GREAT AGAINST CANCER

2023 REPORT

Numbers and stories from Soleterre’s Global Program
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The year 2023 has also been a relentless and frontline year. Characterized by our commitment in war. We did everything to bring peace, and instead of ending the war in Ukraine, another one erupted in the Middle East. Wars where the main victims are civilians. Where even hospitals have become targets to be struck without limits.

The war in Ukraine, in which we are directly involved in field aid operations, has hit 95% civilian targets, namely homes, schools, hospitals, offices, and fundamental infrastructure for the daily life of the non-combatant population.

In all the current war contexts, the scenes are similar: NGOs are the only ones to enter and operate among the rubble of former life, the only ones working for survival and healing wounds. To rescue children forced into hospital beds, to bring electricity where life-saving machinery risks shutting down, to provide medicines in ravaged emergency rooms. But amidst this visible destruction, the wounds are also psychological, and they will likely heal long after the physical ones.

Oncological disease puts a strain on the body and psyche of a child. Over the years, we have understood how crucial the surrounding environment is for the success of pharmacological therapies. That’s why in addition to medications, we have always prioritized improving the quality of life during and after the illness: safe and serene accommodation, psychological support for the entire family, complementary activities such as entertainment, sports, and play to preserve normalcy. We have learned that healing trauma means treating every aspect of a sick child’s intimate life.

And then this happens: “What’s the point of me getting treatment and surviving the illness if I’m then forced to live in a country at war?” asks a cancer-stricken girl to one of our psychologists in Lviv.

The absurdity of war is also told by the anti-aircraft bunker built within the garden of the new shelter home in Kyiv. A place where children should rest after a day in the hospital, not run for cover during a missile attack.

What we have done this year is also to accompany another 5,983 children with cancer and their parents. In war as in peace.

Damiano Rizzi
Soleterre President
Going through the increasingly gloomy international scenarios of recent years, between health pandemics and echoes of war in different parts of the world, Soleterre’s international program for pediatric oncology “Great against Cancer” celebrated its thirteenth anniversary of activity.

The program is aligned with the international goals outlined in 2018 by the Global Childhood Cancer Initiative launched by the World Health Organization: to reduce the number of children affected by the disease, estimated at least 400,000 each year, and to raise survival rates globally to 60% by 2030, aiming to mitigate the social disparity between the northern and southern regions of the globe. In high-income countries, where more advanced health services are generally accessible, 80% of children with cancer are cured. In low- and middle-income countries (LMICs), less than 30% are cured.

Unlike cancer in adults, the vast majority of childhood cancers have no known cause, do not appear to be attributable to environmental factors or lifestyles (the most common cancers are leukemias, brain tumors, lymphomas and solid tumors, such as neuroblastoma and Wilms tumor), although some chronic infections are particularly prevalent in LMICs, such as HIV, Epstein-Barr virus and malaria, are risk factors; while other infections, such as hepatitis B and papilloma virus, increase the chances of developing cancer as an adult.

Therefore, it is important to promote vaccination campaigns and adopt policies for the early detection and treatment of chronic infections. Most childhood cancers can be cured with generic drugs and other forms of treatment, including surgery and radiotherapy, and avoidable deaths from childhood cancer in LMICs are often caused by lack of diagnosis, misdiagnosis or delay, barriers to access to care, neglect of treatment, deaths from toxicity and relapses.

For this reason, the fight against childhood cancer also passes through health policies devoted to social justice and equity.

In this regard, in accordance with the United Nations 2030 Agenda on Sustainable Development, subsequently implemented in the Resolution on Cancer adopted by the World Health Assembly in 2017, the global goal is to “reduce premature deaths caused by non-communicable diseases by one third” (SDG 3.4).
Over the course of these thirteen years, in line with the “CURE ALL” methodological framework adopted by the WHO Global Initiative, the Soleterre programme has therefore developed an integrated approach, aimed at contributing to this global goal and guaranteeing rights and access to care and quality of life at all stages of the disease, from primary prevention, diagnosis, treatment, and long survival:

**CURE ALL**

- Health centres and care networks: promoting basic health systems for vaccination and early diagnosis
- Universal health coverage: ensuring equal access to health rights and care services
- Scientific research, technologies and essential medicines: to promote and disseminate access to the progress of the scientific community, through training and research
- Evaluation and monitoring: measuring progress in health impact
- Advocacy and access to rights for children with cancer and their families: ensuring and promoting accessible and protected social and health policies for all
- Funding dedicated specifically to the sector: direct investments and resources to local health services
- Supportive public policies: promoting health as a public good and fundamental right

During 2023, the Soleterre Program reached 32,494 beneficiaries of care, accompaniment and training services, including 2,607 children with cancer, 3,376 their families, 857 doctors, nurses and trained social-health workers, through the implementation of 15 projects activated in collaboration with 48 partner organizations (including Public Institutions, Hospitals and Non-Profit Organizations), with an investment of funds of € 1,319,274.00.

- **6,840** children, caregivers and doctors reached in 2023
- **5,983** children and parents supported in 2023
- **715** doctors, nurses and healthcare assistants trained in 2023
Since the beginning of the war in Ukraine in September 2023, the World Health Organization (WHO) has verified reports of 1,147 health attacks through its surveillance platform. This number, when compared to 18 other countries monitored in the same period, represents more than 69% of all attacks on health systems, making Ukraine one of the most affected in contemporary history. In the wake of the collapse of medical facilities and the excessive burden on the remaining hospitals and health centers, ensuring continuity of care for chronic patients has become a matter of primary importance for Soleterre.

The impact of possible multiple trauma and cancer on child mental health should not be underestimated at this particular time in history. In recent years, and again in 2023, Soleterre has experienced this directly in its work: in the war in Ukraine, on the occasion of the earthquake in Morocco last September, even before that during the Covid-19 pandemic emergency. What Soleterre is observing, in helping children, is similar to what has been reported in the literature: natural disasters, wars or health emergencies cause significant damage, destruction and disruption of the environment, human life and property. These intense and uncontrollable events pose a threat to the safety, well-being and livelihoods of the affected populations. The experience of a humanitarian disaster is linked to an elevated risk of mental disorders in the general population, such as generalized anxiety disorder (GAD), depression, substance use disorder, adjustment disorder, and post-traumatic stress disorder (PTSD).
Despite the growing awareness of the scientific community itself, the prevention and treatment of non-communicable diseases in humanitarian contexts is still a relatively neglected topic. For this reason, in 2023, Soletterre has structured its own Emergency Department, to be increasingly prepared and structured to intervene promptly, especially in the contexts of the most frequent crises in middle- and low-income countries.

Situations that lead to destruction, pain and death affect children's psychosocial development and expectations for future life. A child thrown into a situation of war and violence loses opportunities. Short-term risks include dying, injuring, becoming disabled, falling ill, being subjected to torture, kidnapping or sexual violence, and losing one or more family members.

The psychological suffering that is generated, in the long term, can persist in PTSD, post-traumatic stress disorder. Losses, disruption of one’s life cause high rates of depression and anxiety in war-affected children. Toddlers often have difficulty verbalizing their emotions, usually expressing them through restlessness, agitation, outbursts of anger, fear of the dark, sleep problems, nightmares, and fear of abandonment. They may also report physical symptoms such as headaches or gastrointestinal upset. To cope with stressful events, children need to be reassured and given plausible explanations for accommodating unpleasant and unusual events. **Soleterre stands ready for this new challenge.**
One of the assets of the CURE-ALL Approach is impact assessment. Since the first edition of this annual report, Soleterre has equipped itself with a special Monitoring and Evaluation System that has gradually been perfected over time, subjecting the various project initiatives put in place to an increasingly punctual and systematic control, starting from the methodological principles of the Theory of Change.

In recent years, the measurement tools utilized by the System have been progressively refined. By 2023, they reached a set of 50 performance and outcome indicators uniformly applied across the countries benefiting from the Programme.

As introduced in the Great Against Cancer Report 2022, the time series of recent years will also be reported in this edition for some particularly significant indicators, to account for the trend of the program’s activity in the medium term. In the following sections, these indicators will be illustrated and analyzed, articulating and aggregating them by three macro-categories:
Universality of Care and Quality of Life:
In the most fragile countries or territories, the most economically and socially vulnerable families have fewer opportunities to access health rights and services, with greater exposure to the risks of delayed diagnosis and lack of treatment. In this regard, Soleterre’s intervention provides totally free services of accommodation in its Family Homes, opened near the main treatment centers; psycho-oncological support for children but also for their caregivers; provision of financial subsidies to address expenses not covered by the public service and counteract the financial toxicity (and related exposure to extreme poverty) induced by cancer; physiotherapy rehabilitation and recreational-recreational socialization for patients and their families.

Strengthening of Health Systems and Care Networks:
In contexts with a low level of development, local public health systems are in most cases significantly inadequate in terms of infrastructure (inpatient wards, medical halls and clinics), diagnostic and surgical equipment and machinery, training of health or para-medical personnel, opportunities for study and research. Soleterre has continued to intervene with direct actions, funds, investments, development of alliances and international partnerships for development.

Advocacy and strengthening of public health policies:
Raising awareness among decision-makers on legislative initiatives in the sector, informing and engaging citizens and operators of basic services, nurturing civil society coalitions in the field of health. Even in 2023, Soleterre has continued to implement activities and initiatives aimed at promoting social rights to health publicly.
Years ago, when the Dacha - a family home - in Kyiv was a large rented building with a garden in a residential area, the neighbors made it clear we weren’t welcome in the neighborhood: “children with cancer devalue the properties around”, we were told. What else could we do but promise to provide these children with the most beautiful, bright, and welcoming home they could imagine? In the meantime, while waiting to build a new one, we not only continued to host children from all over Ukraine but did so “loudly”: a lively house, filled with festivities, dances, painters, entertainers, and slides to accompany the children’s post-therapy afternoons when their conditions allowed.

Then came the war, yet another adult affair disrupting children’s lives. And so, the construction work on the new Dacha slowed down. We were at a standstill for a year, but Zaporuka Foundation, our Ukrainian partner, never stopped negotiating with suppliers and workers, and thus, in October 2023, we managed to inaugurate it: 15 rooms and common areas including an outdoor space, as well as an anti-aircraft shelter, essential to ensure the safety of the beneficiaries in case of attacks.

Inside the welcoming home, psychological support, recreational, educational, and physiotherapy activities are offered. But this home, for the children and their families, is much more: it is an integral part of the trauma healing process for the children, who can thus feel protected in a safe and comfortable space, surrounded by their loved ones and by the psychologists and psychotherapists of Soleterre, and where they can have a semblance of “normality” and “home” even when away from their loved ones.

Zaporuka and Soleterre welcoming home, funded by Fondazione Rosa Pristina, is now the only facility in the whole of Ukraine that offers free accommodation to children with cancer and their families undergoing treatment at the two national cancer reference centers: the Cancer Institute and the Neurosurgery Institute in Kyiv, very close to the structure. The Dacha hosts those children who are admitted with the most complex diagnoses and who have no possibility of receiving treatment in their hometown. Families often face high expenses to cover the costs of travel and the subsequent food and accommodation over the long term in the capital, where the cost of living is much higher than in the provinces. The Dacha, therefore, also meets the need to alleviate these families of a significant economic and organizational burden. The staff of the house works in total synergy with the departments and their medical, nursing, and psychosocial teams.
Cancer represents a traumatic and particularly impactful experience, especially when the diagnosis occurs in childhood. To better manage the illness and treatments, it’s possible to adopt methods that help reduce the distress experienced by sick children and their parents. These methods depend on the interaction of various factors, primarily the relationship between parent and child. The quality of this bond, along with the adult’s ability to be empathetic, combined with perceived social and psychological support, can help the patient cope with a variety of emotions and moods.

Since 2012, Soleterre has been present at the Pediatric Oncology Department of the IRCCS Policlinico San Matteo in Pavia with a team of psychologists providing continuous support to young patients and their families. This intervention is of primary importance, considering that the diagnosis of childhood cancer presents significant sources of stress for families.

From clinical experience with patients, there arises the need to develop and structure a psychological assessment model that ensures a more effective approach to the families being followed. To understand how to reduce distress and increase levels of mental well-being, a study is underway involving 240 parents (single or in couples) with children aged between 3 and 18 years, receiving care at the Pediatric Oncology Departments of the Policlinico San Matteo in Pavia, the SS. Annunziata Hospital in Taranto, and the San Gerardo Hospital in Monza.

The role of attachment (a dynamic system of attitudes and behaviors contributing to the formation of the parent-child bond) and certain variables (age, gender, treatment phase, disease stage, social support, resilience) are being investigated regarding coping strategies. This entails how parents manage traumatic events or daily stressful situations, in order to evaluate how they influence the course of the illness or treatment.

For the patient, interacting with a family member, psychologist, or more generally a caregiver is a way to express fears, handle potential crisis moments, process information received from doctors, but also to discover unexpected inner resources and strengths that help manage even the most difficult phases.
UNIVERSALITY OF CARE AND QUALITY OF LIFE

The set of indicators adopted in this section aims to measure the ability to ensure that children with cancer and their families effectively exercise their right to access the best health services (universal care) regardless of their socio-economic starting conditions, according to the principle of equity in care.

The impact on improving the quality of life of sick children and their families is measured and evaluated by analyzing the results collected in 5 operational service areas specifically aimed at increasing the degree of socio-economic, mental and emotional well-being of children and their caregivers:

- **FREE RESIDENTIAL ACCOMMODATION FOR FAMILIES IN THE PROXIMITY OF PEDIATRIC ONCO-HEMATOLOGY WARDS DURING PERIODS OF CARE AND TREATMENT;**
- **ECONOMIC SUPPORT FOR FAMILIES IN CONDITIONS OF GREATER POVERTY, FOR THE MANAGEMENT OF COSTS DIRECTLY AND INDIRECTLY RELATED TO THEIR CHILDREN’S CANCER TREATMENT;**
- **PSYCHOLOGICAL AND PSYCHO-ONCOLOGICAL SUPPORT FOR SICK MINORS, CAREGIVERS AND HEALTH PERSONNEL;**
- **REHABILITATION AND PHYSIOTHERAPY TREATMENTS AIMED AT REDUCING THE NEURO-MOTOR EFFECTS OF THERAPIES;**
- **THE OFFER OF SOCIALIZATION, EDUCATION AND RECREATION SERVICES, AIMED AT GUARANTEEING CHILDREN AND ADOLESCENTS’ SPACES FOR REGULAR ATTENDANCE OF PEERS, SCHOOL CONTINUITY AND ACCESS TO PLAY.**
The reception capacity of the Family Homes, built by Soleterre to accommodate families with sick children during treatment, is now a growing added value of the Soleterre Program. The Family Homes are situated near the primary pediatric oncology and hematology wards, allowing guests to undergo day-hospital therapies and receive support in a familial environment outside the ward. This ensures they have access to emotionally supportive and secure surroundings, while also alleviating occupancy and assistance burdens within the wards.

With the new facilities becoming operational at the end of 2022, the indicators for services and benefits provided in 2023 have seen further increases compared to previous years. The comparison of results obtained over the past 7 years regarding reception activities reveals a significant increase across all analyzed indicators: number of open facilities, number of beds available, number of operators employed, number of guests welcomed, both sick minors and family members.
Series (2017-2023)

<table>
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<th>Year</th>
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<td>2018</td>
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Series (2020-2023)

<table>
<thead>
<tr>
<th>Year</th>
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<td>2020</td>
<td>53</td>
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<td>2021</td>
<td>62</td>
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<tr>
<td>2022</td>
<td>141</td>
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<td>2023</td>
<td>172</td>
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- **Ukraine**: 43 in Uganda
- **Italy**: 38 in Italy
- **Morocco**: 26 in Morocco
- **Burkina Faso**: 24 in Burkina Faso
- **Côte d’Ivoire**: 28 in Côte d’Ivoire
- **Ukraine**: 13 in Ukraine

Series (2020-2023)

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<thead>
<tr>
<th>Year</th>
<th>Number of Operators</th>
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<tr>
<td>2020</td>
<td>18</td>
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<td>31</td>
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<td>2023</td>
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Helia had just turned one when, in the summer of 2021, a series of bruises began to appear, prompting her mother to seek further investigation at the hospital in Tirana, the city where they lived. The diagnosis was clear: **Helia was suffering from a form of leukemia, for which Albanian doctors advised the family to turn to the Fondazione IRCCS Policlinico San Matteo in Pavia.**

Here, they met the psychologists and social workers of Soleterre, who not only never left them alone but also provided an apartment near the hospital for the long periods of treatment and bone marrow transplantation.

**This support was crucial in facing the side effects of treatments and the challenging hospitalizations.**

Following the transplant, Helia and her mother embarked on a gradual return to everyday life, filled with outdoor walks and interactions with other children and parents. While slowly rediscovering desire and everything seemed to be going well, unexpectedly in September 2022, Helia lost her vision in both eyes.

For her and her mother, once again, there were medical investigations and moments of despair. Fortunately, **both found relief from in-person meetings with psychologists**, and Helia also began a rehabilitation process, still ongoing, aimed at enhancing her other senses.

There have been many difficult moments in Helia’s short life, but today she attends kindergarten, has started speaking, and **is happy to be among other children.** Her mother, tired and worn out from the past few years, continues with psychological support sessions to **build the best possible future for herself and her daughter.**
Built with the contribution of the Andreotti & Brusone Philanthropy Fund and inaugurated in September 2022 in Marrakech, the House of Hope - translated from Arabic as Dar Amal - hosted 153 girls and 110 boys in 2023, along with 228 parents, from the central and southern regions of the country.

The House of Hope, co-managed by Soleterre and the local association AMAL (Association of Leukemia Patients), provided each sick child with the opportunity to sleep in one of the 13 rooms with their mother or father and offered shared spaces with educational, recreational, and social activities to alleviate the burden and fatigue due to chemotherapy cycles carried out at the Mohamed V Hospital in Marrakech, a reference point for the central-southern Morocco region, which includes a third of the country’s population.

Not even during the magnitude 6.8 earthquake that devastated Marrakech and the High Atlas Mountains on the night of September 8 did the house cease its activities.

The educators and psychologists of the house were always by the side of the children and their families, increasing the moments of psychosocial support due to the strong trauma suffered.

The house did suffer damage, especially to the walls of some rooms, but after some minor interventions, it returned to normal. The staff managing the house, including social workers and drivers, continued tirelessly to act as intermediaries between the hospital ward and the families, organizing visits and taking the children to therapy appointments.

A continuous synergy that allowed all children in treatment to never interrupt the path started for cancer care.

Our knowledge of the Moroccan territory enabled us to do more for the ongoing national emergency: we reached the most remote villages affected by the earthquake and rescued 49 children with cancer and 6 adult oncology patients (and 68 accompanying individuals) so they could continue treatment in Marrakech, despite the impassable roads and many of them losing everything. We also activated an emergency psychology service for the traumatized population affected by family losses: 3 support caravans with local and international staff were sent to some of the hardest-hit villages (Tinghir, Boulmame, Dades, Amsemrir).

Financial support was also provided to families who lost their homes, businesses, and belongings due to the collapses.
It is customary among industry insiders to speak of the “financial toxicity of cancer”. Even in the population followed by Soleterre, the disease often affects families that are already tried and exacerbates pre-existing economic precariousness, with increases in both direct costs (for transport, food and lodging far from home, unguaranteed health expenses, health migration, etc.), and indirect (for the loss of a job due to the need to follow the sick family member).

The indicators show the value of personalised economic support activated in favour of patients in the face of extraordinary or particularly critical circumstances of poverty or family hardship, which put at risk the very possibility of accessing care.

134,828€

- 52,408€ in Ukraine
- 48,330€ in Italy
- 11,500€ in Uganda
- 9,980€ in Côte d’Ivoire
- 9,610€ in Burkina Faso
- 3,000€ in Morocco
Hlib, a lively three-year-old boy, is like a cheerful bell ringing, bringing with him a sweetness that leaves an indelible impression on the heart of anyone who has visited the Dacha, the welcoming home in Kiev built by Zaporuka with the support of Soleterre and Fondazione Rosa Pristina. Hlib is full of love, and his eyes sparkle with joy, a light that never fades despite the difficulties and challenges he faces from such a young age.

With the onset of large-scale war in February 2022, due to the constant threat of Russian missile attacks, Hlib and his mother had to leave their home in Zaporizhia to find a safe place in Europe. Soon after, Hlib began experiencing unusual pains accompanied by strange symptoms, but the city where they had found refuge lacked high-quality diagnostics to better understand what was happening. So, in the summer of 2023, the family returned to Zaporizhia, Ukraine. There, they received terrible news: Hlib was suffering from hepatoblastoma, a liver tumor that affects children.

It was a terrible shock for everyone. As soon as possible, the parents decided to move to Kyiv, so that their son could be treated at the pediatric department of the National Cancer Institute in the capital. There, Hlib underwent a very delicate surgical procedure, and fortunately, the tumor was successfully removed. Now that Hlib has started chemotherapy, for the duration of the treatments at the Institute, the little patient will be accommodated free of charge with his mother and grandmother at the Dacha where, in the warm embrace of his family, he will be surrounded by new friends and caregivers who will take care of him and his parents. In fact, like other guest families at the Dacha, they will live in a comfortable room all to themselves, with everything they need to truly feel at home.

Since the outbreak of the war, medications and constantly required consumables for the child's hospital treatment (such as catheters, special adhesives, patches, anti-nausea medications, and various types of dressings) are not always provided on time to public facilities. Soleterre and Zaporuka are also committed to purchasing chemotherapy treatments, for a comprehensive welcome experience.
Psychological support is increasingly recognized in the medical-scientific field as a fundamental and decisive component in cancer treatment. This recognition has led to the specialization of a discipline known as “psycho-oncology”. This form of support has a positive impact on patients’ response skills and resilience; on the determination of caregivers in their care commitments and in reducing cases of abandonment of care; in general, in improving the quality of life.

In relation to psycho-oncological support activities, the results of the program on an international scale show a further increase in 2023 compared to past years. At the end of the year, in fact, there is the highest number of psychological support sessions carried out over the last 7 years, with a more equitable distribution (the numbers drop slightly in European countries but increase in almost all non-European countries).
Support sessions with sick children
Support sessions with family members
Support sessions with health personnel and operators

Series (2017-2023):

Support sessions with sick children
- 6,008
- Italy: 2,890
- Côte d’Ivoire: 1,512
- Ukraine: 1,297
- Uganda: 167
- Morocco: 138
- Poland: 4

Support sessions with family members
- 5,964
- Italy: 2,649
- Côte d’Ivoire: 1,512
- Ukraine: 1,147
- Uganda: 468
- Morocco: 120
- Poland: 5

Support sessions with health personnel and operators
- 388
- Italy: 284
- Ukraine: 52
- Uganda: 47
- Morocco: 5

Series (2019-2023):

Support sessions with sick children
- 4,006
- Italy: 2,053
- Côte d’Ivoire: 1,023
- Ukraine: 810
- Morocco: 63
- Poland: 4

Support sessions with family members
- 4,661
- Italy: 2,330
- Côte d’Ivoire: 1,160
- Ukraine: 890
- Morocco: 63
- Poland: 5

Support sessions with health personnel and operators
- 388
- Italy: 284
- Ukraine: 52
- Uganda: 47
- Morocco: 5

Frequently, when surgery is required, it can lead to motor or neurological effects necessitating rehabilitation treatment to facilitate the restoration of previous functions, such as in cases involving amputations and prosthetic grafts. The indicator shows the size of the rehabilitation, physiotherapy and follow-up services guaranteed by Soleterre, through which the beneficiary minors can recover, totally or partially, the compromised neuro-motor skills. Rehabilitation and physiotherapy interventions are currently focused solely in Ukraine, whereas in Uganda, complementary interventions involve follow-up actions on treated cases aimed at preventing and reducing instances of treatment abandonment.

**COMPLEMENTARY INTERVENTIONS:**

**REHABILITATION, PHYSIOTHERAPY AND FOLLOW-UP**

- **353** interventions carried out
- **296** in Ukraine
- **57** in Uganda
- **374** beneficiaries reached
- **355** in Uganda
- **19** in Ukraine

**ALINA’S STRENGTH**

Alina was only 15 years old when she discovered she had osteosarcoma in the femur of her left leg. School, dance, volleyball, and other daily activities had to make way for medical therapies and treatments. The diseased bone needed to be replaced with one from a healthy donor through a complicated surgical intervention that didn’t guarantee Alina would be able to walk normally again. Despite being determined to get back on her feet, Alina was very worried, but the presence of Petro, her boyfriend, in her recovery journey allowed her to achieve remarkable results in a short time. Petro actively participated in Alina’s rehabilitation, carefully observing the exercises, interacting with the physiotherapist to correctly perform various manipulations, and ensuring that Alina followed all instructions to the letter. In this way, he became an essential member of her rehabilitation team.

Despite Petro’s fundamental help, Alina had to face numerous obstacles. Initially, the knee flexion capacity was limited to 50 degrees, tending to collapse inward. Yet, one week after the operation, Alina managed to stand steadily. Over time, thanks to constant rehabilitation, she made further progress walking with crutches and supporting the entire weight of the operated limb. Slowly, the knee flexion also increased. These improvements strengthened Alina’s confidence in the effectiveness of her rehabilitation journey. After four months, the results were even more evident: Alina’s knee had reached increasingly higher flexibility, allowing her to walk without the help of crutches or other supports.

Even the doctors admitted they had never witnessed such a recovery in their careers. The girl’s determination to continue with commitment and dedication was her salvation. Determined not to allow others’ looks to influence her decisions or deprive her of the passions she loves, recently Alina has also resumed wearing her favorite shorts. As she emphasizes herself, “I don’t want anything to prevent me from enjoying what I love,” demonstrating her strong will to live without restrictions. Alina also commits to sharing her experience with other children and teenagers in similar situations. She explains how she managed to overcome skepticism towards the physical rehabilitation process, often boring and painful: “These exercises represent the only chance to regain what we have lost. However, they only work if you truly believe in them and commit yourself wholeheartedly.” With these words, Alina motivates others to pursue their healing journey with the same strength and conviction that characterized hers.
SOCIALIZATION AND RECREATION

The indicator quantifies a range of social, educational, and recreational activities aimed at facilitating relational and educational experiences for both sick children and adolescents (including studying, playing, and engaging in art) as well as for their parents. These activities provide valuable opportunities for both groups to find moments of serenity and courage, helping them overcome fear and loneliness during prolonged hospitalization and treatment.

67 active volunteers
- 51 in Ukraine
- 13 in Italy
- 1 in Morocco
- 1 in Burkina Faso
- 1 in Côte d’Ivoire

965 activities carried out
- 480 in Burkina Faso
- 240 in Italy
- 156 in Côte d’Ivoire
- 88 in Ukraine
- 1 in Morocco

Series (2020-2023)
426 minor beneficiaries
- 172 in Italy
- 112 in Burkina Faso
- 75 in Côte d’Ivoire
- 63 in Ukraine
- 4 in Morocco

443 family members
- 227 in Italy
- 96 in Burkina Faso
- 75 in Côte d’Ivoire
- 41 in Ukraine
- 4 in Morocco
HEALTH CENTERS AND CARE NETWORKS

The second set of indicators aims to measure the scope and impact of strengthening local public health systems. This objective is pursued through structural support provided to peripheral health centers for pediatric vaccination plans and initial diagnostic services, as well as to specialized pediatric oncology and hematology departments for specialized treatments. This support is made possible through developed cooperation and funds invested in various countries to benefit public health institutions, particularly hospitals and health services.

For structural support to be effective, it must be accompanied by investment in the skills of medical and healthcare personnel, providing opportunities for study and scientific updates. The indicators enable monitoring of the breadth of beneficiaries reached through training activities provided by Soleterre. These activities include professional and specialized updating interventions aimed at health and social-health personnel at various levels involved in the diagnosis and treatment process of children and their families. Furthermore, there is the possibility of promoting or supporting research initiatives, including multicentric ones, among institutions of excellence on a transnational scale.

The impact on strengthening the provision of care is primarily measured by analyzing results achieved in three operational areas directly related to the medical-clinical sphere:

1- Infrastructural support and the provision of medical equipment to public health departments and centres;

27 health centres supported

- 13 in Ukraine
- 7 in Uganda
- 2 in Côte d’Ivoire
- 2 in Burkina Faso
- 2 in Italy
- 1 in Morocco

25.634 users of health centres supported

- 14,400 in Italy
- 9,870 in Uganda
- 680 in Ukraine
- 300 in Morocco
- 253 in Côte d’Ivoire
- 131 in Burkina Faso
€ 1,319,217,00 total funds disbursed by the programme in 2023

- Shelters: € 516,965,00
- Strengthening of Health Centres: € 270,725,00
- Psycho-oncological Service: € 234,132,00
- Economic aid to families: € 134,828,00
- Research: € 72,729,00
- Doctors' training: € 37,209,00
- Complementary care: € 28,164,00
- Socialization and Recreation: € 24,519,00

2 - The specialized training of doctors and health personnel, at various levels involved in the diagnosis and treatment of pediatric cancer:

- 30 training initiatives provided
  - 24 in Côte d'Ivoire
  - 5 in Italy
  - 1 in Uganda

- 715 doctors, nurses and social and health workers trained
  - 510 in Côte d'Ivoire
  - 202 in Italy
  - 3 in Uganda

3 - Research aimed at identifying and developing new treatment or treatment opportunities in the field of childhood cancer:

- 4 participatory research projects
  - 3 in Italy
  - 1 in Uganda

- 4 activated researchers
  - 4 in Italy

- 1 publications
  - 1 in Italy
Especially in adolescence, a stage of development in which children are already facing various developmental challenges, a cancer diagnosis is a highly traumatic event. The effect of the disease is visible in terms of psychopathological disorders, difficulties with respect to identity construction, with particular emphasis on body image, and quality of relationships with peers and adults of reference.

Assessing the psychological conditions of young people with oncological patients in order to identify who needs intervention the most and which areas to focus on (post-traumatic symptoms, anxiety, depression, problems related to the image of the body self), is the goal of the first multicenter study of Soleterre conducted in Italy, at the San Matteo Polyclinic in Pavia, and in Uganda at the pediatric oncological hematology department of St. Mary's Hospital Lacor in Gulu.

To identify the degree of physical and psychological well-being, the symptoms of trauma, the level of psychopathology, the centrality of the illness and the adequacy of relationships with parents, friends and teachers, self-report psychological tests were administered. In the comparison between the two groups, an attempt was then made to evaluate whether cultural belonging could in some way impact on the outcomes of the pathology. Statistical surveys comparing the Italian and Ugandan samples showed significant differences.

The results obtained via the Centrality of Event Scale (CES) confirmed that cancer plays a significant role in shaping identity, with younger subjects experiencing a deeper impact. The construction of identity, interrupted by the isolation and alienation linked to illness, has exacerbated crises related to the construction of oneself. Relationships with parents, teachers, and peers, investigated thanks to the Trauma Relationship Inventory (TRI), were also negatively affected, with low scores indicating inadequacy. The isolation resulting from cancer treatment affects social and emotional well-being, hindering the development of affective and relational skills in adolescents.

Overall, Italian adolescents scored higher in anxiety, depression, somatic disorders and aggressive behavior (YSR) and depression and post-traumatic stress disorder (TSCC). These differences can be attributed to cultural influences. Ugandans tend to inhibit expressions of discomfort and show a lower perception of well-being, especially in family, friends, leisure and school size.
The battery of indicators is aimed at measuring the **ability to impact on the knowledge and application of health and social rights of children with cancer and their parents**, in order to promote and stimulate public policies of protection and support. The fields monitored and investigated therefore refer to:

- **public information and awareness-raising activities on childhood cancer**, to promote early diagnosis and guarantee rights and equity in access to care for children and families;
- **public initiatives aimed at paying attention to and supporting** the conditions of care, well-being and quality of life of children with cancer and their families, through the awareness and commitment of national governments, international agencies and local authorities.

### Website visits

**In 2023**

- **511,160**
  - **340,976** in Italy
  - **120,184** in Morocco
  - **50,000** in Ukraine

### Website visitors

**In 2023**

- **208,888**
  - **136,772** in Italy
  - **40,000** in Ukraine
  - **32,116** in Morocco
**Newsletter readers**

- **2023:** 43,066
  - 40,566 in Italy
  - 2,500 in Ukraine

- **2022:** 40,000
  - in Italy

**Social media users**

- **2023:** 131,129
  - 125,859 in Italy
  - 5,270 in Morocco

**Public communication events**

- **2023:** 406
  - 220 in Ukraine
  - 122 in Italy
  - 40 in Uganda
  - 24 in Côte d’Ivoire

**People informed in offline meetings**

- **2023:** 11,229
  - 2,000 in Ukraine
  - 6,740 in Uganda
  - 1,741 in Italy
  - 748 in Côte d’Ivoire
GREAT AGAINST CANCER

2023 REPORT

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GRANDE CONTRO IL CANCRO

International Ethics and Scientific Committee

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