A PSYCHOLOGICAL CONSULTATION MODEL FOR CANCER PATIENTS AND THEIR CAREGIVERS

Marco Gonella¹, Monica Agnesone¹, Carola Grimaldi², Maria Domenica Sauta², Antonella Granieri², & Isabella Giulia Franzoi²

¹SS Psychology, Local Health Authority "Città di Torino", Turin (Italy) ²Department of Psychology, University of Turin (Italy)

Abstract

Cancer and its treatment have a significant impact on patients' and caregivers' lives. A cancer diagnosis compels to confront feelings of helplessness and vulnerability and with intense anxieties related with grief and death. Patients and caregivers may experience high levels of hopelessness, dissatisfaction and unhappiness, increased feelings of discouragement and demoralization, as well as concerns related to bodily perception. A feeling of having failed in their own life and having insufficient resources to cope with everyday circumstances can emerge.

Looking at the biological, psychological, and social complexity of cancer from a clinical perspective, it is crucial to investigate the subjective response of each patient and caregiver in the somatopsychic experience of illness and their ability to represent and attribute meaning to it.

The consultation model in the field of Clinical Psychology in Oncology proposed within the San Giovanni Bosco Hospital in Turin (Italy) sets assessment goals about the different dimensions influencing affective regulation, and aims to assess the subjects ability to symbolize their own level of psychophysical integration through five psychological interviews and an assessment of the psychophysiological profile using biofeedback. In the initial phase of assessment, is important to gather information about symptoms, investigate their subjective perception, recognize their significance, and promote their adjustment if they occur in the interview. Transversely, the possibility of put in words and making representable the dysregulation at a psychic, relational or psychophysiological level offer an opportunity of regulation and the possibility of asking for psychological help. Sensory, somatic, and emotional experiences related to the disease are embodied and experienced primarily at a bodily level by patients and caregivers.

In such consultation model, the clinician's focus on body is enhanced by the use of biofeedback, which offers an opportunity to observe their own spontaneous self-regulatory strategies and draw connections between bodily sensations (enteroceptive states) and emotions, providing an initial opportunity of regulation and representation.

The Investigation of the relational and community context of cancer patients, caregivers, and family unit, with a focus on psychic, relational, and psychophysiological dysregulation elements, can uncover unexpressed needs and risk situations for the development or the exacerbation of physical and mental health issues.

It is important for the clinical psychologists to promote the recognition of such needs both facilitating patient access to psychological support services both sensitizing health care providers to recognize signs of distress in patients and caregiver through a multidisciplinary teamwork.

Keywords: Assessment, cancer patients, clinical psychology, biofeedback, affective regulation.

1. Introduction

The experience of cancer entails a significant impact on the somatopsychic balance of patients and their caregivers. Patients can feel vulnerability, helplessness and death anxieties (Borgogno et al., 2015; Guglielmucci et al., 2014), as well as anxious and depressive symptoms (Hammermüller et al., 2021; Hinz et al., 2010; Linden et al., 2012), distress (Carlson et al., 2019) and preoccupation about their somatic Self (Liu, Peh & Mahendran, 2017; Miaja et al., 2017). Caregivers can also suffer from physical, psychological and interpersonal impairment (Hsu et al., 2014; Vahidi et al., 2016; Wong et al., 2020), because of the demanding caregiving tasks, the sense of helplessness, the fear of losing their beloved one

(Granieri, 2015; Granieri et al., 2018) and because of loss-related pain, which sometimes leads to prolonged grief (Kustanti et al., 2022).

Experiences such as cancer diagnoses can be processed through a non-symbolic level of representation, expressed on a bodily level, and through a symbolic level of representation, expressed through images and language (Bucci, 1997). The ability to symbolize experience supports mental health (Klein, 1930; Caspi, 2018), allowing individuals to live experiences of separation, loss, and integration (Segal, 2006). However, oncological diseases can induce a sense of threat which is experienced through interoception (Sleight e Clark, 2015), and the possibility to symbolize emotions and experience can be compromised (Granieri et al., 2018), fostering the presence of psychophysiological dysregulation, sympatho-vagal unbalance and mentalization deficits (Bateman and Fonagy, 2019; Porges, 2018; De Couck, 2012; De Couck, 2018). Patients and caregivers can react to mental pain through the body, implementing "secondary alexithymic responses" (De Vries et al., 2012) that protect themselves from a suffering which is difficult to represent. Moreover, physical limitations connected to cancer can lead to a narrowing of the mental field on concrete aspects (Granieri et al., 2018), limiting the ability to process the experience.

Furthermore, some risk factors might exacerbate the impact of cancer on patients and their families. These risk factors include a low socio-economic status (Sumner et al., 2020), critical housing conditions (Fan et al., 2022), the presence of minors (Walczak et al., 2018) or family members affected by disability (Lovell and Wetherell, 2011; An, 2006; Lim e Lee, 2010), the absence of caregivers or significant relationships (Hodgson et al., 2020; Cacioppo & Cacioppo, 2014; Malcom, Frost & Cowie, 2019; Steptoe et al., 2013), a history of insecure style attachment (Pietromonaco & Powers, 2015) and psychophysiological dysregulation (Beaychaine and Thayer, 2015).

Thus, we strongly believe that physical, psychological, and interpersonal consequences of cancer require a psychosocial care, even if patients and caregivers not always have access to psychosocial services and to prolonged interventions (Deshields and Nanna, 2010).

2. Design

The consultation model offered by the Psychology Service within the Oncology Department of San Giovanni Bosco Hospital in Turin, in collaboration with the Department of Psychology of the University of Turin, aims at assessing the psychological, interpersonal, and psychophysiological functioning of patients and caregivers.

During the assessment, conducted by clinical psychologists, interviews comprise also the use of psychometric tests and a multiparameter polygraph for biofeedback.

In our perspective, consultation interviews already have a therapeutic function, since they can promote affective regulation (Schore, 2008) and support symbolization (Granieri et al., 2018). Indeed, by listening to the affective and non-verbal elements arising from the clinical encounter (Carli & Paniccia, 2003), the clinical psychologist enables the patient to name and acknowledge the presence of a possible dysregulation, as well as of psychological, relational, and psychophysiological resources, as a first opportunity to regulate and recognize her own psychological needs.

3. Methods

The consultation consists in five weekly interviews, lasting 45-50 minutes, conducted by a psychoanalytically oriented psychotherapist trained in biofeedback.

The first interview explores the patient's demand. The clinical psychologist listens to the subjective meaning attributed to the experience of cancer, assesses the quality of present relationships, and supports the patient to recognize her psychosocial frailties and resources. Whenever, during the interview, the patient shows symptoms of affective dysregulation, the clinician observes the regulation strategies she spontaneously adopts or invites her to try other ways of regulation. At the end of the first interview, patients are administered some questionnaires.

The second interview is dedicated to the collection of patient's personal history, and to the observation of the Self-Other representations which have been internalized within attachment relationships and during moments of crisis.

The third interview is about recording a five-minutes baseline using biofeedback. After positioning sensors (respiration belt, photoplethysmography for BVP, thermistor for temperature, skin conductance sensor, electromyography for muscle activity), the clinician explains their function to the patient and shows the psychophysiological measures on a monitor, during a habituation phase which precedes the baseline registration. The clinical psychologist observes patient's ability to make connections between her emotions, interoceptive states and behaviors emerging during the baseline and other life situations.

During the fourth interview, a registration of a second five-minutes baseline and a fourteen-minutes stress assessment are completed. The stress assessment consists in several tasks, that last two minutes each: baseline, Stroop test, arithmetic calculation, and recalling of a stressful event. Every task requires two minutes of recovery in between, where the person is asked to stay quiet and silent. The stress assessment highlights the presence of a possible chronic hyperarousal, an excessive reactivity, or the inability to recover from stress (Pierini, Rolandi & Bertolotti, 2013). The clinician can encourage the patient to draw connections between stress assessment responses and patterns of thoughts, emotions and behaviors related to cancer experience or to her personal history.

The fifth interview is dedicated to the clinical feedback and a further treatment is proposed when necessary.

During the consultation, the clinician listens to the verbal and non-verbal communications of patients and caregivers, and she performs a constant, internal, work of symbolization, related to alpha function (Bion, 1970). At the same time, she can choose to invite patients to experience changes in their psychophysiological arousal, for example by modifying the respiration rate or posture, in order to draw attention to the body and to promote the regulation of dysregulated states (Ferenczi, 1929; Speziale-Bagliacca, 2010).

4. Discussion

When affective experiences related to cancer are embodied and lived at a somatic level (Granieri et al., 2018), during the clinical consultation the body can become a theater where changes can take place, such as a transit from a concrete, external-oriented thought, to an affect-oriented thought, which includes emotional aspects of experience.

The use of biofeedback during assessment provides an opportunity for the patient to receive an external response to her own interoceptive signals from both the clinician and the visual feedback given by the instrument (Pierini, Rolandi, Bertolotti, 2013). The joint observation of a possible psychophysiological dysregulation and of the patient's resources can validate patient's feelings and promote symbolization (Granieri, et al., 2018).

This information, along with an evaluation of patient's psychological and relational frailties and resources, enables the clinical psychologist to offer more targeted interventions, optimizing the use of therapeutic resources and reducing healthcare costs (Yates & Taub, 2003).

5. Conclusions

This consultation model can also detect unexpressed needs and risk situations for the development or the exacerbation of physical and mental health issues (Compton e Shim, 2020). It is important for clinical psychologists to promote the acknowledgment of such needs both facilitating patients' access to psychosocial support services, and sensitizing healthcare providers to recognize signs of distress in patients and caregiver through a multidisciplinary teamwork (Gonella in Gallina & Gonella, 2017).

References

- Bateman, A., & Fonagy, P. (2019). Mentalizzazione e disturbi di personalità: una guida pratica al trattamento. Raffaello Cortina.
- Beauchaine, T. P., & Thayer, J. F. (2015). Heart rate variability as a transdiagnostic biomarker of psychopathology. International journal of psychophysiology, 98(2), 338-350.
- Bion (1970), Attenzione ed interpretazione. Armando Editore.
- Borgogno, F.V., Franzoi, I.G., Barbasio, C.P., Guglielmucci, F., & Granieri, A. (2015). Massive Trauma in a Community Exposed to Asbestos: Thinking and Dissociation in the Population of Casale Monferrato. British Journal of Psychotherapy, 31(4): 419-432.
- Carli, R., & Paniccia, R. M. (2003). Analisi della domanda. Teoria e intervento in psicologia clinica.[Analys of Demand: Theory and Technique in clinical psychology].
- Carlson, L. E., Zelinski, E. L., Toivonen, K. I., Sundstrom, L., Jobin, C. T., Damaskos, P., & Zebrack, B. (2019). Prevalence of psychosocial distress in cancer patients across 55 North American cancer centers. Journal of psychosocial oncology, 37(1), 5-21.

- Compton, M. T., & Shim, R. S. (2020). Mental illness prevention and mental health promotion: when, who, and how. Psychiatric services, 71(9), 981-983.
- De Couck, M., Caers, R., Spiegel, D., & Gidron, Y. (2018). The role of the vagus nerve in cancer prognosis: a systematic and a comprehensive review. Journal of oncology, 2018.
- De Couck, M., Mravec, B., & Gidron, Y. (2012). You may need the vagus nerve to understand pathophysiology and to treat diseases. Clinical science, 122(7), 323-328.
- De Vries et al. (2012). Alexithymia in Cancer Patients: Review of the Literature. Psychother Psychosom; 81:79–86
- Deshields, T. L., & Nanna, S. K. (2010). Providing care for the "whole patient" in the cancer setting: The psycho-oncology consultation model of patient care. Journal of clinical psychology in medical settings, 17(3), 249-257.
- Ehrenreich, Y., & Rolnick, A. (2019). Mentalization-based psychophysiological therapy. Biofeedback, 47(4), 81-84.
- Fan, Q., Nogueira, L., Yabroff, K. R., Hussaini, S. Q., & Pollack, C. E. (2022). Housing and cancer care and outcomes: a systematic review. JNCI: Journal of the National Cancer Institute, 114(12), 1601-1618.
- Ferenczi, S. (1929). Principio di distensione e neocatarsi. Fondamenti di psicoanalisi, 3.
- Gallina, M. A., & Gonella, M. (Eds.). (2017). Proteggere la salute nell'esperienza della malattia oncologica: Prospettive transdisciplinari di cura tra scienze mediche e psico-sociali. FrancoAngeli.
- Granieri, A. (2011). Corporeo, affetti e pensiero. Intreccio tra psicoanalisi e neurobiologia (pp. XV-136). UTET università.
- Granieri, A. (2015). Community exposure to asbestos in Casale Monferrato: From research on psychological impact to a community needs-centered healthcare organization. Annali dell'Istituto Superiore di Sanità, 51, 336-341.
- Granieri, A., Borgogno, F. V., Franzoi, I. G., Gonella, M., & Guglielmucci, F. (2018). Development of a Brief Psychoanalytic Group therapy (BPG) and its application in an asbestos national priority contaminated site.
- Guglielmucci, F., Franzoi, I. G., Barbasio, C. P., Borgogno, F. V., & Granieri, A. (2014). Helping traumatized people survive: a psychoanalytic intervention in a contaminated site. Frontiers in psychology, 5, 1419.
- Hammermüller, C., Hinz, A., Dietz, A., Wichmann, G., Pirlich, M., Berger, T., ... & Zebralla, V. (2021). Depression, anxiety, fatigue, and quality of life in a large sample of patients suffering from head and neck cancer in comparison with the general population. BMC cancer, 21(1), 1-11.
- Hinz, A., Krauss, O., Hauss, J. P., Höckel, M., Kortmann, R. D., Stolzenburg, J. U., & Schwarz, R. (2010). Anxiety and depression in cancer patients compared with the general population. European journal of cancer care, 19(4), 522-529.
- Hodgson, S., Watts, I., Fraser, S., Roderick, P., & Dambha-Miller, H. (2020). Loneliness, social isolation, cardiovascular disease and mortality: a synthesis of the literature and conceptual framework. Journal of the Royal Society of Medicine, 113(5), 185-192.
- Hsu, T., Loscalzo, M., Ramani, R., Forman, S., Popplewell, L., Clark, K., ... & Hurria, A. (2014). Factors associated with high burden in caregivers of older adults with cancer. Cancer, 120(18), 2927-2935.
- J. H. Lim and E. P. Lee, "The influence of parenting stress on the parenting attitude and moderating effect analysis of depression in multi-cultural family mother," Journal of Future Early Childhood Education, vol. 17, no. 2, pp. 49–70, 2010.
- Kustanti, C. Y., Chu, H., Kang, X. L., Huang, T. W., Jen, H. J., Liu, D., ... & Chou, K. R. (2022). Prevalence of grief disorders in bereaved families of cancer patients: A meta-analysis. Palliative Medicine, 36(2), 305-318.
- Linden, W., Vodermaier, A., MacKenzie, R., & Greig, D. (2012). Anxiety and depression after cancer diagnosis: prevalence rates by cancer type, gender, and age. Journal of affective disorders, 141(2-3), 343-351.
- Liu, J., Peh, C. X., & Mahendran, R. (2017). Body image and emotional distress in newly diagnosed cancer patients: The mediating role of dysfunctional attitudes and rumination. Body image, 20, 58-64.
- Lovell, B., & Wetherell, M. A. (2011). The cost of caregiving: Endocrine and immune implications in elderly and non elderly caregivers. Neuroscience & Biobehavioral Reviews, 35(6), 1342-1352.
- Malcolm, M., Frost, H., & Cowie, J. (2019). Loneliness and social isolation causal association with health-related lifestyle risk in older adults: a systematic review and meta-analysis protocol. Systematic reviews, 8(1), 1-8.

- Miaja, M., Platas, A., & Martinez-Cannon, B. A. (2017). Psychological impact of alterations in sexuality, fertility, and body image in young breast cancer patients and their partners. Revista de investigacion clinica, 69(4), 204-209.
- Pellerin, N., & Lecours, S. (2015). Sensitization to emotions and representation formation through social biofeedback: Is markedness a necessary mechanism?. Psychoanalytic Psychology, 32(1), 61.
- Pierini, D., Rolandi, S., & Bertolotti, G. (2013). L'assessment psicofisiologico nel contesto clinico. Psicoterapia Cognitiva e Comportamentale, 19(3), 355-380.
- Pietromonaco, P. R., & Powers, S. I. (2015). Attachment and health-related physiological stress processes. Current opinion in psychology, 1, 34-39.
- Porges (2018). La guida alla teoria polivagale. Il potere trasformativo della sensazione di sicurezza. Giovanni Fioriti Editore
- Schore, A. (2022). Psicoterapia con l'emisfero destro. Prima edizione. Raffaello Cortina Editore
- Schore, A. N. (2008). La regolazione degli affetti e la riparazione del Sé. Astrolabio.
- Siegel, D.J. (2020). La mente relazionale. Neurobiologia dell'esperienza interpersonale. Terza edizione. Raffaello Cortina Editore
- Sleight, A., & Clark, F. (2015). Unlocking the core self: Mindful occupation for cancer survivorship. Journal of Occupational Science, 22(4), 477-487.
- Speziale-Bagliacca, R. (2010). Come vi stavo dicendo: nuove tecniche in psicoanalisi. Astrolabio.
- Steptoe, A., Shankar, A., Demakakos, P., & Wardle, J. (2013). Social isolation, loneliness, and all-cause mortality in older men and women. Proceedings of the National Academy of Sciences, 110(15), 5797-5801.
- Sumner, R. C., Bennett, R., Creaven, A. M., & Gallagher, S. (2020). Unemployment, employment precarity, and inflammation. Brain, behavior, and immunity, 83, 303-308.
- Vahidi, M., Mahdavi, N., Asghari, E., Ebrahimi, H., Ziaei, J. E., Hosseinzadeh, M., ... & Kermani, I. A. (2016). Other side of breast cancer: Factors associated with caregiver burden. Asian nursing research, 10(3), 201-206.
- Walczak, A., McDonald, F., Patterson, P., Dobinson, K., & Allison, K. (2018). How does parental cancer affect adolescent and young adult offspring? A systematic review. International journal of nursing studies, 77, 54-80.
- Winnicott, D. W., Roghi, T., & Gaddini, R. D. B. (1989). Sulla natura umana. R. Cortina.
- Wong, C. L., Choi, K. C., Lau, M. N., Lam, K. L., & So, W. K. W. (2020). Caregiving burden and sleep quality amongst family caregivers of Chinese male patients with advanced cancer: A cross-sectional study. European Journal of Oncology Nursing, 46, 101774.
- Y. H. An, "Family resilience: Implications for nursing practice," Journal of Nursing, vol. 15, no. 1, pp. 5–24, 2006.
- Yates, B. T., & Taub, J. (2003). Assessing the costs, benefits, cost-effectiveness, and cost-benefit of psychological assessment: we should, we can, and here's how. Psychological assessment, 15(4), 478.