

The Relationships Between Illness-Related Variables and Flourishing: A Psycho-Oncological Study

Valentina Biscaldi,¹ Davide Dalu,² Anna Gambaro,³ Sabrina Ferrario,⁴
Nicla La Verde,⁵ Raffaella D. G. Sartori⁶

1. Department of Oncology, Luigi Sacco University Hospital, Milan, Italy

biscaldi.valentina@asst-fbf-sacco.it  <https://orcid.org/0009-0005-5269-8329>

2. Infectious Disease Oncology Unit, Department of Oncology, Luigi Sacco University Hospital, Milan, Italy

dalu.davide@asst-fbf-sacco.it  <https://orcid.org/0000-0002-8017-2149>

3. Department of Oncology, Luigi Sacco University Hospital, Milan, Italy

gambaro.anna@asst-fbf-sacco.it  <https://orcid.org/0009-0004-6619-3279>

4. Department of Oncology, Luigi Sacco University Hospital, Milan, Italy

ferrario.sabrina@asst-fbf-sacco.it  <https://orcid.org/0009-0004-6250-034X>

5. Department of Oncology, Luigi Sacco University Hospital, Milan, Italy

laverde.nicla@asst-fbf-sacco.it  <https://orcid.org/0000-0002-2884-1632>

6. Department of Oncology, Luigi Sacco University Hospital, Milan, Italy – Department of Medico-Surgical Specialties, Radiological Sciences and Public Health, Università degli Studi di Brescia

sartori.raffaella@asst-fbf-sacco.it  <https://orcid.org/0000-0002-0639-1861>

DOI: [10.17421/2498-9746-12-24](https://doi.org/10.17421/2498-9746-12-24)

SUBMITTED: 28.03.2026 – REVIEWED: 31.05.2026 – ACCEPTED: 14.06.2026

Abstract

This study investigated the relationships between cancer stage and physical symptoms with mental health and distress emotions among persons with solid tumors.

Participants were administered the Revised Illness Perception Questionnaire (IPQ-R) – Identity Scale, the Mental Health Continuum-Short Form (MHC-SF), and the Distress Thermometer. Descriptives analyses, correlations, chi-square tests, t and Mann-Whitney tests were performed.

176 persons (84% female, mean age=58.01), predominantly with breast (54%) localized (66%) cancer significantly differed in illness identity ($U=3929.5$, $p=0.003$), anger ($U=3980.0$, $p=0.003$), hedonic, psychological, eudaimonic and total well-being ($U=2456.0$, $p=0.03$; $U=2192.0$, $p=0.002$; $t(166)=2.2$, $p=0.03$; $t(166)=2.3$; $p=0.02$) at different cancer stages. No associations emerged between cancer stage and flourishing. Flourishing and non-flourishing patients differed in physical symptoms ($U=2504.0$, $p=0.03$), stress, ($U=2251.0$, $p=0.001$), anxiety ($U=2298.0$, $p=0.002$), depression ($U=1907.0$, $p<0.001$), anger ($U=2397.0$, $p=0.009$) and help needed ($U=2574.0$; $p=0.44$).

Results showed the independent observation of flourishing related dimensions across symptoms and cancer stage. This awareness integrates practice.

Keywords: Cancer, Symptoms, Illness identity, Mental health, Flourishing, Distress.

CONTENTS

1	Introduction	380
2	Materials and Methods	387
3	Results	389
4	Discussion	392
5	Conclusions	397

1 INTRODUCTION

1.1 *Toward a Bio-Psycho-Socio-Spiritual Definition of Health*1.1.1 *The Study of the Body and Mind: The Contribution of Philosophy to the Definition of Health*

The definition of health and the medical approach vary over time and according to cultures and historical backgrounds.¹

Historically, in Western cultures, philosophers and physicians conceptualized the human being from a holistic viewpoint, considering individuals in interaction with the environment and the social context. Therefore, health emerged by the adaptive interaction between the physical, the psychological and the social dimensions, while illness occurred when external or internal causes produced a state of unbalance of these domains.²

In the v century B.C., the Italic school defined health as a harmonious and homogeneous balance of the qualities (hot and cold, bitter and sweet etc.) of the body with the empirical world. A state of illness emerged when the imbalance between the qualities displaced the others. Aezio, a philosopher who lived between the I century B.C. and the I century A.D. expert of doxography (from the greek word δόξα, “opinion, point of view” and γράφειν, “to write, to describe”), attributed to the philosopher and physician Alcmeone of Croton the first definition of health, according to which

it lasts as long as the opposites elements, wet/dry, cold/hot, bitter/sweet are in balance, and diseases emerge when one prevails over the others. The domain of both

¹M. E. JONES, C. L. CASON, M. L. BOND, *Cultural Attitudes, Knowledge, and Skills of a Health Workforce*, «Journal of Transcultural Nursing», 15/4 (2004), pp. 283-290; B. W. LEVIN, C. H. BROWNER, *The Social Production of Health: Critical Contributions from Evolutionary, Biological, and Cultural Anthropology*, «Social Science & Medicine», 61/4 (2005), pp. 745-750; A. DELLE FAVE, M. BASSI, *Psicologia e salute. Esperienze e risorse dei protagonisti della cura*, UTET Università, Torino 2025.

²*Ibidem*, p. 3; A. DELLE FAVE *et al.*, *The Eudaimonic and Hedonic Components of Happiness: Qualitative and Quantitative Findings*, «Social Indicators Research», 100/2 (2011), pp. 185-207; R. D. G. SARTORI *et al.*, *The Assessment of Patients' Quality of Experience: Autonomy Level and Perceived Challenges*, «Rehabilitation Psychology», 59/3 (2014), p. 267.

factors, he said, is wreaking havoc [...]. Health is the harmonious blending of the qualities (opposite).³

In the same period, in the school of Kos, Hippocrates described the main topic of medicine, the body, as a unitary entity composed of various organs and liquids. From Hippocrates's perspective, in the healthy body these elements were balanced among each other and with the environment, the social context or the climate conditions. Breaking this balance produced a state of illness. The prerequisite for defining health as well as comprehending illness was being aware of the individual's physiology and the continuous interplay of the internal and the external conditions.⁴

Plato in the *Timeo* highlighted the relevance of studying the human being in its complexity: "This is not to exercise nor the soul without a body or a body without a soul, so that both [...] maintain balance and health."⁵ Therefore, since health emerged from the balance between the soul and the body, taking care of both these aspects of human complexity represented the core aspect of prevention and illness, as well as pathologies' treatments.

During the XIII Century Pietro D'Abano, in his most famous tractate *The Conciliator*, clearly wrote about the necessity for the doctor to use incantations, prayers and sacraments to conquer the trust of the patient, influencing his spirit and his body. Even though D' Abano had the fame of a magician and a necromancer, history considered him as one of the harbingers of the scientific method, and for this reason in the xv Century he was included by Federico III, duke of Montefeltro, in his great sequence of 28 paintings depicting illustrious men such as St. Augustine, Dante and Petrarch. Moving from the Arabic medical discipline, his work highlighted the doctor-patient relationship was crucial for the realization and efficacy of cures.⁶

At the end of the xiv Century A.D., at the time of Michele Savonarola, grandfather of Girolamo, medical doctors were expert in philosophy, history, moral disciplines, theology and pedagogy. They were also competent in astrology, diplomacy and alchemy.⁷

Over the centuries, however, the holistic perspective of human beings and the

³L. PERILLI, *Alcmeone di Crotona tra filosofia e scienza. Per una nuova edizione delle fonti*, «Quaderni Urbinati di Cultura Classica», 69/3 (2001), pp. 55-79.

⁴C. ORFANOS, *From Hippocrates to Modern Medicine*, «Journal of the European Academy of Dermatology and Venereology», 21 (2007), pp. 852-858, <https://doi.org/10.1111/j.1468-3083.2007.02273>.

⁵PLATONE, *Timeo*, in *Opere complete*, vol. IV, ed. by G. Reale, Bompiani, Milano-Bari 2000, p. 250.

⁶M. PERITI, *Le multiformi curiosità del nonno di Savonarola*, in *Medici Rivoluzionari. La Scienza Medica a Padova dal Duecento alla Grande Guerra*, ed. by Il Bo Live, Padova University Press, Padova 2019, pp. 39-42.

⁷F. ZAMPIERI, *L'eresia del medico-mago che ispirò anche Giotto*, in *Medici Rivoluzionari*, cit., pp. 25-30.

consequent definition of health was replaced by a mechanistic vision, in which the body and the soul were considered as two different components, with different characteristics and specific peculiarities. This perspective made a strong contribution to modern medicine and its definition of health.

Renè Descartes defined the soul (*res cogitans*) and the body (*res extensa*) as different domains of analysis and subject to different rules.⁸ The *res extensae* were measurable and divisible in parts, each physical component could be divided into minimum sub-components, and their interactions could describe the entire body functioning.

In this cultural framework, in the medical disciplines the material and the spiritual level were separated. This theoretical framework represented the seed of modern medicine.

1.1.2 *The Modern Medicine: From the Biomedical to the Bio-Psycho-Socio-Spiritual Model*

The XIX century and the beginning of the XX century saw great changes in public health. The Industrial Revolution and the growing findings in medical research played a crucial role in the definition of the individual's functioning and the concept of illness and health.

The discovery of the existence of microorganisms, their role in the pathogenic process and the research done by Pasteur in microbiology influenced disciplines such as chemistry, biology and medicine. The introduction of the scientific method in clinical practice gave an additional contribution to the already rooted idea that the body structures and mechanisms were separated from the processes behind the mind and the soul functioning.⁹

Moving from these premises, the *biomedical approach* emerged as centered on illness and on the identification of specific biological parameters, signs and symptoms, according to rigorous Evidence Based Medicine (EBM) rules. The model provided important advancements in understanding and treating disease, as well as in planning social and international policies aimed at granting adequate standards of health and assistance to all.¹⁰

⁸R. DESCARTES, *Les Principes de la Philosophie*, vol. IX-2, Vrin, Paris 1974-1986, pp. 48-49.

⁹G. SANTORO *et al.*, *The Anatomic Location of The Soul from the Heart, Through the Brain, to the Whole Body, and Beyond: A Journey Through Western History, Science, and Philosophy*, «Neurosurgery», 65/4 (2009), pp. 633-643; H. S. FRIEDMAN, N. E. ADLER, *The Intellectual Roots of Health Psychology*, in *The Oxford Handbook of Health Psychology*, ed. by H. S. Friedman, Oxford Library of Psychology, Oxford 2011, pp. 3-14.

¹⁰C. HERNÁNDEZ-QUEVEDO *et al.*, *Socioeconomic Inequalities in Health: A Comparative Longitudinal Analysis Using the European Community Household Panel*, «Social Science & Medicine», 63/5 (2006), pp. 1246-1261.

This biomedical approach conceptualized health and illness as opposite poles of a continuum and, therefore, simply as the absence of illness,¹¹ considering that illness should be treated as an independent entity from social behavior. The success of therapy was evaluated in terms of life expectancy and expressed in years of survival.¹²

Considering health as a complex concept, objective and subjective at the same time, Engel,¹³ formalized the *bio-psycho-social model*, emphasizing the active role of the individual both in the etiopathogenesis and in the treatment process. This approach focused on the individual's perspective, considering the patient as a person, that is a complex living system, an individual with a subjective interpretation of health, disease, quality of life, and well-being, a carrier of a specific cultural background and a member of a particular society.

The bio-psycho-social model issued the complexity of health and gave space to other disciplines besides medicine, such as psychology, sociology, anthropology.¹⁴ The model aimed at integrating the other disciplines' perspectives, broadening horizons and potential, and moving to the centrality of the patient as an individual who holds a subjective interpretation of health, illness, quality of life and well-being.¹⁵ As highlighted by the World Health Organization, health is not the mere absence of illness, but rather a state of well-being at the physical, psychological and social level.¹⁶

Recent literature highlighted how ill people daily include spiritual dimensions in the interpretation and management of adversities with hope, meaning, purpose, and belief systems. The *Bio-psycho-socio-spiritual Model*, that has its origin in Palliative care, integrates physical, psychological, social, and spiritual interventions to relieve suffering at every stage of serious illness.¹⁷ Moving a step further, or more precisely, moving a step behind, medicine has reminded herself

¹¹M. E. JONES, C. L. CASON, M. L. BOND, *Cultural Attitudes, Knowledge, and Skills of a Health Workforce*, «Journal of Transcultural Nursing», 15/4 (2004), pp. 283-290.

¹²A. DELLE FAVE, M. BASSI, *Psicologia e salute. Esperienze e risorse dei protagonisti della cura*, cit.

¹³G. L. ENGEL, *The Need For a New Medical Model: A Challenge for Biomedicine*, «Science», 196 (1977), pp. 129-136; IDEM, *The Biopsychosocial Model and Medical Education: Who are to be the Teachers?*, «New England Journal of Medicine», 306/13 (1982), pp. 802-805.

¹⁴E. J. ANJUGU, A. M. T. JOHN, M. AKAWU, *Relevance of Bio-Psychosocial and Psycho-Diagnostic Models on the Evaluation of Individual's Mental Health*, «International Journal of Anthropology and Ethnology Research Development», 7/6 (2025), pp. 37-54, <https://doi.org/10.70382/hijaerd.vo6i6.020>.

¹⁵G. L. ENGEL, *The Need for a New Medical Model: A Challenge for Biomedicine*, cit.

¹⁶*Constitution of the World Health Organization. Preamble*, in *World Health Organization, International Health Conference* (New York, 19 June-22 July 1946), New York 1946, p. 1.

¹⁷*Palliative Care: Key Facts*, in *World Health Organization*, Geneva 2020, <https://www.who.int/news-room/fact-sheets/detail/palliative-care>; J. S. TEMEL *et al.*, *Early Palliative Care for Patients With Metastatic Non-Small-Cell Lung Cancer*, «New England Journal of Medicine», 363/8 (2010), pp. 733-742.

how precious it could be considering every aspect of the human being for the cure and the care of people facing sickness, physical disabilities and impairments.

1.2 *The Psychological Approach to Health: An Integrated Framework*

The International Agency for Research on Cancer,¹⁸ pointed that cancer is a world large extent pathology, with 19.976.499 new cases and 9.743.832 deaths every year. It is the second leading cause of death.¹⁹

As highlighted by Delle Fave and Massimini, “more than any other topic, health is related to the biological survival of the human species. Disease, treatment, and prevention have been prominent objects of investigation and resource investments in all cultures.”²⁰ Disease represents a privileged topic of psychology, which has primarily focused on pathologies and the identification of strategies and procedures to cope with them.²¹

For decades literature has highlighted the risk for people with cancer to develop psychological and psychiatric disorders, such as depression and anxiety.²² Besides that, however, according to the Positive Psychology Approach,²³ several studies focused on the individual and environmental resources that can promote well-being and life fulfillment, outlining the constructive side of disease despite biological limitations.²⁴

Psychological adjustment to illness can be a mediator of perceived well-being and good quality of life.²⁵ Furthermore, scientific evidence highlights that pa-

¹⁸F. BRAY *et al.*, *Global Cancer Statistics 2022: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries*, «Cancer Journal for Clinicians», 74/3 (2024), pp. 229-263.

¹⁹*Global Health Estimates: Leading Causes of Death*, in World Health Organization, Geneva 2025.

²⁰A. DELLE FAVE, F. MASSIMINI, *The Relevance of Subjective Wellbeing to Social Policies: Optimal Experience and Tailored Intervention*, in *The Science of Well-Being*, ed. by F. A. Huppert, N. Baylis, B. Keverne, Oxford University Press, Oxford 2005, pp. 379-402.

²¹R. D. G. SARTORI *et al.*, *The Assessment of Patients' Quality of Experience*, cit.

²²L. GRASSI, D. MCFARLAND, M. RIBA, *The Risk and the Course of Cancer Among People with Severe Mental Illness. Clinical Practice and Epidemiology in Mental Health*, «CP & EMH», 19/1 (2023), pp. 1-7; D. ANUK *et al.*, *The Characteristics and Risk Factors for Common Psychiatric Disorders in Patients with Cancer Seeking Help for Mental Health*, «BMC Psychiatry», 19/1 (2019), p. 269.

²³M. CSIKSZENTMIHALYI, M. SELIGMAN, *Positive Psychology*, «American Psychologist», 55/1 (2000), pp. 5-14.

²⁴R. D. G. SARTORI *et al.*, *Autonomy Level and Quality of Everyday Experience of People with Hereditary Spastic Paraplegia*, «Health & Social Care in the Community», 27/5 (2019), pp. 850-860; M. VAN DE WIEL *et al.*, *Coping Strategy Influences Quality of Life in Patients With Advanced Lung Cancer By Mediating Mood*, «Clinical Lung Cancer», 22/2 (2021), pp. 146-152.

²⁵M. BASSI *et al.*, *The Contribution of Illness Beliefs, Coping Strategies, and Social Support to Perceived Physical Health and Fatigue in Multiple Sclerosis*, «Journal of Clinical Psychology in Medical Settings», 28/1 (2021), pp. 149-160; S. FOLKMAN, S. GREER, *Promoting Psychological Well-Being in the Face of Serious Illness: When Theory, Research and Practice Inform Each Other*, «Psycho-Oncology: Journal of the Psychological, Social and Behavioral Dimensions of Cancer», 9/1 (2000), pp. 11-19.

tients' attitudes towards pain and physical symptom management are influenced by their knowledge of pain, their perception of being able to manage physical symptoms, and the presence of social support.²⁶ Furthermore, in patients with chronic disabilities, the presence of challenges balanced with the perception of adequate skills predicts a positive quality of subjective experience associated with daily activities, while the contribution of functional autonomy to psychological well-being is rather marginal.²⁷ Finally, the presence of a family support system, adaptive coping strategies, adequate disease knowledge and effective management methods²⁸ can be protective factors in promoting and enhancing psychological well-being and a sense of coherence.²⁹

1.3 Human Flourishing in Cancer Patients

With the purpose of defining what promotes psychological well-being, a definition of this term derives from two theoretical perspectives, hedonism and eudaimonism³⁰, which identify the two philosophical backgrounds sharing the common interest of studying what promotes a good life.³¹ The hedonic view equates happiness with positive emotions and satisfaction with life, whereas the eudaimonic view with the human ability to pursue complex goals which are meaningful to the individual and society.³² Quality of life should be considered as a relative

²⁶M. BASSI *et al.*, *The Contribution of Illness Beliefs, Coping Strategies, and Social Support to Perceived Physical Health and Fatigue in Multiple Sclerosis*, cit.; F. LOU, S. SHANG, *Attitudes Towards Pain Management in Hospitalized Cancer Patients and Their Influencing Factors*, «Chinese Journal of Cancer Research», 29/1 (2017), p. 75.

²⁷R. D. G. SARTORI *et al.*, *The Assessment of Patients' Quality of Experience*, cit., p. 267; R. D. G. SARTORI *et al.*, *Autonomy Level and Quality of Everyday Experience of People With Hereditary Spastic Paraplegia*, cit.

²⁸A. K. COBB, E. HAMERA, *Illness Experience in a Chronic Disease-ALS*, «Social Science & Medicine», 23/7 (1986), pp. 641-650.

²⁹A. DELLE FAVE *et al.*, *A Longitudinal Study on Motherhood and Well-Being: Developmental and Clinical Implications*, «Terapia psicologica», 31/1 (2013), pp. 21-33.

³⁰The term eudaimonia (εὐδαιμονία) originates from the *Nicomachean Ethics* of Aristotle, ten books probably belonging to the last period. The title derives from the fact that Nicomaco, the son, edited the books. In the *Etica Nicomachea*, Aristotle investigated which science should determine what happiness is and how individuals can achieve it. This goal should not be achieved by the political science. The reason of this argument lies in the fact that “happiness is desirable when belongs to a person, however it is better if it belongs to the nation or to the people (polis)” (ARISTOTLE, *Nicomachean Ethics*, I, 2, 1094b7-10). Well-being, therefore is the goal to which every individual strain, and the ultimate purpose is happiness. The latter derives from the exercise of virtues, defined as realization of internal potentials and resources of human being. From this perspective, happiness and virtues coincide. Eudaimonia means “presence of a good daimon” and identifies a way of being that realizes the ultimate purpose of the individual.

³¹R. N. RYAN, E. L. DECI, *On Happiness and Human Potentials: A Review of Research on Hedonic and Eudaimonic Well-Being*, «Annual Review of Psychology», 52/1 (2001), pp. 141-166.

³²A. DELLE FAVE *et al.*, *The Eudaimonic and Hedonic Components of Happiness: Qualitative and Quantitative Findings*, «Social Indicators Research», 100/2 (2011), pp. 185-207; N. C. KIKNADZE, B.

and subjective concept, involving perceived opportunities for action and skill development in the daily environment, social relations, and goals pursuit, which are not necessarily dependent on physical functioning or material goods.³³

Ryff and Keyes's studies in the 1990s described that mental health and illness are highly correlated between each other's and not opposite poles of the same continuum. Mental health has been defined as a syndrome of personal well-being composed of symptoms of hedonism and eudaimonia, positive affectivity, and optimal functioning. Where mental health exists, individuals thrive, flourish, and grow. That is flourishing.

Mental health was described by the World Health Organization³⁴ as a state of well-being in which the individual realizes his/her own abilities, can cope with the stresses of life, work productively, and contribute to the community.

According to Keyes' definition of flourishing,³⁵ positive psychological functioning consists of self-acceptance, positive social relationships, personal growth, life purpose, environmental mastery, and autonomy. Five dimensions are related to social well-being: social coherence, social actualization, social integration, social acceptance, and social contribution.

In psycho-oncology, Fuller-Thomson and West³⁶ analyzed mental health in cancer patients observing flourishing in 66% of patients with active disease, and in 70% of survivors. Furthermore, Harris and colleagues³⁷ found in head and neck cancer survivors a significant association between higher flourishing scores and advanced age, normal diet, employment, higher income, and low economic difficulties. Also, flourishing was inversely associated with higher symptoms of depression, anxiety, swallowing dysfunction, neck disability, and insomnia.

The contribution of hedonic and eudaimonic wellbeing to mental health in cancer patients is essential for designing multidisciplinary intervention programs focused on personal resources. To our knowledge, no studies have simultane-

J. FOWERS, *Cultural Variation in Flourishing*, «Journal of Happiness Studies», 24/7 (2023), pp. 2223-2244.

³³R. FITZPATRICK, *Measurement Issues in Health-Related Quality of Life: Challenges for Health Psychology*, «Psychology and Health», 15/1 (2000), pp. 99-108; A. DELLE FAVE, F. MASSIMINI, *L'analisi transculturale dell'esperienza ottimale*, «Ricerche di psicologia», 1 (2004), pp. 79-103.

³⁴*International Classification of Functioning, Disability and Health (ICF)*, in *World Health Organization*, Geneva 2001.

³⁵C. L. M. KEYES, *The Mental Health Continuum: From Languishing to Flourishing in Life*, «Journal of Health and Social Behavior», (2002), 43/2 pp. 207-222; IDEM, *Promoting and Protecting Mental Health as Flourishing: A Complementary Strategy for Improving National Mental Health*, «American Psychologist», 62/2 (2007), p. 95.

³⁶E. FULLER-THOMSON, K. J. WEST, *Flourishing Despite a Cancer Diagnosis: Factors Associated with Complete Mental Health in a Nationally Representative Sample of Cancer Patients Aged 50 Years and Older*, «Aging & Mental Health», 23/9 (2019), pp. 1263-1274.

³⁷A. HARRIS *et al.*, *Flourishing in Head and Neck Cancer Survivors*, «Cancer Medicine», 11/13 (2022), pp. 2561-2575.

ously considered physical and psychological deficits and limitations along with resources, particularly the presence of flourishing as a mental health indicator and the relation of illness identity, distress emotions and flourishing, in cancer patients with limited-stage and advanced/metastatic disease. Therefore, this study investigated the relationships between a) cancer stage and physical symptoms, mental health and distress emotions; b) presence of flourishing, physical symptoms and distress emotions among persons with solid tumors.

2 MATERIALS AND METHODS

2.1 Study Design and Procedure

A single-center cross-sectional study was conducted at the Complex Structure of Oncology at Luigi Sacco Hospital, Milan (Italy). Patients were enrolled during the first session of a psychological support program. Before participating in the study, all participants signed an informed consent form. The form specified that participation was free, voluntary, anonymous and could be revoked at any moment (Lombardy Ethical Committee approval N.84-2023). Data collection was conducted between 2022 and 2024. Sociodemographic and illness-related information were gathered, and tests assessing symptomatology, illness identity, mental health and distress, and distress emotions were administered.

2.2 Instruments

The following variables were investigated by using the tools described below:

- *Sociodemographic and cancer-related information.* These variables were assessed through a semi-structured interview. In detail, for sociodemographic characteristics, participants reported age, level of education, marital status, and employment condition. Information about the type of cancer, disease stage, and type of treatment were also collected.
- *Symptoms and illness identity.* To detect these two aspects, the Identity Scale of the Revised Illness Perception Questionnaire (IPQ-R)³⁸ was administered. This scale measures the presence of physical symptoms and their perceived link with the disease (illness identity) through 14 dichotomous items.
- *Mental health.* To assess mental health, the Mental Health Continuum Short-Form (MHC-SF)³⁹ was administered. This questionnaire consists of

³⁸R. MOSS-MORRIS *et al.*, *The Revised Illness Perception Questionnaire (IPQ-R)*, «Psychology and Health», 17/1 (2002), pp. 1-16; A. GIARDINI *et al.*, *Contributo alla validazione italiana dell'IPQ-R*, «Giornale Italiano Medicina del Lavoro ed Ergonomia», 29/1 (2007), pp. 64-74.

³⁹C. L. KEYES, *The Mental Health Continuum: From Languishing to Flourishing in Life*, in *Foundations of Psychological Thought: A History of Psychology*, ed. by B. F. Gentile, B. O. Miller, SAGE Publications Inc., Los Angeles 2009, pp. 601-617; G. PETRILLO *et al.*, *The Mental Health Continuum-Short Form (MHC-SF) as A Measure of Well-Being in the Italian Context*, «Social Indicators Research», 121/1 (2015), pp. 291-312.

14 items on a 5-point Likert type scale. Three subscales measure different dimensions of mental health: emotional or hedonic, psychological and social well-being. These scales scores classify the respondents' state according to three categories: flourishing, languishing or moderate mental health. Flourishing emerges when participants indicate at least 1 of the 3 emotional well-being symptoms and 6 of the 11 psychological and social well-being symptoms as present "every day" or "almost every day" in the past month. Languishing emerges when respondents report to have "never" or "once or twice" experienced at least 1 of the 3 emotional well-being symptoms, and 6 of the 11 psychological and social well-being symptoms in the previous month. Respondents who are neither flourishing nor languishing are considered to have moderate mental health.

- *Distress and distress emotions.* To detect the level of distress, The Distress Thermometer, which measures the level of distress and its possible causes, was administered.⁴⁰ Patients are asked to describe the amount of emotional distress they have experienced in the past week by indicating a number from 0 (no emotional distress—no stress) to 10 (maximum emotional distress—maximum stress) on a thermometer. The questionnaire is also composed of the so called problem list, which grouped into five categories the associated difficulties: practical problems, relational problems, emotional problems, spiritual aspects, and physical problems. To the purpose of our studies, only the distress scale was applied. The distress emotions were evaluated through the Emotional Thermometer⁴¹ which is a largely used scale in the field of clinical health psychology. This instrument integrates the information deriving from the Distress Thermometer with the evaluation of the intensity of four main emotions—anxiety, depressed mood, anger, insomnia and need for help—on a 0-10 Likert Type scale (0=no emotion – 10=maximum emotion).

2.3 Statistical Analyses

Scale variables and coded responses were analyzed using the statistical program SPSS (v.29.0.1.0). Descriptive statistics (frequencies, percentages, means, and standard deviations) were calculated to assess the psychometric characteristics of the data and to draw preliminary information. Data normality was assessed using the

⁴⁰J. C. HOLLAND *et al.*, *Distress Management*, «Journal of the National Comprehensive Cancer Network», 8/4 (2010), pp. 448-485.

⁴¹A. J. MITCHELL *et al.*, *Can the Distress Thermometer be Improved by Additional Mood Domains? Part I. Initial Validation of the Emotion Thermometers Tool*, «Psycho-Oncology», 19/2 (2010), pp. 125-133; IDEM, *Can the Distress Thermometer be Improved by Additional Mood Domains? Part II. What is the Optimal Combination of Emotion Thermometers?*, «Psycho-Oncology», 19/2 (2010), pp. 134-140.

Kolmogorov-Smirnov test. Inferential methods (t tests or Mann-Whitney tests, as appropriate) were used to analyze the variables' relationships between groups (patients with localized cancer stage vs patients with recurrent/metastatic stage, flourishing vs non flourishing patients).

3 RESULTS

3.1 Sample Characteristics

The final sample was composed of 176 participants. Regarding sociodemographic characteristics (*Table 1*), most patients were female with a mean age of 58 years ($SD=12.5$). The majority had a high school diploma or a higher qualification, and more than half of the sample was actively working. As for cancer type, participants were predominantly affected by breast cancer, followed by gastrointestinal and gynecological tumors. Most patients had a localized illness and were undergoing active treatment.

	Patients (N=176)		
	f	%	M(SD)
Age			58.01(12.5)
Gender			
Females	148	84.1	
Male	28	15.9	
Education			
Elementary or middle school	44	25	
High school	79	44.9	
University/post-graduate	47	26.7	
Missing	6	3.4	
Current Working	98	55.7	
Type of cancer			
Breast	95	54	
Gastrointestinal	30	17	
Gynecological	18	10.2	
Urological	10	5.7	
Lung	7	4	
Hematological and Lymphoma	7	4	
Cervical and facial	3	1.7	
Other	9	3.4	
Staging			
Localized	120	68.2	
Advanced/Metastatic	56	31.8	
Treatment type			
Active	136	77.3	
Simultaneous	7	4	
No current treatment	33	18.8	

Table 1 – Sociodemographic and Illness-related characteristics of the participants

3.2 *Daily Symptoms, Negative Emotions and Flourishing Dimensions Among Cancer Patients*

Table 2 shows mean scores, standard deviations and ranges for the questionnaires evaluated. Regarding IPQ-R, results showed that participants experienced, on average, a low-moderate number of symptoms. Patients linked almost all reported symptoms to their cancer. Concerning the Distress Thermometer, the mean scores appeared moderate on most scales, showing that the patients experienced a moderate sense of need for help, stress, anxiety, sleepiness and depression. Anger appeared to be the least negative emotion experienced. Participants reported moderate levels of hedonic and psychological wellbeing, while social wellbeing was low. The most frequent mental health category among participants was moderate mental health, followed by flourishing. Only 24% of participants were languishing (Figure 1).

Test	M(SD)	Scores range
IPQ-R		
Number of symptoms	5.5(3.5)	0-14
Illness identity	5.3(3.4)	0-14
Distress Thermometer		
Stress	6.0(2.8)	0-10
Anxiety	6.0(3.0)	0-10
Depression	5.5(3.0)	0-10
Anger	4.2(3.4)	0-10
Sleepiness	5.6(3.3)	0-10
Need for help	6.6(2.8)	0-10
MHC-SF		
Hedonic wellbeing	7.7(4.0)	0-15
Psychological wellbeing	18.8(7.3)	0-30
Social wellbeing	8.3(6.2)	0-25
Total wellbeing	34.8(15.2)	0-70

Table 2 – Sample's mean scores, standard deviations and ranges in tests

3.3 *Differences in Symptoms, Illness Identity, and Distress Emotions Between Patients in Localized and in Recurrent/Metastatic Stages*

Results showed significant differences between patients with localized and advanced/metastatic cancer in the scales scores (Table 3). In detail, in patients with advanced/metastatic cancer stage, illness identity and anger appeared significantly higher. No significant differences were found on the number of physical symptoms and other emotions connected to distress. Regarding MHC scores, patients with localized cancer reported significantly higher scores in hedonic, psychological and total wellbeing compared to advanced/metastatic patients. No significant differences were detected regarding social wellbeing between the two groups.

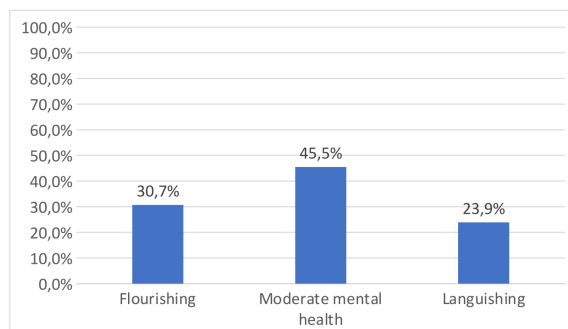


Figure 1 – Frequencies of flourishing, languishing and moderate mental health in the sample

For the analysis of mental health, 44.4% of patients with localized cancer reported moderate mental health, while 37.4% were flourishing and 18.2% languishing. As concerns patients with advanced/metastatic cancer, 31.7% of them reported moderate mental health, while 34.1% were flourishing and 34.1% were languishing. No significant differences emerged between groups.

Test	Localized M(SD)	Metastatic/recurrent M(SD)	t test/Mann-Whitney test
IPQ-R			
Number of symptoms	5.2(3.5)	6.1(3.4)	U=3603.0, p=0.141
Illness identity	4.6(3.5)	6.3(2.9)	U=3929.5, p=0.003
Distress Thermometer			
Stress	6.0(2.9)	5.8(2.5)	U=2969.5, p=0.5
Anxiety	5.9(3.1)	6.2(2.8)	U=3280.0, p=0.6
Depression	5.3(3.2)	6.1(2.4)	U=4999.0, p=0.2
Anger	3.7(3.4)	5.3(3.2)	U=3980.0, p=0.003
Sleepiness	5.3(3.4)	6.0(3.2)	U=3530.5, p=0.2
Need for help	6.4(2.9)	7.0(2.6)	U=3413.0, p=0.3
MHC-SF			
Hedonic wellbeing	8.2(3.8)	6.7(4.1)	U=2465.0, p=0.03
Psychological wellbeing	20.1(6.8)	16.5(7.1)	U=2192.0, p=0.002
Social wellbeing	8.6(6.5)	8.0(5.7)	U=3029.5, p=0.8
Total wellbeing	36.9(14.9)	31.2(14.9)	t(166)=2.3, p=0.02

Table 3 – Differences in symptoms, illness identity, and distress emotions between patients in localized and in recurrent/metastatic disease stages

3.4 Symptoms, Illness Identity, and Distress Emotions Among Flourishing and Non-Flourishing Patients

Concerning IPQ-R, significant differences were detected between flourishing patients and patients with languishing or moderate mental health in the number of

referred symptoms *Table 4*. Specifically, non-flourishing patients reported a significantly higher number of symptoms. Participants classified as non-flourishing also scored significantly higher in most distress-related emotions. Among all the Distress Thermometer Scale, only the sleepiness scores appeared similar in flourishing and non-flourishing patients.

No associations were found between staging and flourishing ($\chi^2=1.32$, $p=0.3$)

Test	Flourishing M(SD)	Non flourishing M(SD)	t test/Mann-Whitney test
IPQ-R			
Number of symptoms	4.6(3.6)	5.9(3.4)	U=2504.0, $p=0.03$
Illness identity	4.6(3.6)	5.5(3.4)	U=2534.0, $p=0.1$
Distress Thermometer			
Stress	4.9(3.0)	6.4(2.6)	U=2251.0, $p=0.001$
Anxiety	4.9(3.3)	6.5(2.7)	U=2298.0, $p=0.002$
Depression	4.1(3.0)	6.2(2.7)	U=1907.0, $p<0.001$
Anger	3.2(3.3)	4.7(3.3)	U=2397.0, $p=0.009$
Sleepiness	5.6(3.3)	5.6(3.4)	U=3190.0, $p=0.9$
Need for help	5.8(3.3)	7.0(2.5)	U=2574.0, $p=0.44$

Table 4 – Differences in symptoms, illness identity, and distress emotions between flourishing and non-flourishing patients

4 DISCUSSION

The present study targeted an innovative research project, simultaneously investigating illness identity, emotional difficulties, and mental health, in particular flourishing, among cancer patients. It also aimed at comparing findings from participants with localized and metastatic cancer, and flourishing and non-flourishing patients.

4.1 Cancer Stage and Physical Symptoms, Mental Health and Distress Emotions

To the best of our knowledge, only one study has investigated the differences in illness identity across cancer stages ⁴².

It is interesting to note that no differences were found between the number of symptoms in patients with localized and metastatic cancer. Sartori and colleagues⁴³ found a significantly higher frequency of sleep disorders for metastatic

⁴²R. D. G. SARTORI *et al.*, *The Impact of Bio-Psycho-Social Factors on Mental Health Outcomes in Patients with Solid Tumors*, «Tumori Journal», 112/4 (2026), pp. 1-11, <https://doi.org/10.1177/03008916261442>.

⁴³*Ibidem*.

compared to localized cancer patients. Valentine and colleagues,⁴⁴ through the profiling of patients in stage iv Non-Small Cell Lung Cancer, found that most subjects reported the greatest physical symptom burden.

Regarding anger, to the best of our knowledge, no previous studies have directly compared anger across cancer stages. However, this emotion has been widely explored in palliative care settings, both in oncology and in other terminal diseases or conditions.⁴⁵

Given the lack of comparative studies across stages, further research is needed. Although early studies indicated that clinically relevant levels of anger have been reported in up to 20% of cancer patients,⁴⁶ this emotional state remains relatively understudied compared to other distress-related emotions such as anxiety and depression. While it is often perceived as irrational and maladaptive, and patients expressing anger can be seen as difficult, anger is a natural response to threatening, uncontrollable, or unfair situations, and may serve adaptive functions by empowering individuals to face adversity and loss.⁴⁷ Extant studies highlight the influence of anger on patient-physician communication, physical distress, and prognostic pessimism⁴⁸. In this context, our findings provide further support for its clinical relevance.

Interestingly, despite the observed differences in anger, in our study other distress-related variables (such as anxiety, depression and stress) did not significantly differ across cancer stages. This is in contrast with previous findings, which indicated that patients with advanced cancer had higher levels of anxiety and depression⁴⁹ and, more generally, more severe psychological impairment as cancer progresses.⁵⁰ However, most existing studies do not directly compare

⁴⁴T. R. VALENTINE *et al.*, *Illness Perception Profiles and Psychological and Physical Symptoms in Newly Diagnosed Advanced Non-Small Cell Lung Cancer*, «Health Psychology», 41/6 (2022), p. 379.

⁴⁵B. MOSSMAN *et al.*, *Emotional Distress Predicts Palliative Cancer Care Attitudes: The Unique Role of Anger*, «Psycho-Oncology», 32/5 (2023), pp. 692-700; J. PHILIP *et al.*, *Anger in Palliative Care: A Clinical Approach*, «Internal Medicine Journal», 37/1 (2007), pp. 49-55; E. KUBLER-ROSS, S. WESSLER, L. V. AVIOLI, *On Death and Dying*, «JAMA», 221/2 (1972), pp. 174-179.

⁴⁶J. JULKUNEN, M. GUSTAVSSON-LILIUS, P. HIETANEN, *Anger Expression, Partner Support, and Quality of Life in Cancer Patients*, «Journal of Psychosomatic Research», 66/3 (2009), pp. 235-244; S. P. THOMAS *et al.*, *Anger and Cancer: An Analysis of the Linkages*, «Cancer Nursing», 23/5 (2000), pp. 344-349.

⁴⁷J. I. GERHART *et al.*, *Anger Proneness and Prognostic Pessimism in Men with Prostate Cancer*, «American Journal of Hospice and Palliative Medicine», 34/6 (2017), pp. 497-504.

⁴⁸J. I. GERHART *et al.*, *Anger, Provider Responses, and Pain: Prospective Analysis of Stem Cell Transplant Patients*, «Health Psychology», 34/3 (2015), p. 197; J. I. GERHART, V. S. VARELA, J. W. BURNS, *Brief Training on Patient Anger Increases Oncology Providers' Self-Efficacy in Communicating with Angry Patients*, «Journal of Pain and Symptom Management», 54/3 (2017b), pp. 355-360.

⁴⁹R. D. G. SARTORI *et al.*, *The Impact of Bio-Psycho-Social Factors on Mental Health Outcomes in Patients with Solid Tumors*, cit.; A. E. SIMON, M. R. THOMPSON, K. FLASHMAN *et al.*, *Disease Stage and Psychosocial Outcomes in Colorectal Cancer*, «Colorectal Disease», 11/1 (2009), pp. 19-25.

⁵⁰D. NDETEI *et al.*, *Psychological Well-Being and Social Functioning Across the Cancer Stages*:

negative emotions and states across cancer stages. Many focus on distress within a single stage⁵¹ or examine it at specific points along the illness trajectory and the clinical path, such as diagnosis, treatment, follow-up, or recurrence.⁵² Therefore, further comparative research across cancer stages is needed to clarify and confirm the results obtained.

Regarding the differences in wellbeing across cancer stages, research in literature appears scarce and mixed. Our findings are consistent with one study, which indicates worsening in psychological wellbeing as cancer progresses. In detail, Simon and colleagues⁵³ found that patients with advanced colorectal cancer exhibited poorer outcomes across nearly all psychosocial variables compared to those with localized disease, including worse emotional wellbeing and overall quality of life. Importantly, in line with our results, the only domain that did not differ across stages was social/family-related wellbeing.⁵⁴ This convergence can indicate that social wellbeing may represent a relatively stable dimension, less influenced by disease progression than other aspects of wellbeing. On the other hand, a study from Sartori and colleagues⁵⁵ indicated that localized cancer patients did not report higher wellbeing compared to metastatic ones. Further research is needed to clarify these relationships.

4.2 *Presence of Flourishing, Physical Symptoms and Distress Emotions*

As far as flourishing is concerned, our findings indicated that non-flourishing patients had a higher number of symptoms compared to flourishing participants, but the two groups did not differ in illness identity. This suggests that overall symptom burden may be more strongly associated with flourishing rather than the cognitive attribution of symptoms to the illness. The former result is consistent with Harris and colleagues,⁵⁶ who found a negative association between in-

Implications for Palliative Care, «Journal of Social Work in End-of-life & Palliative Care», 14 (2018), pp. 194-208.

⁵¹Y. CHEN *et al.*, *Characteristics of Symptom Distress in Chinese Nasopharyngeal Carcinoma Patients and its Relation to Mood Disturbance: A Cross-Sectional Study*, «European Journal of Cancer Care», 28/4/13032 (2019), <https://doi.org/10.1111/ecc.13032>; S. J. STAPLETON *et al.*, *A Systematic Review of The Symptom Distress Scale in Advanced Cancer Studies*, «Cancer Nursing», 39/4 (2016), pp. 9-23.

⁵²E. CHAD-FRIEDMAN *et al.*, *Psychological Distress Associated with Cancer Screening: A Systematic Review*, «Cancer», 123/20 (2017), pp. 3882-3894; L. ZIEGLER *et al.*, *Identifying Psychological Distress at Key Stages of the Cancer Illness Trajectory: A Systematic Review of Validated Self-Report Measures*, «Journal of Pain and Symptom Management», 41/3 (2011), pp. 619-636.

⁵³A. E. SIMON *et al.*, *Disease Stage and Psychosocial Outcomes in Colorectal Cancer*, cit.

⁵⁴*Ibidem*.

⁵⁵R. D. G. SARTORI *et al.*, *The Impact of Bio-Psycho-Social Factors on Mental Health Outcomes in Patients with Solid Tumors*, cit.

⁵⁶A. HARRIS *et al.*, *Flourishing in Head and Neck Cancer Survivors*, cit.

creasingly severe symptoms and flourishing in cancer patients. However, the lack of association between illness identity and different levels of flourishing in our study is in contrast with prior research indicating that illness identity is strongly related to both physical and mental health outcomes.⁵⁷ Moreover, while a systematic review and meta-analysis⁵⁸ found associations between psychological wellbeing and illness perceptions such as consequences, the specific role of illness identity remained unexplored in the reviewed studies. This highlights the need for further research into these relationships.

In addition, non-flourishing patients in our sample showed significantly higher levels in all distress variables, apart from sleep. This is in line with the results from Harris and colleagues⁵⁹ showing that flourishing is inversely associated with depression and anxiety. However, in contrast to our research, in their study insomnia was significantly associated with flourishing.

Interest in flourishing in the oncological field is relatively new. Early contributions⁶⁰ are from the late 2010s and the beginning of 2020s, and expansions in this field are recent. For example, Soria-Reyes and colleagues⁶¹ examined the psychometric properties of the Flourishing Scale in women with breast cancer.

Additional research has begun to explore flourishing in specific groups, such as children, adolescents, young adults affected by cancer and their parents⁶², or among oncology professionals⁶³. Nevertheless, a strong need for expansion remains and should be addressed, particularly regarding adult cancer populations.

⁵⁷H. ROZEMA, T. VÖLLINK, L. LECHNER, *The Role of Illness Representations in Coping and Health of Patients Treated for Breast Cancer*, «Psycho-Oncology», 18/8 (2009), pp. 849-857.

⁵⁸E. M. RICHARDSON *et al.*, *Illness Representations, Coping, and Illness Outcomes in People with Cancer: A Systematic Review and Meta-Analysis*, «Psycho-Oncology», 26/6 (2017), pp. 724-737.

⁵⁹A. HARRIS *et al.*, *Flourishing in Head and Neck Cancer Survivors*, cit.

⁶⁰E. FULLER-THOMSON, K. J. WEST, *Flourishing Despite a Cancer Diagnosis: Factors Associated with Complete Mental Health in a Nationally Representative Sample of Cancer Patients Aged 50 Years and Older*, cit.; A. HARRIS *et al.*, *Flourishing in Head and Neck Cancer Survivors*, cit.

⁶¹L. M. SORIA-REYES *et al.*, *Psychometric Properties of The Depression Anxiety Stress Scales (DASS-21) in Women with Breast Cancer*, «Scientific Reports», 14/20473 (2024), <https://doi.org/10.1038/s41598-024-68814-9>.

⁶²E. CHO, S. L. DOCHERTY, *Beyond Resilience: a Concept Analysis of Human Flourishing in Adolescents and Young Adults with Cancer*, «Advances in Nursing Science», 43/2 (2020), pp. 172-189; C. POZO MUÑOZ, B. BRETONES NIETO, *Spanish Version of the Flourishing Scale (FS) on the Parents of Children with Cancer: A Validation Through Rasch Analysis*, «Frontiers in Psychology», 10 (2019), p. 35.

⁶³M. BOSSARD *et al.*, *Oncologists' Psychological Flourishing: A Driving Force for Positive Attitudes at Work*, «Psycho-Oncology», 33/7/6372 (2024), <https://doi.org/10.1002/pon.6372>; M. H. VETTER, M. K. VETTER, J. FOWLER, *Resilience, Hope and Flourishing are Inversely Associated with Burnout Among Members of the Society for Gynecologic Oncology*, «Gynecologic Oncology Reports», 25 (2018), pp. 52-55.

4.3 Differences in Associations for Cancer Staging and Flourishing

Taken together, these findings suggest that variables from different biological and psychological areas may have distinct patterns of association with other biopsychosocial aspects inherent to the condition of patients with cancer. This indicates the importance of adopting a comprehensive approach to patient assessment and care that accounts for the complexity of these interacting dimensions.

If confirmed, the overall pattern of results would suggest that symptom burden is associated with flourishing but not with cancer stage, possibly reflecting the effects of symptom management strategies. Conversely, illness identity appears to be linked to disease stage but not to flourishing. Anger is associated with both advanced cancer and non-flourishing status, whereas other distress-related emotions are primarily associated with non-flourishing rather than disease stage. Sleep, in contrast, does not appear to be significantly associated with either factor. Overall, these findings suggest that mental wellbeing may be more closely related to psychological distress than to disease stage per se, challenging common assumptions about the primacy of clinical severity in determining patients' psychological outcomes.

4.4 Strengths, Limitations and Future Directions

The present study represents a novel contribution to the psycho-oncological field, addressing important gaps in literature regarding the comparison of bio-psychosocial variables across cancer stages and patients with different levels of flourishing.

However, the present study also has limitations. First, its correlational design does not allow predictive interpretations of data. Future research using a longitudinal design could investigate the links between these variables over time. Second, as previously highlighted by Kiknadze and Fowers⁶⁴ the importance of considering flourishing not only as an individual dimension of life calls for the need to deepen into differences and similarities in cancer patients across different cultures and different geographic areas. Finally, the concept of mental health as dynamic balance⁶⁵ can be integrated with the model for Sustainable Mental Health⁶⁶.

⁶⁴N. C. KIKNADZE, B. J. FOWERS, *Cultural Variation in Flourishing*, cit.

⁶⁵V. PIROLA *et al.*, *The Interplay Between Mental Health and Mental Illness in The Daily Experience of Persons with Major Depressive Disorder in Remission: A Real-Time Sampling Study*, «Journal of Affective Disorders», 395/120794 (2026), <https://doi.org/10.1016/j.jad.2025.120794>.

⁶⁶E. BOHLMEIJER, G. WESTERHOF, *The Model For Sustainable Mental Health: Future Directions for Integrating Positive Psychology into Mental Health Care*, «Frontiers in Psychology», 12/747999 (2021), <https://doi.org/10.3389/fpsyg.2021.747999>.

5 CONCLUSIONS

Cancer is a matter for everyone in the world, touching different geographies, cultures and economic realities. Results showed that patients with advanced cancer reported significantly higher levels of illness identity and anger, and significantly lower scores in all wellbeing subscales, except for social wellbeing, compared to patients with localized tumors. Patients at different cancer stages did not differ in mental health distribution. Finally, non-flourishing patients exhibited significantly higher numbers of symptoms, and levels of stress, anxiety, depression, anger, and need for help than flourishing patients.

The aim of this study was to suggest new directions for research rather than drawing definitive conclusions. Over the past decades, several efforts have been made to clarify the structure and relationship between health and mental illness⁶⁷. Despite the persistent emphasis on illness, especially in the field of interventions, the need to pay attention to “positive mental health and well-being,” has recently been emphasized by the 2030 ONU Agenda. Eudaimonia seems to be an enriching and efficacious approach to health services in psycho-oncology. Bertucci Lima and Mariano⁶⁸ highlighted the importance of the interdependence of nature and its positive relationship with eudaimonic well-being, supporting the claim of a ‘Sustainable Eudaimonic Development’ through four fundamental principles: normative, equity, integration and dynamism. Taking this concept into account, psycho-oncology should consider the interplay between bio-psycho-socio-spiritual difficulties and resources, and flourishing promotion, to offer patients the best sustainable and healthy pathway of adjustment to illness and to a good quality of life.

As highlighted by Wissing⁶⁹, the significance of understanding the intricate nature of bio-psycho-social-ecological well-being is to emphasize how humans interact with non-human beings and ecological systems. To this extent, the values of prevention and care/cure in medical contexts underline the importance of empowering an entirely good life, at the physical as well as at the psychological, social and spiritual level. Going back to Aristotle’s concept of living well-together, and the more recent studies on communal flourishing⁷⁰, psycho-oncology should

⁶⁷M. T. LEE, I. MAYOR, *Health and Flourishing: An Interdisciplinary Synthesis*, in *Human Flourishing: A Multidisciplinary Perspective on Neuroscience, Health, Organizations and Arts*, ed. by M. Las Heras, M. Grau, Y. Rofcanin, Springer International Publishing, Cham 2022, pp. 49-68.

⁶⁸P. A. B. LIMA, E. B. MARIANO, *Eudaimonia in the Relationship Between Human and Nature: A Systematic Literature Review*, «Cleaner Production Letters», 2/100007 (2022), <https://doi.org/10.1016/j.clpl.2022.100007>.

⁶⁹M. P. WISSING, *Beyond the “Third Wave of Positive Psychology”: Challenges and Opportunities for Future Research*, «Frontiers in Psychology», 12/795067 (2022), <https://doi.org/10.3389/fpsyg.2021.795067>.

⁷⁰N. C. KIKNADZE, B. J. FOWERS, *Cultural Variation in Flourishing*, cit.

foster tailored interventions based on the importance of reducing distress and managing negative emotions, as well as reinforcing well-being and mental health, and flourishing both at the individual as well as at the collective level.

© 2026 Valentina Biscaldi, Davide Dalu, Anna Gambaro, Sabrina Ferrario, Nicla La Verde, Raffaella D. G. Sartori & Forum. Supplement to Acta Philosophica



Quest'opera è distribuita con Licenza [Creative Commons Attribuzione - Non commerciale - Non opere derivate 4.0 Internazionale](#).

[Testo completo della licenza](#)