

LONG-TERM CANCER SURVIVORS: CONCERNS AND UPDATES

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ABSTRACT

During the Conference on Cancer Long-term Survivors, held in Siracusa (Italy) on September 16, 2022, Oncologists, General Practitioners, Epidemiologists, Hematologists, Pediatric Oncologists, Nurses, Industry Medical Affairs and Patients' Advocates came together to discuss the clinical implications of the condition beyond acute cancer.

The debate was based both on the current literature on this topic, and on the opinion of all participants. Specifically, numerous issues were discussed in the round tables, but focused mainly on the following topics:

- REASONS FOR SUCCESS IN IMPROVING SURVIVAL RATES
- REHABILITATION
- LONG-TERM SURVEILLANCE
- PEDIATRIC AND YOUNG ADULT ISSUES
- SOCIAL, FINANCIAL AND INSURANCE ISSUES

This Opinion Paper aims to stimulate a suitable support to the growing population of people cancer disease free or with long-term or late effects. The development of new models can promote actions towards the elimination of obstacles and difficulties in cancer survivorship care.

KEY WORDS

KEY WORDS: LIFE BEYOND CANCER, CANCER REHABILITATION, LONG-TERM SURVEILLANCE, SOCIAL ISSUES, FINANCIAL ISSUES, INSURANCE ISSUES, CHILDHOOD CANCER.

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INTRODUCTION

The growing number of persons living with a history of cancer, and the facility with which modern technology allows us to communicate our thoughts, feelings, and experiences, has also meant that we have stopped viewing cancer in a purely clinical sense and have begun to develop an awareness of the human being behind the disease. More often than not, those who receive a diagnosis of cancer now no longer ask themselves how long they have to live, but rather how well they can expect to live from that moment onward. This shift in thinking from *data and figures* about cancer to the *life beyond cancer* has led, in recent years, to a notable increase in research on this huge field of cancer survivorship. Yet despite the growing body of scientific literature on cancer survivorship, many questions remain regarding how to assess, treat, and prevent survivorship-related problems. Indeed, the complex array of potential risks, problems, and long-term effects cancer survivors face, and the methods to control them, are just beginning to be explored and understood.¹

The number of persons living with a history of cancer and no evidence of active disease (NED) is steadily increasing and is one of the most gratifying aspects for health care providers dealing with both solid and hematologic malignancies.² Every day we can say that we manage to snatch a few more patients from the negative outlook that cancer brings. Haematological malignancies have long boasted a significant percentage of NED patients, and now some diseases can be treated without chemotherapy but only with the use of biologic drugs. A typical example is Acute Promyelocyte Leukemia, that used to be called *fulminant leukemia* and now has very high 5-year survival rates with the combination of Arsenic and Retinoic Acid without chemotherapy.³

Also, in the area of solid tumors there is no shortage of new examples of NED as well as in the area of tumors that are still considered *big killers* such as lung cancer.⁴ In several European countries about 5% of individuals are living >5 years from cancer diagnosis (e.g., 3.6 million in Italy, 5.8%)⁵ and it is estimated that such percentage grows approximately 3% per year.⁵⁻⁷

There are some groups of patients who, more often than not, achieve very high rates of disease-free survival (e.g., testicular or papillary thyroid carcinomas, colorectal cancer (50-60%), cervix uteri cancer (60-75%), Hodgkin's lymphoma (80%), childhood cancers).⁸

The current literature highlights that patients with the same life expectancy as the general population⁹⁻¹² present equal clinical implications.¹³⁻¹⁵

Reasons for success in improving survival rates

Among the factors that contributing to this success, a key role is exerted by the prevention and screening campaigns that make it possible to identify early-stage disease that can be treated more successfully than an advanced ones.¹⁶

Another important key role is played by the multidisciplinary team, which plans tailor-made treatments to address all the clinical characteristics of the disease. The formation of this team represents a milestone for the achievement of a successful treatment, which involves not only the oncologist, surgeon, pathologist, cytogeneticist, molecular biologist, laboratory technician, and radiologist but also the cardiologist oncologist, pain therapist, nephrologist, hepatologist, pharmacologist, etc. who can bring specific knowledge and skills for personalized care planning and side effect management.

From this point of view, the Cancer Center represents the clinical institution to gather and coordinate all these specialists for treating cancer and improving survival rates.¹⁷

The independent non-profit research, with both local and national cooperative groups, has played a key role in advancing knowledge and practice. This progress has allowed many groups to achieve advanced quality standards of care, and to nationwide extend them dramatically increasing the number of NED people. Furthermore, these cooperative groups have allowed to adopt the methodology for prospective clinical trials in accordance with the European directives.^{18,19}

The research for profit supported by pharmaceutical companies has also produced a significant contribution which has allowed not only the development and clinical use of new drugs and technologies, but has also contributed to spreading the culture of the responsible use of new drugs. Today there are more and more examples of collaboration and joint ventures between industry and academia with a strong potential for positive synergy to achieve increasingly important goals in research and practice.²⁰

The successful results in cancer care have increasingly focused international attention on the unique care needs of cancer survivors, with proposals to implement Survivorship Care Plans (SCPs) by building new and more flexible models of care to meet these issues. However, to date, as far as we know, the clinical evidence regarding the use of SCPs, still needs to be improved, and there are difficulties and delays in their adoption and delivery in the Public Health Systems. In the worldwide scientific community, the requirement to develop and apply exclusive and targeted programs addressed to people NED or with chronic disease, represents a current goal to be achieved timely for a best treatment and recovery of these people.¹⁵

Rehabilitation

Rehabilitation, one of the pillars of the continuum of care, until the 1970s was almost restricted to treating the treatment of cardiovascular diseases, physical disabilities, and brain/spinal cord injuries.²¹ Since then, cancer research and practice advances have led to a new field of rehabilitation, not yet fully explored, to meet the rehabilitation needs of people with cancer or survivors: Cancer Rehabilitation. The growing life expectancy and even the deeper understanding of the early and late effects of the disease, resulted in a substantial change in the rehab model, by a momentous transition from Rehabilitation Organ/Apparatus Oriented to Comprehensive Rehabilitation.

J.K. Silver summarizes the new model as "*medical care that should be integrated throughout the oncology care continuum, and delivered by trained rehabilitation professionals who have it within their scope of practice to diagnose and treat patients' physical, psychological and cognitive impairments in an effort to maintain or restore function, reduce symptom burden, maximize independence and improve quality of life in this medically complex population*".²²

This transition included major changes based on the increasingly in-depth study of long-term cancer survivors, disease free or with chronic disease, but affected by impairments caused by both cancer itself and cancer treatment.²³⁻²⁶

Throughout the cancer trajectory, patients may experience symptoms and sequelae such as pain, cancer-related fatigue, lymphedema, breathing difficulties, mental and psychological problems, cognitive disorders, swallowing disorders, speech impairments, motor paralysis, bones fractures, central or peri-

pheral neuropathies, etc. that limit the daily living activities, resulting in lowered QoL.²⁷ This is the reason why Comprehensive Rehabilitation plays a role in all disease stages, from prevention and functional recovery, to maintenance of cancer patients' functions in the time that they have left, and the period of palliative care too.²⁸

The major change is related to Comprehensive Rehabilitation not only oriented to the organ/apparatus affected by the disease, and involving the whole person throughout the cancer experience. A holistic taking in charge of this medically complex population, where rehabilitation plans must treat the patients' impairments, in an effort to maintain or restore function, reduce symptom burden, maximize independence and improve quality of life.²⁸

The second one is represented by the Rehabilitation team, should be multidisciplinary. Rehab assessment and treatment should be provided under the guidance of a clinical oncologist and a rehabilitation physician by a team consisting of a physical therapist, occupational therapist, speech therapist, nurse, and medical social worker as core members, together with various other professionals to deal with specific problems to cancer patients. Furthermore, the caregiver, family member or reference person involved in taking charge of the disabled person to manage his current and future problems, is fully included.^{21,28}

The third one is represented by the Rehabilitation timing integrated into the cancer continuum, from diagnosis to end of life:

- **preventive or prehabilitation**, at the diagnosis, to decrease the effects of the expected disabilities, and improve the patient's physical functioning;
- **restorative**, during the treatment, to return patients to the previous levels of physical, psychological, social and vocational functioning;
- **supportive**, at the recurrence/metastasis time, to minimize debilitating changes resulting from ongoing disease;
- **palliative**, at the end of life, to minimize complications and provide comfort and support.²⁸

WHO estimates that globally in 2018 there were >18 million new cancer cases, requiring a tremendous need for acute care and long-term rehabilitation.²⁹⁻³⁰ The benefits of cancer rehabilitation have been consistently demonstrated to restore or maintain function and quality of life.³¹⁻³² Despite the benefits, rehabilitation services remain disappointingly unavailable and underutilized.³³ While more than 50% of all adult cancer survivors and approximately two-thirds of breast cancer survivors report at least 1 long-term cancer-related issue, only about 1% to 2% receive treatment for those disorders.³⁴⁻³⁶

In the recent Health Policy Guidelines for the European Member States, defined within the European CanCon Project (Cancer Control; a Joint Action between the European Commission and Member States to standardize cancer control, from Prevention, to Survivorship, Rehabilitation and End-of-Life Care) and published at the end of February 2017, cancer rehabilitation is included in Recommendation #13 as below, with the aim to develop National Cancer Rehabilitation and Survivorship Policies, underpinned by an equity perspective:

“Rehabilitation is a key component to ensure that cancer survivors have the best chance of returning to a normal life. Rehabilitation must be understood to include not only physical rehabilitation, but also psychological, cognitive, sexual, spiritual and

*professional rehabilitation. These principles must be enshrined in every National Cancer Control Plan in the form of Survivorship Care Plans to ensure the fullest possible recovery of all cancer survivors. This is especially important for those in situations of social vulnerability, because they face greater challenges in terms of access to care and health behaviors.”*³⁷

However, these guidelines are mostly still disregarded, and a great heterogeneity exists in cancer rehabilitation plans among European Countries. In particular, differences exist in the rehab timing, in the presence/absence of a national unified care model, and in dedicated or generic services and plans.³⁸

Cancer Rehabilitation is both a challenge and an opportunity. The first challenge is obtaining information on cancer rehabilitation for all countries worldwide, which could have been useful to define a more detailed and complete view, enabling comparisons and collaborations. The greatest challenge seems to be ensuring equal access to rehabilitation for all people, regardless of the organizational differences and of the proximity to the most specialized Oncology hospitals.³⁸ Closely connected to the previous one, it is the challenge to offer a multidisciplinary rehabilitation responsive to the different needs of each patient with the opportunity to maximize the chances of restoring cancer patients' pre-illness comprehensive functioning or at least to get as close to it as possible. Finally, creating a culture of long-term survivorship requires also requires a culture of rehabilitation. It is possible that people with a previous cancer history are not aware of their rehabilitative needs, because they cannot identify them or they are not aware of possible interventions to improve impaired functions; mis-information regarding the rehabilitative offer may represent the first obstacle to access.³⁸

Surveillance

The Surveillance Programs (SPs) will assume a wider and more comprehensive profile, multidisciplinary and multidimensional, aimed at the early detection of disease recurrences and the second tumour onset. These programs identify late effects of treatments and/or comorbidities, promote adequate lifestyles, to give answers to psychosocial needs to prevent economic sequelae and disparities (*the right to be forgotten*)³⁹.

The first step in SPs planning is the adherence to categorization of the included patients. Indeed, the individual needs should be fitted with the effective differences among the various clinical contexts. As for the adoption of a precision medicine standards for the acute phase treatments, the SPs should be adapted to the categorising the long-term survivors, by individualizing the pattern of diagnostic and interventional procedures⁴⁰. On this theoretical basis, for every relapse risk category it should be identified a suitable clinical strategy carried out by different care providers: the high-risk survivors should be followed by the cancer specialist, while the low-risk survivors by the general practitioner⁴¹.

It's well recognized that the General Practitioner (GP) represents the “connecting ring” between the specialistic cures released in the hospital and the long-term follow-up, becoming the principal case-manager. The GPs' compliance and expertise represent critical points, and the Specialists' effort to communicate and share the clinical knowledge about each patient.

In searching for really shared SPs, a self-criticism should be the starting point to implement the surveillance mentioned above, as a real cultural breakthrough that requires maximum engagement⁴².

So far, the optimal model of SP has not been identified and

validated yet, even if we should refer to some crucial operative points such as³⁹⁻⁴³:

- a. realising a “Survivorship Care Plan” which designs the steps to be followed, tailored to the medical history of the single patient, with the aim to implement the continuity of care between specialist cancer care and primary care;
- b. delocalize the specific skills from hospitals to the community;
- c. identifying a coordinator role that could manage the patient’s journey, avoiding unnecessary and often expensive diagnostic and therapeutical procedures by giving “the right choice at the right time”.

We urgently need the definition of Cancer Surveillance Guidelines, shared and undersigned by Oncologists and GPs Society, that address mode and timing of clinical controls of long living patients, based on their comprehensive categorization/characterization.

Paediatric issues

In recent decades, as a result of the growing successes achieved in paediatric oncology, survival >5 years after paediatric cancer is estimated to be >85%. In Italy almost 50,000 childhood cancer individuals -median age 29 years- are now living, and each year about 1,200 new long-term survivors are added to this population.⁴⁴

Many childhood cancer survivors (CCS) are at greater risk of early mortality and/or a higher incidence of chronic health conditions than expected than their peers in the general population. These sequelae can severely affect the quality and expectancy of life. The risk increases with age and depends on the type and dose of treatments received as well as the type and localization of the original tumour. Individual genetic susceptibility and/or lifestyle can further modify the extent of this risk.

A few years ago, the paediatric community issued the so called “Erice Statement” about the concept of a cure for after childhood cancer. The statement, at its first point reads: *“Cure’ refers to cure from the original cancer, regardless of any potential for, or presence of, remaining disabilities or side effects of treatment. These side effects are a separate issue needing tailored long-term follow-up based upon subject-specific and treatment-related risk factors. The term ‘cured’ should be used when discussing the survivors’ status with them and in the larger society; vice versa, the term ‘long-term survivor’ should continue to be used in scientific research and related literature to alert professionals to sequelae which require care and attention”.*

“It is not possible to provide an exact definition of cure that applies to all cancers. For the purpose of this document, in the context of childhood cancer survivorship, the group agreed on the use of the following concept of cure. Cure after cancer during childhood refers only to the original disease regardless of any potential for, or presence of, disabilities or side effects of treatment. Children who have been treated for cancer can be considered cured when they have reached a time point at which the chance that they will die from their original disease is no greater than that of age peers in the general population of dying from any cause”⁴⁵.

The International Guideline Harmonization Group (IGHG; www.ighg.org) is conducting systematic literature reviews in order to develop evidence-based guidelines addressing several long-term toxicities that could affect different organs or systems.

Each recommendation indicates:

- I. who needs surveillance (is at risk) for the given complication;
- II. what surveillance modality should be used;
- III. when and at what age or time should surveillance be initiated (and discontinued, if applicable),
- IV. at what frequency should surveillance should be performed,
- V. what to do If abnormalities are identified.

In parallel, the EU-funded PanCareFollowUp (PCFU; <https://pancarefollowup.eu/>) project has recently developed consensus-based recommendations for those topics not yet addressed by the evidence-based methodology. A total of 41 recommendations for screening of as many possible organs/systems at risk are now available⁴⁶⁻⁴⁷.

The paediatric community in Italy and a few European countries adopted the Survivorship Passport (SurPass) (<http://www.survivorshippassport.org/>) which is a document available both in digital and in paper. After completing the care summary of each former patient, built in algorithms, the treatment exposures are correlate to the risk factors identified by IGHG or PCFU guidelines, thus giving a preliminary individualized care plan to be discussed and approved by the treating physician after a shared decision with the survivor. This process eventually constitute a detailed risk-based follow-up care plan that the survivor may share with his/her general practitioner (GP) or local hospital. The SurPass may be considered as a proof of concept of the EU announced Cancer Survivor Smart Card which will be developed in the incoming years.

The continuous care of the childhood cancer survivor might not involve a simple transfer to the adult equivalent of their paediatric oncologist; especially when the risk of recurrence of the original cancer is minimal or even null. The transition to adult care could need the involvement of health professionals from several specialities, such as endocrinology and cardiology, who could not have the prior knowledge or experience in caring for young cancer survivors. Specialized long-term follow-up clinics are the suitable solution to this in the framework of a coordinated plan involving GPs, local hospitals or tertiary care hospitals based on the complexity of actual or potential late sequelae⁴⁸.

Besides possible medical problems, CCS may also face some social issues as discrimination at school or in the workplace. There are reports about leukaemia survivors being refused their application for driving license *“because of history of hematologic disorder”* or job applications because of their cancer history. Based on the World Health Organisation (WHO) approved ICF (International Classification of Functioning) (www.who.int/classifications/icf; www.rehab-scales.org); it is possible to document the personal fitness to a particular job, thus impeding possible discrimination from employer. In this framework the so called *right to be forgotten* should apply to all survivors in order to enforce a societal concept of cure.

Last but not least, several survivors may also need a long-term rehabilitation program. Most at risk are survivors treated for a Central nervous system tumour and/or with radiation therapy directly involving the CNS. These patients may face neurocognitive and neurologic problems early in life which may also affect their long term quality of life. Similarly long-term rehabilitation should also be considered for those survivors treated for bone tumours which might have required either limb amputation or prosthesis insertion as well high dose radiotherapy on a growing skeleton.

However, it is important to recognise that for some survi-

vors, the cancer experience can be perceived to have positive consequences. Childhood Adolescent and Young Adult cancer Survivors (CAYACS) may feel they have benefited through self-growth, an awareness of their resilience and an increased appreciation for life as a result of their cancer experience.

Social, financial and insurance issues

For various types of cancer, the criteria debate that makes it possible to define a cancer patient as cured is very topical; in principle, it is believed that we may define as cured a patient who, in the absence of any sign of recurrence or persistence of his tumour, expresses the same life expectancy as a subject who has never suffered from a neoplastic disease of the same age and gender⁴⁹.

The application of this criterion would make it possible to define a significant proportion of cancer survivors as cured; despite this, there are numerous dynamics within our society that tend to discriminate against them, preventing them or limiting their access to credit, private insurance instruments, job maintenance or career progression and even the fulfilment of the desire for parenthood.

Another sensitive issue is the recognition of the right to parenthood through the instrument of adoption; the Italian legal system obviously does not preclude cancer patients from accessing adoption procedures, but the absence in the regulatory framework of precise references to how to define the status of "cured patient" leaves excessive discretion to individual cases, unfortunately fuelling discriminatory situations. There is therefore a need to provide the judge and the experts called to rule in these cases with tools that make it possible to classify the degree of probability of definitive recovery of individual patients in relation to their history of the disease, guaranteeing access to adoption procedures and at the same time protecting the interests of the child.

Finally, it would not be possible to complete these brief considerations without underlining the discomforts that cured cancer patients face in the process of reintegration into work, as far as adults are concerned, and in their school and training courses for the youngest; while for the former there is a strong need to remodel and optimise some of the tools for protecting the role and productivity, for the latter the adoption of support tools in the school path that contribute to taking charge of them in a truly holistic manner is of absolute priority. The healed paediatric cancer patient often requires differentiated paths that cultivate the different modes of neurocognitive and affective development of him/herself and preserve his/her capacity for growth and achieve a full personal and professional affirmation.

The recommendations of the European Community to align with the best practices already existing and the now reached maturity of the awareness of the issues related to cancer survivorship by the Italian society are too tempting opportunities not to try to contemplate all the aspects already mentioned in a single law, which embraces all the different aspects and in all its forms⁵⁰.

Europe is now witnessing a tremendous increase in survival and better outcomes for patients with cancer, approximately 3% annually, representing more than 5% of the overall population in several countries¹². In addition, a large proportion of people living after a cancer diagnosis (i.e. 24% of cancer patients in Italy⁵¹ and 29% in the USA⁷) are alive after 15 years or more since diagnosis. However, returning to get back to an appropriate quality of life for former patients may prove to be a neglected issue. Cancer survivors across Europe are experiencing several obstacles, particularly when looking

for access to financial services, such as mortgages, loans and life insurances⁵²⁻⁵³. Bankers and insurers have difficulties assessing the risks associated with such a complex disease and its risk of relapse and are still not convinced by the notion of "cure". People can experience such financial penalties long after their cancer treatment.

The return to a normal life also involves new projects, and therefore these cancer survivors need to be insured without being penalised. We know there is a large financial burden for people as they go through treatment, with significant new costs and a loss in income associated with time off work. However, after cancer treatment, people also face other challenges, be it difficulties in returning to work, or in accessing financial products or services (such as insurance and loans) or in accessing the adoption procedures. Just imagine how important is the dream of forming a family through an adoption for people who lost the chance to procreate as they have not had the time or the opportunity to preserve their fertility before starting treatment.

The lack of specific criteria uniformly applied by private actors contributes to generating a fragmented assessment practice, mainly self-regulated by the same companies, including reinsurance companies, with a need for more transparency and monitoring control. In this regard, further studies and investigation should be performed to investigate the impact of those denials as indirect issues connected to the financial stress faced by cancer survivors and their families⁵⁴. France was the first country in Europe to adopt in 2016 a law recognising a so-called *right to be forgotten* (RTBF) for cancer survivors. The provision establishes a right to non-discrimination, which allows former patients with cancer that no medical information relating to their cancer pathology has to be communicated to or taken into account by bankers and insurers for access to credit insurance under certain conditions.

In this respect, three EU Member States (France, Belgium and Luxembourg) adopted specific legislative initiatives, recognising a RTBF for cancer survivors. These legal provisions have in common the principle of avoiding unfair treatment in accessing financial services for cancer survivors because of their medical history and experience with cancer. An important step forward was the inclusion of the RTBF as a measure of best practice to ensure the best possible quality of life for cancer survivors in the EU Beating Cancer Plan, published by the EU Commission in February 2021⁵⁵.

The European Parliament Special Committee on Beating Cancer released a draft report on the implementation of the cancer plan, and there it requests that by 2025, all Member States should guarantee the RTBF based on the model provided by the EU member states⁵⁶. Parliament asks that by 2025 all member states guarantee the right to be forgotten for all European patients ten years after the end of the treatment up to five years after the end of treatment for patients for whom the diagnosis is formulated before the age of 18. The topic reveals cross-cutting issues and linkages, which can be resumed in three key pillars:

1. Pillar I: Protection and Promotion of Consumer Rights in the EU
2. Pillar II: Health Promotion in the EU (Legal references TFEU: Art.6; Art.9; Art.168 CFUE: Art. 35).
3. Pillar III: Anti-discrimination and Fundamental Rights in the EU

Such a measure remedies the fragmented national practices in credit worthiness assessment and ensures equal access to

credit for cancer survivors, considering the measures already enforced by France, Belgium, Luxembourg, the Netherlands and Portugal.

According to Pillar II and III, the obstacles to access to financial instruments for former patients with cancer may represent a form of discrimination strongly impacting their quality of life and full rehabilitation into society. The EU has the legitimacy to take action to promote social inclusion, and equality, fight against discrimination and promote the highest level of quality of life and health for EU citizens.

Following a series of recommendations stated in an early study report commissioned by the European Commission on the use of age, disability, sex, religion or belief, racial or ethnic origin and sexual orientation in financial services, in particular in the insurance and banking sectors, the debate on the RTBF for cancer survivors may redesign⁵⁷.

Too many societal challenges are faced by cancer survivors from a political and legal perspective, relying on the impact of full rehabilitation and restoration of functional health due to the obstacles to access to financial instruments to buy a house or finance the work activities.

The legislative initiatives taken by France, Belgium and Luxembourg are prove that a solution exists in this contexts and the Member States can repair to these discriminatory practices by limiting the *marge of appreciation* of insurers and banks. The importance of proclaiming a Right to Be Forgotten throughout the EU is also a way to initiate the dialogue with the science and ensure by law the equality of cancer survivors to all the other citizen by law.

A Pan-European solution based on the implementation of the RTBF is feasible within current treaties and seems the best approach to tackle the issue. The EU Action would provide a common and harmonised regulatory framework among the Member States to avoid discrimination and ensure equality among EU citizens being cured of cancer.

Considering this recognition should be a key steps. However, many challenges remain and the most important is the possibility of having similar regulating between the European countries, minimizing the discrimination, promoting social equality and regulate the market for all EU citizens being cured of cancer. In April 2021, the Parliamentary Assembly of the Council of Europe adopted a recommendation for Member states recommended to Member States to set up measures to remedy the *profound social disadvantage and discrimination* experienced by people with chronic and long-term illnesses, including cancer survivors. The latter also included the need for a clear definition of 'the RTBF' and the effective implementation of this protection in all Member states^{58,59}.

The institutions of our Country can draw on the heritage of cultures and sensitivities of the associations to protect patients' rights and scientific societies to achieve an objective that can no longer be postponed.

Italian citizens have a moral obligation to ask for commitment on these issues from those who will represent them in the government meetings in the near future.

CONCLUSION

The life expectancy of cancer patients, whether they are haematological or suffering from solid or paediatric cancer, requires specific attention in care planning.

Survivorship care represents an important aspect of quality cancer care. In this context, the selection of interventions, tailored to patients' individual needs of patients, deriving

from their condition, can no longer be postponed. In particular, patients with long life expectancy and those who, after an adequate time, have reduced the risk of dying from cancer (the cured), should receive appropriate rehabilitation programs that take into account the multidimensional impact of the disease and treatments, receive a personalized follow-up for pathology and risk of developing iatrogenic side effects and metachronous tumours. Finally, for them the social discrimination, unjustifiable by the life expectancy they have reached, should be eliminated for them. Whenever possible, all this should be favoured by a transition from hospital to territory where specialists and general practitioners are involved in coordinated and synergistic action.

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Author contribution

PT, VM, RB, FDR, and FF conceived and designed the manuscript. GB, CB, LB, RB, GC, SC, AC, LC, RDA, FDL have performed acquisition, analysis or interpretation of data. PT, VM, RB, FDR and FF drafted the manuscript. ADC, MDM, DD, FE, FF, GG, SG, RH, EI and GI have performed critical revision of the manuscript. administrative, technical, or material support, have been collected by ML, LLC, EM, SB, CN, DP, EP, SR, DR, and GS. All authors supervised, read and approved the final manuscript.

Conflict of interest

Regarding the manuscript topic, the authors have no conflicts of interest to report.

In Memory

The activity of this working group and the subsequent production of this paper are dedicated to the memory of Sergio Claudio, MD, who contributed, as General Practitioner, to improving the language of cancer survivorship care and the quality of life of the patients.

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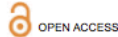
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