Cancer Facts & Stats: Quality of life in cancer patients

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When a person is diagnosed with cancer, his/her subsequent question is typically "How long will I live?". A great importance has been paid to life expectancy (i.e., length of life) in cancer patients; nevertheless, there is another equally important factor: quality of life.

The World Health Organization defines health as "*A state of complete physical, mental, and social well-being, not merely the absence of disease*" (1). Hence, when assessing the effectiveness of any cancer treatment, we should also focus on the improvement in health-related quality of life (2). However, defining and measuring health-related quality of life is challenging.

Health-related quality of life is a complex, broad-ranging concept. This multidimensional measurement includes a person's physical, psychological, social, and spiritual well-being; and, as a subjective measure, it depends on the values and beliefs of the person, as well as their environment and experiences (3). When assessing health-related quality of life, we do not seek to measure the frequency or intensity of a certain state of health, but rather its impact on a person's life. This is done with special instruments that are based on comparative judgment and are called preference-based methods. Such questionnaires are available, either to measure health-related quality of life for any disease (e.g. EQ-5D, WHOQOL and SF-36), or for a specific disease (e.g. EORTC QLQ-C30). Available methodologies are time-trade-off (TTO), visual analog scale (VAS) and discrete choice experiments (DCE). In the former a person is asked to trade years of life in state of health for an equal or lower amount of years with complete health (i.e. how many years of life they are willing to give-up in order to be healthy). Thus, the number of years sacrificed in a state of complete health represents the value of the state with less health. This approach makes it possible to measure both health states considered to be better or worse than death. In VAS the person is asked to give a value between 0 and 100 to their current health state, being 100 perfect health and 0 the worst possible health state. Finally, in DCE the person chooses the best of two states of health; it is a less expensive and cognitively less demanding technique than TTO.

Cancer is the second cause for mortality worldwide and the first in Canada; it was also the first cause for disability adjusted life years in Canada in 2017 (4). Cancer patients experience a variety of symptoms that might affect their health-related quality of life.

Available treatment can potentially prolong life; however, consequential side effects may, momentarily or permanently, affect health-related quality of life. When choosing among different treatment options, or in some cases whether to receive treatment at all, cancer patients often make trade-offs between quality and length of life, especially in patients with incurable cancer (5). These trade-offs depend on several factors such as age, gender, education, religion, family support, socioeconomic status, and current health related quality of life, among others (6).

Some cancer patients might be willing to accept treatment side effects to increase their survival, while others might decide not to prolong life in a compromised state. Both points of view are valid and ought to be respected by health care professionals and family members. But how can a patient decide among different options if they lack information on health-related quality of life in cancer patients? It is important to consider the experience and perspective of cancer patients, from diagnosis through treatment and survival. I call upon more researchers to assess this outcome in their studies, despite the imperfections it may still have; to pharmaceutical companies to listen to patients as treatments are developed; and to health care professionals to shift to a more patient-centered approach.

References

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