PSYCHO-ONCOLOGY AND SPIRITUALITY
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SUMMARY
Psycho-oncology is a branch of medicine which, combining psychiatry and oncology, studies the biological and psychological factors related to the onset and treatment of carcinoma. The struggle with this life-threatening disease requires an adaptation to a new life situation characterized by changed routines of everyday life and dynamics of personal relationships. The psycho-oncological approach is a multidisciplinary one, as modern medicine recognizes more and more the role of spirituality in the treatment and recovery from various pathological conditions. Spirituality is the adaptive capability of intelligent beings to retain the will for life in spite of adversities and awareness of the imminence of death. Faced with a challenge of malignant disease people are nevertheless able to react with positive personality changes, which leads them to a more meaningful and substantial life. The so-called posttraumatic growth is a feature which enables an individual to assume control over his own reactions to disease, which in turn can have a positive influence on the treatment outcome. An essential role in this process is played by the spiritual growth of an individual. Malignant disease can represent an opportunity for spiritual growth, a dimension often neglected by contemporary lifestyles. Religion, as an important constituent part of spirituality, can offer the believer a meaning of suffering and thus turn the disease into an opportunity for self-knowledge and development of a more mature spirituality. Christian spirituality can represent a path which helps an individual to cope with malignant disease. Modern medicine should be based on a multidisciplinary approach to the patient and encompass all the human dimensions (rational, emotional and spiritual), whereas treatment itself must be both personalized and participatory.

Key words: psycho-oncology - spirituality - posttraumatic growth

INTRODUCTION
A task of modern medicine is to be personality-centred and participatory, taking into account the patient’s physical, psychological and spiritual health. The prevalence of malignant diseases is increasing, and, although a number of oncological treatments lead to high survival rates, in order for a person to cope with the challenges of a serious diagnosis, mental health should be preserved in the first place. Psycho-oncology has recognized the importance of mental health in the treatment of carcinoma, and numerous clinical studies have stressed the importance of distinguishing normal emotional reactions from mental disorders. Modern medicine, however, ought to make a further step and acknowledge the spiritual dimension of man which can be a partner in the process of either a successful healing or coping with malignant disease. Spirituality has many facets and spiritual growth is individual, reflecting personal interests and affinities, ultimately aiming at assuming responsibility for one’s own reactions to the disease. In the context of malignant disease, we can say that spirituality is the adaptive capability of intelligent beings to retain the will for life in spite of life’s adversities and awareness of the imminence of death. Positive emotions such as love, contentment, thankfulness and serenity are constituents of psychological wellbeing and exert a positive impact on bodily functions (Jakovljević et al. 2014).

Spiritual growth can take place in the ambience of religion; for instance, a Christian can empower his inner life under distressing circumstances through his religious observances (prayer, religious rituals, holy books etc.). In oncological patients, a greater maturity of spiritual life can be achieved through striving to connect God and man and find a meaning in suffering, thus alleviating fear and pain and favourably affecting bodily functions.

Today we witness an increased focus on the notion of posttraumatic growth, i.e. personality growth occurring after particularly distressing life circumstances (e.g. malignant disease). The starting premise of this notion is that people change in confrontation with life’s challenges and that these changes can be a motivating factor for personality growth. Specifically, we observe a restructuring of values: changed priorities, opening up of new possibilities, better self-knowledge, development of personal identity, focusing on one’s own goals. Sometimes, even the most severe pain can empower us to develop our higher self.

With the aim of educating and sensitising students in accordance with current medical trends, the Medical Faculty of the University of Rijeka has introduced in 2019 an elective course called “Psycho-oncology and spirituality”. The goal of this course is to enable students to identify emotional reactions to the disease in oncological patients, recognize parallel mental comorbidities, and finally, clarify the need for a multidisciplinary approach involving an oncologist, a psychiatrist and a psychotherapist, as well as to elucidate the importance of spirituality in the process of oncological treatment. Through lectures and exercises, students familiarize themselves with theory, clinical studies as well as clinical practice relating to interconnectedness of oncological...
pathology with certain psychiatric disorders, along with acquiring an all-encompassing view of spirituality, as seen from several perspectives (biological, theoretical principles, etc.). Students are also taught to observe the religious life of patients, in order to be able to understand, appreciate and encourage patients to affirm their faith with the aim of achieving therapeutic goals.

PSYCHO-ONCOLOGY

Psycho-oncology began developing as a medical discipline in the second half of the 20th century, as a response to a growing interest for psychiatric, psychological and social factors impacting upon the prevention and treatment of carcinoma. This discipline investigates mental factors within the framework of multidimensional perception of malignant diseases. More specifically, it comprises diagnostic, therapeutic, educational and research activities of psychiatrists in oncological institutions (Holland 2018).

Key areas of psycho-oncology are:
- psychological reactions to carcinoma in patients, family members and carers.
- biological, psychological, social and behavioural factors impacting upon the risk of development of carcinoma, as well as its diagnosis, treatment and survival (Cleeland et al. 2003).

In addition to the growing interest for this area, psycho-oncology got a boost due to a number of studies elucidating and identifying possible links between mental factors and aetiology of disease, i.e. mental factors impacting upon the morbidity and mortality of cancer.

At the time of diagnosing and during treatment, patients with carcinoma often manifest a high degree of mental disturbances, and it is very important to know whether these are mere emotional reactions or perhaps underlying mental disorders requiring treatment. The knowledge of having a malignant disease often means confronting the fear of death – a frequent first reaction – usually followed by fear of separation from others and one’s own self (Gregurek 2008). Fear of death and helplessness are inevitable and normal responses to a disease, often leading to anxiety and mobilization of defence mechanisms which protect an individual from more severe forms of mental disorder (Gregurek 2006).

EMOTIONAL REACTION TO THE DIAGNOSIS OF CANCER

Emotional reactions occur already at the moment when carcinoma becomes suspect, and grow in intensity as the diagnosis is reached. Compared to other illnesses, the knowledge of having cancer precipitates psychological reaction more often, due to existential threat, and an array of psychological defences is mobilized in order to maintain mental balance. The period of anticipated crisis after diagnosis includes an initial response mani-

festing as disbelief, despair or denial, which usually lasts about a week. There follows a period of dysphoria, usually lasting about two weeks, marked by depression, anxiety, loss of appetite, insomnia, lack of concentration and a general decrease in normal functioning parameters. After these initial reactions, there comes a phase of adaptation which lasts several months. It is marked by acceptance of reality and concern about possible treatment options, along with a search for reasons for optimism and return to normal activities. Facing and coping with disease depends on ego strength, family relationships, object relations and last, but not least, relationship with the physician. The patient’s emotional response can depend on the type and stage of carcinoma, treatment requirements and prognosis of the disease. A negative emotional reaction and belated recognition of mental symptoms can result in the development of psychiatric disorders (Gregurek 2009).

PSYCHIATRIC DISORDERS IN ONCOLOGICAL PATIENTS

Clinical practice and research show that between one third and a half of all oncological patients develop mental disorders. Most frequent psychiatric comorbidities in carcinoma patients are depression, anxiety and post-traumatic stress disorder (PTSD).

Depression
Depression can manifest in all stages of malignant disease, but the risk is the highest in the diagnosing stage, situations of treatment failure or relapse. Symptoms of depression can be a normal reaction, mental disorder or manifest as a consequence of the disease or treatment. Symptoms vary in intensity from sadness to a major depressive episode (MDE). Severe depressive symptoms are often correlated with low pain control and poor cooperability, which in turn can aggravate physical symptoms and influence the course of treatment and recovery (Anton et al. 2008).

Anxiety disorder
Anxiety disorder can have a profound influence on the quality of life. Fear of death, helplessness, fear of pain and suffering can lead to anxiety disorders ranging from panic to psychotic reactions. Anxiety can be additionally aggravated by demanding and exhausting treatment procedures which in turn can be compromised if the patients are irritable, incapable of relaxing, overly excited, suffering from permanent discomfort, heightened feeling of pain, fears of bodily deterioration and death. Symptoms of anxiety (sweating, palpitation, vertigo, feelings of suffocation, lack of air, nausea, loss of appetite) often overlap with adverse effects of treatment or intense pain (Brintzenhofe-Szoc et al. 2009).

PTSD
Post-traumatic stress disorder (PTSD) can develop as a consequence of various stressors among which are
some of the cancer diagnostic and therapeutic procedures. An added stress burden may be derived from perception of the disease as lethal, long painful periods, relapse of disease and contact with a dying person. Sometimes symptoms of PTSD manifest shortly after diagnosis, but they can also be delayed for months or even years. They range from mild to malignant forms, or chronic forms. Intense emotions connected with “having a carcinoma” can persist, even in acute forms, for years after completion of a successful treatment, for instance fear can haunt a person in spite of clinical recovery (Anton et al. 2012).

A study in South Korea carried out between 2002 and 2013 investigated the mortality of breast carcinoma, colorectal carcinoma and carcinoma of stomach and tongue in patients in whom psychiatric disorder manifested subsequent to the onset of the disease. The psychiatric disorders observed in this study were organ disorders, mood disorders, anxieties, neurosis, stress disorder and other. Patients were treated with medication and psychotherapy in the duration of at least 30 days. Results showed a higher mortality in patients with psychiatric comorbidities, but mortality was lower in patients treated for psychiatric disorders compared to those who received no psychiatric treatment (Lee et al. 2020).

Psychiatric disorders are known to delay a timely diagnosis of carcinoma, as shown by a prospective study carried out in England. The study was designed to reveal whether depression and anxiety were associated with a lower response to screening programmes for breast and neck carcinoma. A high incidence of depression symptoms proved to be correlated with a lower response to screening, while neurotic symptoms triggered a higher response, a phenomenon explained by increased worry (Niedzwiedz et al. 2020).

In 49% of men in whom prostate carcinoma was diagnosed within the past year, a major depressive episode was also diagnosed, related to feelings of guilt and suppressed emotions (Rice et al. 2020).

In the period 2010-2018, a study was carried out at the Haematology and Oncology Department of the University Hospital in Vienna which included patients with breast carcinoma, haematological carcinomas and throat carcinoma. Psychiatric disorders were diagnosed in one third of the cancer patients, and a correlation of PTSD with depression, anxiety and distress was proved too (Unseld et al. 2019).

**SPIRITUALITY**

_The soul finds nourishment in what pleases it_

_St. Augustine_

The pace at which we live is accelerated, everyday life exposes us to various pressures, interpersonal relations are often strained, and we live under a growing compulsion to satisfy various hedonistic and narcissistic drives. We have moved away from authentic values, authentic spirituality, from ourselves, our human essence, and for this reason somatic diseases are on the increase. The world we live in is a fast-changing one, requiring of us to become more aware, as E. Tolle writes about in his book “The New Earth”. Diagnosis of malignant disease marks a moment in which many of our daily routines come to a halt, and we face exposure to physically and mentally exhausting treatments. Oncological treatments today have a high degree of clinical success, but are nevertheless very demanding, both physically and mentally. Successful outcome cannot be achieved without the patient’s cooperation, which includes acceptance of the disease, inner empowerment in order to be able to cope with the strenuous therapeutic process, and learning to live with the disease and its consequences. Spiritual empowerment can happen on different levels as spiritual growth is always individual, reflecting the unique temperament of the person and personality traits, and its ultimate goal is to assume control over one’s own reactions to the disease. There are many definitions of spirituality, however, in connection with malignant disease, we can say that spirituality is the capacity of a human being to adapt to the distresses of life and to retain the will for life in spite of the fact that death is inevitable. Positive emotions such as love, contentment, thankfulness, serenity, are the constituents of psychological wellbeing and have a positive impact on bodily functions (Jakovljević et al. 2014).

A healthy spiritual life presumes spiritual guidance in recognizing the authentic values and purpose of life, and it can empower us in times of crisis, such as having to face a malignant condition. As a matter of fact, disease as such can act as a trigger for our spiritual growth, the restructuring of our priorities and clarifying our focus which is often blurred by the speed and routine of everyday life.

Some of the concepts of spirituality are the following:

- **Spirituality as a growing all-inclusiveness.** This concept is based on the view that everything is related to everything else, including the existence of spiritual powers, that nothing exists in isolation. This leads to an awareness of dimensions higher than our own self, and fosters empathy which leads to a broader vision of life.

- **Spirituality as a contact with the spiritual realm/powers.** In the western idealist philosophy, the soul represents the spiritual principle inhabiting the body (Plato), or one which gives form to the body (Aristotle).

- **Spirituality as transcendental expansion of consciousness.** To be spiritual means to be in touch with the whole, feeling oneself as a being in a broader, richer and more meaningful context of life, whereas spiritual integration is the integration of the soul whereby we heal and become whole.

- **Spirituality as living in accordance with God’s thoughts and God’s will.** In the Christian perspective, spirituality is defined as opening up to the gifts and fruits of the Holy Spirit, in accordance with spiritual laws and God’s thoughts, by means of love, compassion, joy and peace.
• *Spirituality as a world of ideas and beliefs.* Every person has a set of religious, metaphysical or philosophical convictions which shape and direct his style of life, experience, behaviour, life as a whole. These convictions can be a source of strength, hope and optimism, or alternatively, of fear, pessimism and despair.

• *Spirituality as an elevated and non-material dimension of existence.* In this context, spirituality is seen as a capacity of connecting with one’s true self, with the divine inside of us, with the recognition of true values and purpose of life.

• *Spirituality as a search for meaning.* The phenomenological concept defines spirituality as an activity of giving meaning to life, and a search for existential or transcendental purpose. This can be realized through religiosity or independently of it (Jakovljević 2010).

### CHRISTIAN SPIRITUALITY - A PATH THAT HELPS

Religion is an organized system of belief and ritual centred around the notion of God and it can play an important role in spirituality. Through the practice of religious life (prayer, Mass, contemplating the Gospel, etc.) a Christian can mitigate feelings of fear, suffering, pain and gain help in achieving inner peace. Religiosity as a key ingredient of spirituality can help a person come to terms with malignant disease and facilitate a favourable treatment outcome. Emotions as well as religious feelings can impact upon the immune-endocrinological functions involved in the emergence and treatment of carcinoma (Lissoni et al. 2001). Clinical studies confirm that spirituality and religiosity are able to reduce anxiety and depression in patients with malignant disease (Chara et al. 2018). Also, highly pronounced religiosity has been shown to reduce the incidence of depression in patients with breast carcinoma (Margetić et al. 2005). The study in Iran shows that religious coping methods of relationship with God such as praying and trust was effective in reducing depression among cancer patients. The rate of depression was lower among patients whose families had a better attitude to religion (Fatemth 2013).

On the inescapable human issue of suffering, we can say that it represents a challenge prompting an individual to explore in greater depth the meaning of his existence. On the philosophical level, suffering is an anthropological reality, part of our human existence. There is an old saying that “for one drop of joy, we must drink a whole bucket of sorrow.” Robin Ryan postulates that the reality of suffering is the only thing challenging us to believe. “Suffering is not a matter of choice” (Ryan 2003). Our souls are created to possess an ocean of perfection. The closer we get to the immeasurable, to the source of all creation, the greater our joy will be. Our souls cannot be fully satisfied with any kind of temporal security. One possible reaction to suffering can be rebellion, the other a burnout. If we rebel against suffering, its meaning inevitably evades us. However, if we perceive it in the light of salvation, we are able to turn pain into something creative. If the universe is a mere game of chance, then suffering has no meaning. On the other hand, for a mature believer, all things work together in God, enlightening our path to holiness.

Just like the existence of God, human suffering is an existential mystery. Even the best rational explanations of it fall short of the target. A problem, by definition, is something we are able to solve, but the mystery is something evades easy solutions. Suffering, physical as well as mental, is inseparable from human existence. According to Frankl’s doctrine (Frankl 1984), the search for meaning can be perceived on three levels: (1) our behaviour, i.e. what we are giving to the world, (2) our valuing, i.e. what we request from the world and (3) our suffering, i.e. the meaning which we attach to it. Our emotional and cognitive valuing of pain influences not only the quality of pain itself, but the quality and meaning of our entire life. There is an English saying, “without pain no gain.” Only then are we able to say that spirituality “is usually recognized as the search for meaning and purpose in life, for a personal connection with transcendent realities and truths, and for interconnectedness with humanity” (Jakovljević et al 2019).

Spirituality is not a repetitive absorption of something definite, but rather a journey towards the indefinite, which is creative in its essence. We must, therefore, agree with the statement that “creativity is particularly relevant to achieving personal recovery that involves purpose, hope and optimism, spirituality, personal mastery, new self-identity, connections and interpersonal skills, symptom management and destigmatization” (Jakovljević 2013).

In psycho-oncology, our guiding principle is to try and help oncological patients link the concept of God with our own being through the revealed truth of Jesus Christ: “For God so loved the world that he gave his one and only Son, that whoever believes in him shall not perish, but have eternal life” (John 3:16). Life in Christ reveals that eternal mystery, the striving to experience the breeze of the Eternal here and now. In order to achieve this, it does not suffice to remain on the level of the articulated or learned, it is necessary to enter into communication with the object of a living faith. Our inner being resists living in the constraints of time and space and strives towards realities which are unlimited and immeasurable. It is only in that kind of Love that can give us true spiritual fulfilment. St. Augustine said: “You have made us for yourself, O Lord, and our heart is restless until it rests in you.”

Spirituality in the primary sense of the term is the capacity to connect with what is spiritual. However, as long as we live on this earthly plane, we are also bodily beings, and we attach value to the beauty of communication which is offered us. But our inner being is geared toward the spiritual. We not only have a psyche, but also a conscience which proceeds from our inner-
most being and expands through the various dimensions of our personality. To put it in Christian terminology, we could say that life is guided by a higher Spirit. Spiritual life features a capacity of accepting ideals and living them in an inner, independent way. Aaron Kheriaty said: “When a patient who believes in God asks me whether I recommend him to pray more or start taking drugs, my answer is – do both” (Kheriaty 2012).

We wish to sum up short treatise by saying that an oncological patient is a person living in fear and suffering, but who is nevertheless able to achieve spiritual maturity, i.e. stabilize his mental horizon and continue to walk in hope. When we speak about spirituality or faith, we speak about the inescapable dimension of human existence. Is there any one among us who has never experienced the need to confide in someone, to trust someone, to lay bare his entire life, to find out the things he will accept as truth? When we say “I trust you”, we verbalize our attitude towards another person. We deem that person worthy of our trust and are convinced that he is telling us the truth.

Spirituality under the influence of faith helps the diseased to enter into harmony with Love which gives them strength, with the Presence which becomes life inside of them. In Christian spirituality, the goal is not only to accept our feelings, wounds and illnesses by growing in manhood and discovering inner wealth, but also to acquire the experience of faith precisely where our human ability stops, thus opening up our relationship with God at the point where we feel entirely alone (Grun & Dufner 2004). If we cannot help a diseased person understand spirituality as thought, desire, action, we have probably missed our purpose of caring.

**POSTTRAUMATIC GROWTH**

Posttraumatic growth (PG) is defined as positive psychological change occurring after struggling with a highly challenging experience (Tomita et al. 2017). Growth does not mean the same thing as an increase in well-being or a decrease in pain and is more than an adaptive effect from trauma or a return to a previous state, but growth is instead related to achieving a higher level of functioning that was not present prior to the trauma (Linley & Joseph 2004, Tedeschi & Calhoun 2004). Cancer diagnosis is a potentially traumatic event, the related challenges of which can trigger positive or negative reactions. Having cancer is not a singular stressful experience but a chronic severe stressor and people with cancer deal with various stressful events (medical treatments, adverse effects, pain, change in appearance and body image, fear of recurrence, change in relationships with partner or family). PG includes enhanced interpersonal relationships, appreciation or life, personal strength, positive changes in life priorities and spirituality. A study in Japan included 157 women with breast cancer and indicated the role of coping strategies, social support in enhancing PG and to reveal the influence of PG on depressive symptoms. The results suggest that coping was directly related and social support were partially related to PG. Using positive coping and high level of perceived social support decreased depressive symptoms (Tomita et al. 2017). In addition, one study shows that PG is related to better mental health and quality of life and to less distress and depression (Lelorain et al 2010). More recent studies involving breast cancer patients aimed to shed light on relationship between the evolution of depressive symptoms over time and PG. The results suggest that the PG score was statistically significantly higher in the no longer depressed group compared with the still depressed and depressed now groups (Annuziata et al 2020).

Spirituality is an important dimension to consider in PG of patients with cancer, mainly because cancer is a life-threatening disease that often makes patients wonder about the meaning of life and the possibility of an end (Pinto & Riberio 2010). Several studies have shown a positive relationship between spirituality and PG (Danauer et al. 2013).

In a study of 100 breast cancer patients spirituality and PG have been associated with illness adjustment and the results showed that women with a longer diagnosis and recurrence showed more distress while younger age, recurrent cancer and spirituality predicted higher PG (Paredes & Pereira 2018).

**CONCLUSION**

The treatment of oncological patients has significantly advanced in modern times, but there still remains much to be done to improve the quality of life of these patients. Care for their mental health is essential in the therapeutic process, but we should aim to make one step further and encourage patients to actively participate in their healing and tap their inner potentials. It is in this domain that we see a great potential of spiritual growth which has been suppressed by the modern way of life, but can be reactivated by acute distress, such as confronting malignant disease. Spiritual growth helps one learn the authentic values and set new priorities, a process neglected in the routine and business of everyday life. Mature religiosity, whether having roots in childhood or intensified during medical treatment, can significantly improve man’s coping with malignant disease and foster a favourable treatment outcome.

“Psycho-oncology and spirituality” is an interdisciplinary field which opens up the way to a personalized approach, envisioning the patient as a whole and encouraging him to actively participate in the treatment process, thus achieving spiritual growth and a higher quality of life. It is necessary to sensitize physicians to such an approach through education and further research, in order to integrate it into good clinical practice and improve the treatment outcomes.
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Rudolf Ljubičić: literature review and the final version of the manuscript.

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