

**The patient-physician relationship in the face of
oncological disease: a review of literature on the
emotional and psychological reactions of patients and
physician**

Rossella de Luca, Dorangricchia Patrizia, Guarnaccia Cinzia, L Coco
Gianluca, Cicero Giuseppe

► **To cite this version:**

Rossella de Luca, Dorangricchia Patrizia, Guarnaccia Cinzia, L Coco Gianluca, Cicero Giuseppe. The patient-physician relationship in the face of oncological disease: a review of literature on the emotional and psychological reactions of patients and physician. *Acta Medica Mediterranea*, Carbone Editore 2016, 6 (2), pp.1827. 10.19193/0393-6384_2016_6_170 . hal-01989936

HAL Id: hal-01989936

<https://hal.univ-rennes2.fr/hal-01989936>

Submitted on 30 Jan 2019

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

THE PATIENT-PHYSICIAN RELATIONSHIP IN THE FACE OF ONCOLOGICAL DISEASE: A REVIEW OF LITERATURE ON THE EMOTIONAL AND PSYCHOLOGICAL REACTIONS OF PATIENTS AND PHYSICIAN

DE LUCA ROSSELLA*, DORANGRICCHIA PATRIZIA*, GUARNACCIA CINZIA**, LO COCO GIANLUCA*** CICERO GIUSEPPE*

*Department of Surgical, Oncological and Oral Sciences, University of Palermo, Palermo - **Parisian Laboratory of Social Psychology (LAPPS), University of Paris 8 Vincennes Saint-Denis, Paris - ***Department of Psychology, University of Palermo, Palermo, Italy

ABSTRACT

The physician-patient relationship is daily destabilized by emotional reactions and psychic defenses that cancer arises in the two partners. Continued scientific and technological progresses which were reached by medicine in recent years, and particularly oncologic clinical discoveries, increased the chance of not only survival but also healing. Nevertheless, cancer diagnosis is still a hard existential text that destabilizes everyday life, all the psychic and relational balance, inevitably causing a psychological and social change not only in the patient who is affected but also into the wide social network around him (family, friends, doctors, healthcare team...). The aim of this review is to understand how problems, feelings, emotions, distresses or defense mechanisms could garble the relation and the communication dynamics between physician and patients and then prejudicing the efficacy of oncologic therapeutic compliance. Pubmed and Scopus were searched, using strings related to "cancer", "physician-patient relations", "burn-out", "compliance", and "communication", identifying literature published from 2000 to January 2015. Extracted papers were assessed for their relevance (10 of 412 papers initially reviewed). Results indicate that a good and empathetic relationship between physician and patient were related to good therapeutic adherence. In particular, a good physician-patient relation maximizes the impact of clinical therapies and reduces psychophysical implications.

Keywords: Physician-patient relations, burnout, compliance, oncologic disease, communication.

DOI: 10.19193/0393-6384_2016_6_170

Received May 30, 2016; Accepted September 02, 2016

Introduction

The Cancer diagnosis, as Cianfarini (2007)⁽¹⁾ affirmed, often arrives like "a bolt from the blue" that puts a strain on the search for a relational continuity and is substantiated such an extremely difficult time which nobody is prepared for. It represents a very stressful event for both patient and physician, albeit with a different emotional: for the patient it represents an existential challenge that destabilizes all his own certainties and his life's features like, for example, the relationship with his body, with his feelings and the meaning given up to them, to suffering, disease and death⁽²⁾. On the other hand, instead, physician feels suffocated by the

unremitting requests of patients and the responsibilities he is not sometimes able to hold up because of his own personal, technical and scientific limits with consequent frustrations and demotivation⁽³⁾. This confirms the truth of results of many researches⁽⁴⁻⁹⁾, that in recent years showed how to consider the cancer in its own complexity is important, not only being limited to the analysis of biological factors, but considering it as a disease involving both psyche and body.

Therefore, it requires a multidisciplinary approach that is able to assess its different features and implications. A good physician-patient relationship depends on the physician's ability to demonstrate a clinical expertise⁽¹⁰⁾ that is not limited only

to know and to *be able to do* but consists in the ability to *be able to be in the relationship*, to care and aid a human being in the totality of his person, to be able to understand, without colluding, the patient's feelings and thoughts in order to give him again this sympathy, to be able to have an empathic behavior⁽¹¹⁾. Listening and empathic communication, in fact, can help the physician to plan with his patient a care pathway that could progressively fit to his needs⁽¹²⁾. However, these empathic abilities can be altered by oncologic disease, shattering the balance and relational dynamics that were established between physician and patient. This happens because most of the time cancer put both the physician and patient in front of their inner frailties and emotions that are sometimes so strong that they are not able to face with⁽¹³⁾.

Material and methods

In this review, we wanted to analyze the main issues that can affect this relationship, like the difficulty by the physician in communicating an unlucky diagnosis, reactions and defenses implemented by the patient and his physician in an advanced disease, in order to summarize the latest international studies and understand which may be the adaptive mode that could promote the natural activation of the adaptation process to oncologic disease.

Search Strategy

We consulted Pubmed and Scopus databases, to gather published papers on problems, feelings, emotions, distresses or defense mechanisms that, after a cancer diagnosis, could alter relationship between physician and patients, using as search string "Cancer" AND physician-patient relationship AND ["Communication" OR "Burn-out" OR "compliance"] and prefixing a time interval from 2000 to January 2015.

For Pubmed and Scopus the search was limited by language (all identified articles had to be in English), by methodology (the study had to be either an empirical study, an experimental replication, a follow-up study, a quantitative study, a prospective study, a retrospective study, a quantitative study, or a treatment outcome/randomized clinical trial and by sample (human subjects).

This search allowed us to find 412 abstracts/titles, of these we identified 50 relevant papers but only 10 of which drew attention to the

conceptualization of the emotional and psychological reactions of patients and physicians. The other papers were excluded from the analysis because, despite associated to the keywords, they were not actually related to the aspects.

Inclusion assessment

A paper had to meet the following criteria to be admitted:

- empirical literature published in scientific journals between 2000 and January 2015;
- use of a self-report assessment of psychological outcome variable such as coping strategies, anxiety, depression, personal well-being, work engagement, burn-out and quality life;
- published in English.

Results

This analysis allowed us to identify major and recurring themes, such as the communication dilemma, the defense and emotions in cancer patient, the physician's emotional experience, in particular the burn-out syndrome, which will be developed in the following paragraphs. The characteristics of reviewed papers are shown in table 1.

Cancer diagnosis and the communication dilemma

In this paragraph, we have chosen to summarize five studies (four clinical research and one review) to examine the difficulties of health care professionals to communicate bad news during the course of the disease, such as when cancer recurs or when palliative or hospice cares are indicated.

Over the years, many studies and researches⁽¹⁴⁻¹⁷⁾ tried to find a possible answer to the strong dilemma, which arose in oncology about need, or not to communicate an unlucky diagnosis to the patient.

In this regard, Baile et al. studies⁽¹⁸⁾ show that, though sometimes the wall of silence can serve patient to defend himself from his malaise, in other circumstances silence instead could be inferred to him to be in a situation of much more severe disease than the reality. Therefore, it is more appropriate physician properly informs the patient about his own disease condition and course, in order to avoid producing false beliefs in him. The communication of diagnosis does not have to be limited to a single act that provides only the informative aspect and should be carried out in a few minutes, but, as

Authors	Patients or physician	Country	Sample (n)	Study design	Constructs studies	Measure of psychological variables	Results
Buckman et al. (2000)	Oncologist, oncology trainees and medical students	America	500	Protocol for disclosing unfavorable information to cancer patient about illness.	Ability to disclose unfavorable medical information to patients	Protocol S.P.I.K.E.S	Oncologists who have been taught the protocol have reported increased confidence in their ability to disclose unfavorable medical information to patients
Pascali et al. (2015)	Both	Greece	186 (93 patients and 93 physicians)	Exploratory study	The impact of clinician's defense mechanism defined with the patient-on adherence to a communication skills training	-Phillips et al.'s scale [44] - Revised Illness Perception Questionnaire [45]; - Functioning Scale from the Greek version of the Quality of Life Questionnaire-Care 30 [46]; - MAC SCALE [47].	The more illness and treatment-related information was provided by physicians, the more positive illness representations (specifically, illness consequences, emotional representations, and personal control) were reported by patients. In turn, these illness representations were related to better physical functioning and better adjustment to cancer. The degree of the patient-physician agreement on the information provided did not affect this relationship.
Miyata et al. (2003)	Cancer patients	Tokyo	427 participants	Cross-sectional	People's preferences on receiving this information	-The Japanese Questionnaire - the Japanese version of the State-Trait Anxiety Inventory (STAI) [48]	Regarding diagnosis, most respondents (86.1%) wanted full disclosure. For prognosis partial disclosure was most frequently chosen. There were no significant differences in respondents' disclosure preferences according to age, sex, STAI score, educational background, and living arrangement
Ong et al. (2000)	Both	Amsterdam	107 participants: 96 cancer patients 11 oncologist (6 gynecologists and 5 medical oncologist)	Randomized study	Relationship between both oncologists' and cancer patients' communication and patient outcomes. Doctors' patient-centredness	-The RIAS [49] - The short version of Rotterdam Symptom Checklist [50]	-The doctor-patient communication during the oncology consultation is related to patients' quality of life and satisfaction. The average scores of anxiety and depression increased from before discharge.
Matsushita et al. (2005)	Patients with digestive cancer	Japan	85 cancer patients	Exploratory study	Relationship between psychological characteristics (anxiety, depression and QOL) and coping style	-Japanese version of HADS [51] -The EORTC QLQ-C-30 [52] - The Coping Inventory for stressful situations[53] -Zung' s Self Rating Depression Scale [54]	Relationship between the abovementioned trends and individual coping styles showed that the higher score of "emotion-oriented coping style", the greater the deterioration in QOL subscales.
Schou et al. (2005)	Patients with breast cancer	Norway	165	Prospective longitudinal design	The influence of optimism and pessimism on QOL.	-MAC [47] -EORTC QLQ-C-30 [52] -LOT-R [55]	The influence of optimism and pessimism on QOL appear to be mediated by coping by before and after treatment for breast cancer
Fobair et al. (2006)	Women patients with breast cancer	America	549	A cross-sectional survey and baseline survey	Body image and sexual problems	A personal interview composed by: the 23-item Breast Cancer Problems Checklist [56] -a subset of Hopwood 10 item scale [57] -The MOS-36 [58-59]	Difficulties related to sexuality functioning were common and occurred soon after surgical and adjustment treatment.
Guvelli et al. (2015)	Oncologists	Istanbul	159	Clinical study Exploratory study	To evaluate in the group of oncologists the burnout levels, job satisfaction, psychological statement and ways of coping with stress and the relationship between these variables and their sociodemographic and occupational characteristics	-The Maslach Burnout Inventory [60] -the Minnesota Job Satisfaction Questionnaire [61] -the General Health Questionnaire (GHQ) [62] -the Coping Inventory-Short Form [63]	High levels of emotional exhaustion, depersonalization and low sense of personal accomplishment were determined in the majority of participants. A negative correlation was detected between adapt coping styles and "burnout," and a positive correlation was found between maladaptive coping strategies and exhaustion.
Russo et al. (2014)	Oncologists	Italy	176	Cross-sectional survey	Relationship between work stress and personal well-being	-Health Professions Stress and Coping Scale [64]. -General Health Questionnaire GHQ-12 [62] -Utrecht Work Engagement Scale [65-66]	Positive and significant correlations were found between stress and maladaptive coping of additional training. House staff experienced the greatest burnout. They also reported greater emotional exhaustion, a feeling of emotional distance from patients, and a poorer sense of personal accomplishment. Negative work events contributed significantly to level of burnout; however having a "hardy" personality helped to alleviate burnout. Nurses reported more physical symptoms than house staff and oncologist. However, they were less emotionally distant from patients.
Kash et al. (2000)	Oncologists Nurses House staff	America	261		To assess the effect of stress and personality attributes on burnout scores	-the Maslach Burnout Inventory [60] -the Psychiatric Epidemiology Research Interview (PERI) - the Hopkins Symptom Checklist [67] -the Work Environment scales (WES) [68] - The Stress Questionnaire	

Note: MAC: MENTAL Adjustment to Cancer Scale; EORTC QLQ-C-30: The European Organization for Research and Treatment of Cancer QLQ-30; LOT-R: LIFE ORIENTATION TEST-REVISED; RIAS: The Roter interaction analysis System. The cited articles following the order of citation in the review.

Table 1: Summary of studies reviewed.

how the physicians can support the patient in a constructive, empathetic manner where delivering, bad news. In particular, Kaplan, based on the Baile and Buckman's theories⁽¹⁴⁾, explains that the oncology team has four goals in breaking the news to patients:

- a) learn what he/she already knows about the situation and determine her readiness to hear the news,
- b) provide clear information tailored to her

needs and desire to know,

- c) provide empathy and emotional support,
- d) develop a treatment plan that takes her wishes into account.

Kaplan indicates, as a useful strategy for accomplishing these goals, employs a six-step protocol to communicate bad news, known as SPIKES. It is an acronym for presenting distress information in an organized manner to patient and families⁽²⁰⁾. SPIKES protocol is composed of six steps, like Setting (mental and physical), Perception,

Invitation or Information, Knowledge, Empathy and Strategy or Summarize. These ones, if properly executed, will allow a good communication between physician and patient and the attainment of some important goals in this relationship, such as, for example, the collection of information about the patient, a clear communication about diagnosis and treatment, the active involvement of the patient in planning a personalized treatment.

Miyata, et al. (2005)⁽²¹⁾ conducted a general population survey in Japan to investigate people's preferences on receiving this information. They noticed that there were no significant differences in respondents' preferences according to the seriousness of the cancer. A disclosure policy of giving patients full details of their diagnosis and some information on prognosis can satisfy the preferences of most patients. The need for trust underscores the power imbalance between cancer patients and their oncologist. Therefore, the extent to which physicians should inform them of the diagnosis and prognosis poses a difficult decision in clinical settings. In fact, an inadequate communication does not allow developing a good psychological adjustment to disease and therapy, consequently increasing anxiety, depression and emotional stresses.

In fact, as demonstrated by Ong et al (2000)⁽²²⁾ in their study, patients' global satisfaction was best predicted by information-giving by their doctor. In particular patients who received more information were satisfied than patients who received less information. Not surprisingly, explicit communication of doctors' negative affect resulted in less patient satisfaction. Satisfaction (both visit-specific and global) was predicted by doctors' socio-emotional behaviors and affect tone. This may increase the patient's motivation to follow therapeutic indications, and then increase therapeutic compliance.

Psychological and emotional reactions in cancer patient

In this paragraph were considered three studies that examined psychological reactions in cancer patient.

The tumor puts emphasis on the concept of death as a concrete reality, makes clear the finiteness of life. Clinical experience, supported by various data coming from scientific studies⁽²³⁻²⁶⁾, showed that, when diagnosis is communicated, patient more frequently develops an attitude of existential shock. From this, the immediate search for an explanation

of *why it has happened just to him* or *why it has happened just in this moment of his life* arises. This is finalized to the desperate attempt of the patient to reaffirm and regain his own life⁽²⁷⁾.

In their study, Matsushita et al. (2005)⁽²⁷⁾ underline that these and other questions invade the patient's mind, producing in him a strong sense of anguish. This one has the function to mark an oppressive loss which originates some fears that are linked to the "limit" of life and self-sufficiency, like fear of losing his own psychophysical integrity, being rejected or refused, losing his own role in the family and being considered as a sick person that is unable to manage and control his life.

Schou et al. (2005)⁽²⁸⁾ noticed that each person differently lives and manages the event "disease", implementing more or less effective coping strategies that depend on different factors, first of all her own personality and adaptive capacities which are activated in front of new or negative life-events; the degree of aggressiveness of the disease, previous level of adaptation, the threat that oncologic disease represents against developmental goals, the presence or absence of an emotional support from people surrounding the patient during disease course). Cancer patients sometimes feel as if their time or future is subtracted and they live in a present devoid of meaning and value, prisoners of their own disease. This one, in fact, destabilizes daily life of the individual, as a multi-systemic disease that involves many interdependent levels at the same time: bodily, mental, emotional, family, social, cultural. At a physical level, body is set up as the first nucleus of personal identity that is it.

Even in the study of Matsushita et al. (2005)⁽²⁷⁾, it has been noted that cancer and treatment's effects, like physical mutilation, pain, nausea, hair loss or fatigue determine strong changes of body image. These changes may cause difficulties in the conduction of daily life, because of the need of help and limitations of the patient, which make him, as we have already said, dependent on others. All of this causes important consequences on a psychological, such as loss of safeties and a general instability while Fobair, Stewart et al, (2006)⁽²⁹⁾ noticed that factors more affecting adaptation and acceptance of disease are limitations of freedom, changes of the body caused by treatments and surgery, relationships with others, particularly fear of their judgment for a body ravaged by the disease, of suffering and above all to lose their lives.

They underlined that what demoralized

patients more was *not to be able to do what they usually do* because of physical and psychological changes. First phases of the disease provoke emotional experience that we can find in most cancer patients, such as anger, bewilderment, anguish, fear, rejection. Subsequent steps are instead characterized by the elaboration of what happened and acceptance of the disease and however vary among people according to modality and duration⁽²⁹⁾. The individual is to face with a new and complex situation, adapt to a new condition, characterized by a loss in response of which he has to reorganize to find himself and re-establish a new balance.

The physician's emotional experience: burn-out syndrome

Following we decide to summarize three studies to understand the oncologists' emotions.

As we have already affirmed, cancer involves both patient and physician, albeit with a different emotional burden. The physician is constantly exposed to psychologically difficult and stressful situations that he is not always able to properly manage. Taking care of patient, in fact, requires a great emotional involvement, abilities, professionalism and time, exposing the physician to very strong and prolonged stress levels. The oncologist, in fact, has every day to face on the one hand with pain, suffering and, sometimes, death, and on the other with the need to maintain high professional performances, trying not to be swayed by the patient's feelings.

Scientific literature⁽³⁰⁻³³⁾ found from multiple sources that physicians encounter various problems in relating and communicating with cancer patients. This happens because cancer, regardless of its severity, leads men and women to reflect on life transience and their finitude. This situation is sometimes made more difficult by the difficult relationship with the colleagues, each closed in his own professionalism and unwilling to share experiences and expertise in a team work.

Guveli et al. (2015)⁽³⁴⁾ noticed that, in front of these difficulties, the pressing demands of care that the patient's body requires and discomfort inherent the relationship with him, physician finds himself in a very complex sense of not knowing what to do and not having adequate instruments to manage the contact with the patient, his family and the colleagues. An excessive involvement in emotional aspects of disease may cause destroying and crippling effects, transforming the physicians himself in

a helpless sick. Authors underline that is necessary to monitor the psychological status of employees in oncology units to understand their job stress perceptions and to help them develop adaptive coping methods.

In their study, Russo et al (2014)⁽³⁵⁾ noted that the feeling of well-being perceived by physician is closely related to a high level of confidence in their ability to face complex situations and manage and support the patient during disease course. Lack in self-confidence and inability to maintain a balance between work stress and emotional burden generated by the relationship with the patient may represent a great source of stress in the workplace and alter relational dynamics between physician and patient. All of these causes in the oncologist a high level of stress, which constantly recurring becomes chronic and may turn into a sense of estrangement, distance and emotional exhaustion, known as *burnout syndrome*. In these cases, as underline Kash et al (2000)⁽³⁶⁾, in their research, medical care becomes more technical and patient care more complex, the problems of burnout become increasingly more relevant to the physical and emotional well-being as well as the morale of the medical staff. The physician needs appropriate help to avoid chafing because of guilt, confront his own sense of frustration and powerlessness and understand that in front of certain stages of life the main task is not to persist with therapeutic treatments, but to be able to accompany the patient in the last stages of his life guaranteeing a decent quality of life.

Discussion

In this review, we tried a summary to date of the different emotions to demonstrate how the relationship between physician and patients can be impregnated by the multiple emotions, fears and discomforts that cancer provokes in physician and patient. We preferred to investigate some of the macro-areas that influence physician-patient relationship, but it is clear that other psychological and demographic factors interfere and sometimes prejudice oncologic therapeutic compliance.

In this regard, it would be desirable to acquire, in the hospital, a multidisciplinary perspective that considers not only patient but also the entire social network that accompanies him during disease course. The interest in the whole system should remain during all various stages of disease course, in order to strengthen every day the physicians'

adaptive and professional skills, reduce psychological distress and try to reactivate in them the hope of being able to provide patients an adequate support. It is important to start psychoncology interventions that tries to help overcome psychological distress, in particular specific interventions that help physician to acquire the ability to communicate to patient clear and truthful information and to gather news about the sick, which may be useful to understand how he is informed about his state of health⁽³⁷⁻³⁸⁾. Literature states that reluctance to talk about the disease is generated by feelings of anger, impotence, docility and the inability to express and tolerate what this situation causes, paralyzing the individual and making him unable to relate to others. Furthermore, the physician must be helped to face emotions and fears that the patient raises in him. The need is to help physicians to understand that, only after being released from his own suffering, anxieties and problems we became able to respect the others, immediately protecting them from possible manipulations and exploitations⁽³⁹⁾.

The psychological intervention is aimed in fact to recover the "human dimension" which helps physician to understand that he cannot just limit to cure a patient but he must acquire the ability to care him in the totality of his suffering, in order to start an emphatic relationship and create a space in which patient could feel admitted and accepted and reprocess his trauma⁽⁴⁰⁾. All of this shows that, in order to manage the stress of seriously or terminally ill, it is necessary the patients and physicians learn to manage their emotional stress and the emotional impact that cancer suffering may have on them.

References

- 1) Cianfarini M. *L'intervento psicologico in oncologia. Dai modelli di riferimento alla relazione con il paziente*. Rome: Carocci Faber. 2007.
- 2) Bellani ML, Morasso G, Amadori D, Orrù W, et al. *Psiconcologia Milan*: Morasso. 2002.
- 3) Fallowfield L, Jenkins V. *Communicating sad bad and difficult news in medicine*. Lancet. 2004; 363: 312-9.
- 4) Ronson A. *Adjustment disorders in oncology: a conceptual framework to be refined*. Encephale 2005; 31(2): 118-126.
- 5) Picard L, Dumont S, Gagnon P, Lessard G. *Coping strategies among couples adjusting to primary breast cancer*. J Psychosoc Oncol 2005; 23 (2-3): 115-135.
- 6) Hack TF, Degner LF, Parker PA. *The communication goals and needs of cancer patients: a review*. Psycho-oncology 2005;14: 831-845.
- 7) Surbone A, Ritossa C, Spagnolo AG. *Evolution of truth telling attitudes and practices in Italy*. Cri Rev Oncol Hematol 2004; 52: 165-172.
- 8) Baucom DH, Porter LS, Kirby JS, Gremore TM et al. *Psychosocial issue confronting young women with breast cancer*. Breast-disease 2005; 23: 103-113.
- 9) Costantini A, Baile WF, Lenzi R, Costantini M et al. *Overcoming cultural barriers to giving bad news: Feasibility of training to promote truth-telling to cancer patients*. Journal of Cancer Education 2009; 24: 180-5.
- 10) Orom H, Homish DL, Homish GG, Underwood W. *Quality of physician-patient relationships is associated with the influence of physician treatment recommendations among patients with prostate cancer who chose active surveillance*. Urologic Oncology: Seminars and Original Investigations 2014; 32 (4): 396-402.
- 11) Back AL, Arnold RM, Baile WF, Tulsy JA et al. *Approaching difficult communication tasks in oncology*. CA Cancer J Clin 2005; 5: 164-177.
- 12) Mincu C, Taşcu A. *Social Support, Satisfaction with Physician-Patient Relationship, Couple Satisfaction, Body Satisfaction, Optimism as Predictors of Life Satisfaction in People having a Current Perceived Health Problem*. Procedia-Social and Behavioral Sciences 2015;187: 772-776.
- 13) Lelorain S, Brédart A, Dolbeault S, Cano A et al. *How does a physician's accurate understanding of a cancer patient's unmet needs contribute to patient perception of physician empathy?* Patient Education and Counseling 2015; 98: 734-741.
- 14) Zeliadt SB, Ramsey SD, Penson DF, Hall IJ et al. *Why do men choose one treatment over another?* Cancer 2006;106(9): 1865-1874.
- 15) Lethborg CE, Kissan D, Burns WI. *"It's not the easy part": the experience of significant others of women with early stage breast cancer at treatment completion*". Social Work Care 2003;37: 63-85.
- 16) Bunckman R. *La comunicazione della diagnosi. In caso di malattie gravi*. Milan: Raffaello Cortina. 2006.
- 17) Helft PR. *Necessary collusion: prognostic communication with advanced cancer patients*. JC 2005; 1: 3146-3150.
- 18) Surbone A. *Communication preferences and needs of cancer patients: the importance of content*. Supp Care Cancer 2006; 14(8): 789-791.
- 19) Baile WF, Buckman R, Lenzi R, Globler G et al. *S.P.I.K.E.S. A six step protocol for delivering bad news: application to the patient with cancer*. The Oncologist 2000; 5(4): 302-311.
- 20) Paschali AA, Hadjulis M, Papadimitriou A, Karademas EC. *Patient and physician reports of the information provided about illness and treatment: what matters for patients' adaptation to cancer during treatment?* Psycho-oncology 2015;16, doi: 10.1002/pon.3741
- 21) Kaplan M. *SPIKES: a framework for breaking bad news to patients with cancer*. Clin J Oncol Nurs 2010; 14(4): 514-6.
- 22) Miyata H, Takahashim M, Saito T, Tachimori H et al. *Disclosure preferences regarding cancer diagnosis and prognosis: to tell or not to tell?* J Med Ethics 2005; 31: 447-451.
- 23) Ong LML, Visser MRM, Lammes FB, de Haes, JCJM. *Doctor-patient communication and cancer patients's quality of life and satisfaction*. Patients Education in Counseling 2000; 41: 145-156.

- 24) Faul AL, Jim HS, Williams C, Loftus L, et al. *Relationship of stress management skill to psychological distress and quality of life in adults with cancer*. *Psycho-Oncology* 2010; 19: 102-109.
- 25) Lienard A, Merckaert I, Libert Y, Delvaux N, et al. *Factors That Influence cancer patients' anxiety. Following the medical consultation: Impact of a communication skills training program for physicians*. *Ann Oncol* 2006; 17: 1450-8.
- 26) Torta R, Mussa A. *Psiconcologia. Il modello biopsicosociale*. Turin: Centro Scientifico. 2014.
- 27) Matsushita T, Matsushima E, Maruyama M. *Psychological state, quality of life and coping style in patients with digestive cancer*. *General Hospital Psychiatry*. 2005; 27: 125-132.
- 28) Shou I, Ekerberg O, Ruland CM. *The mediating role of appraisal and coping in the relationship between optimism-pessimism and quality of life*. *Psycho-Oncology* 2005;14: 718-727.
- 29) Fobair P, Stewart SL, Chang S, D'Onofrio C, et al. *Body image and sexual problems in young women with breast cancer*. *Psycho-Oncology* 2006; 15: 579-594.
- 30) Nowakowski J, Borowiec G, Zwierz I, Jagodzinski W. *Stress is an Oncologist's life: present but not insurmountable*. *J Canc Educ*. 2015; 13: 50-56.
- 31) Finset A, Heyn L, Rulnd C. *Patterns in clinicians' response to patientemotion in cancer care*. *Patient Educ Couns* 2013; 93: 80-5.
- 32) Hillen MA, Onderwater AT, van Zwieten MC, de Haes HC, et al. *Disentangling cancer patients' trust in their oncologist: a qualitative study*. *Psychooncology* 2012; 21(4): 392-9.
- 33) Guveli H, Anuk D, Oflaz S, Guveli ME et al. *Oncology staff: burnout job satisfaction and coping with stress*. *Psycho-Oncology* 2015; doi:10.1002/pon.3743
- 34) Russo A, Cicero G, De Luca R, Civilleri A, et al. *Well-Being among Italian Medical Oncologists: an Exploratory Study*. *Oncology* 2014; 86: 72-78.
- 35) Kash KM, Holland JC, Breitbart W, Berenson S, et al. *Stress and burnout in Oncology*. *Oncology* 2000; 14 (4): 1621-1633.
- 36) Roter D. *The enduring and evolving nature of the patient-physician relationship*. *Patient education and counseling* 2000; 39(1): 5-15.
- 37) Sohl SJ, Borowski LA, Kent EE, Smith AW, et al. *Cancer survivors' disclosure of complementary health approaches to physicians: The role of patient-centered communication*. *Cancer* 2015; 121(6): 900-907.
- 38) Andersen BL. *Psychological Intervention for Cancer Patients to Enhance the Quality of Life*. *J Consult Clin Psychol* 2009; 60(4): 552-568.
- 39) Ranfelt E, Lutzen K. *Patients with cancer: their approaches to participation in treatment plan decision*. *Nurs Ethics* 2005;12 (2): 143-155.
- 40) Bernard M, de Roten Y, Despland JN, Stiefel F. *Oncology clinicians' defenses and adherence to communication skills training with simulated patients: an exploratory study*. *Journal of Cancer Education* 2012; 3: 399-403.

Corresponding author

Prof GIUSEPPE CICERO, MD, PhD
Department of Surgical, Oncological and Oral Sciences,
University of Palermo, Palermo
Medical Oncology
Via del Vespro 129
90127 Palermo
(Italy)