Challenges in the Study of Type C Cancer-Prone Individuals

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Short Communication

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ABOUT THE STUDY

Temoshok and Heller expressed the intricacy and methodological challenges of Type C research by comparing "apples, oranges, and fruit salad" in a highly visual way. In other words, it involves many structures that are evaluated using various tools in various samples of people with various cancers and other disorders while utilising various designs.

We can take into account the following aspects of the heterogeneity of causes causing the non-comparability of the literature on psycho-oncology: The characteristics of cancer (kind, place, and stage in the process), the nature and measurement of psychological phenomena, the characteristics of the samples, and the designs employed.

Psychological notions such as personality type, coping mechanisms, stress or emotional responses or behavioural patterns have many different conceptualizations. In summary, this challenging issue has been resolved; it is impossible to comprehend a subject's reaction to a particular stressful scenario without considering both how they perceive the stressor and how they behave under stress, both of which are stable personality conditions.

There is a methodological issue that should be added to this conceptual issue. All factors must be operationalized using psychological tests as constructs [1]. Numerous measures have been used in psycho-oncology research, ranging from semi-structured interviews and projective techniques to well-developed questionnaires. These measures have different psychometric properties and levels of generalizability, and their scores can, therefore, be generalised to different universes, posing challenges for the comparability of results. These methodological issues have been somewhat resolved since Type C measurement has received much more attention in recent decades.

Cancer characteristics

Cancer is not a uniform disease; melanoma, sarcoma, and other cancer forms, as well as cancer locations such as the lung, breast, and skin, each have unique aetiologies, courses, mortality rates, heritabilities, and risk factors. Moreover, cancer always implies a process, and different stages of this process may be affected by psychological elements. This fact creates significant research challenges. Such emotional suppression can be a reaction to the danger that the cancer diagnosis presents. The timing of psychological evaluation and its relevance to cancer have been the subject of several studies, but the connections between psychosocial factors and neoplastic processes call for sophisticated and complex research designs, which have not yet been fully defined [2,3].

Sample characteristics

Several authors have noted that sociodemographic characteristics may be connected to environmental and medical risk factors. Given that cancer incidence and prevalence rise with age and that a number of personality traits are similarly correlated with age, age appears to be the most significant sociodemographic factor. Age needs to be taken into consideration when comparing cancer groups to other participants.

Comparisons between healthy and unwell people are insufficient to examine the psychological risk factors of a specific disease or illness through psychological covariation. It's important to make a distinction between the target illness and other ailments as well. Patients with cancer have been compared to others, including those with normal conditions, cardiovascular, digestive issues, and with chronic illnesses and benign pathologies, and accident victims, among others [4,5].

Designs

Science needs plans or techniques for testing hypotheses, i.e., when and how units will be observed and measured. The majority of authors concur that a prospective design is the ideal one for examining a specific risk factor. In order to determine which subjects will acquire cancer and which won't, subjects are evaluated for the pertinent target behaviours and psychological constructs. Also, in long-term studies, cancer patients are followed throughout the course of their illness, from diagnosis through progression to therapy to survival or death.

Prior to cancer diagnosis, psychological examination is conducted in quasiprospective designs, however this time is typically quite brief. This kind of strategy is frequently employed in cancer prevention programmes where all participants are evaluated for their psychosocial traits and, following a cancer diagnosis, the patients are followed up on. This kind of design has two key problems: psychological traits are assessed on people who have already been diagnosed with cancer, and participants in a preventative campaign cannot be regarded as being in a neutral setting. Also, this circumstance is rather diverse because some participants may already be wary of lumps or lesions while others are only taking part in a preventative-or "normal"-situation.

In retrospective designs, individuals who have already received a cancer diagnosis or are undergoing treatment are contrasted with control groups in terms of a variety of psychological traits. Such retrospective designs have drawn heavy criticism because they do not indicate whether psychological traits contribute to or are a consequence of cancer.

These are all examples of "descriptive" or "correlational" research methodologies. There are other experimental designs, though, in which the "independent" variable is changed to determine its functional or causal link with the "dependent" variable (cancer).

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