendations

- Ensure the urgent and sustained entry of essential medicines for the treatment of thalassemia, including iron chelation therapies, and guarantee the provision of blood units as life-saving interventions.
- Secure medical care for patients through safe humanitarian corridors that enable access to hospitals and allow for the urgent medical evacuation of critical cases outside the Gaza Strip.
- Provide psychological and social support to thalassemia patients and their families as part of an integrated humanitarian response.
- Strengthening the role of civil society organizations working with thalassemia patients and support coordination with them to ensure a more comprehensive and effective response.
- Guarantee the protection of health facilities and medical staff and ensure accountability for the occupying power's
 obstruction of patients' access to treatment.

¹⁵ Integrated Food Security Phase Classification (IPC) |22.08.2025|PC Gaza Strip Acute Food Insecurity Malnutrition July Sept2025 Special Snapshot.pdf