Challenging Rationality: Examining the Belief in Cure Among Patients With Advanced Incurable Cancers

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Key words: cancer; communication; prognosis; cognitive biases; perception of curability.

In the recent publication by Carmona-Bayonas et al,¹ imprecise prognostic awareness was associated with a greater interest in low-efficacy cancer treatments. This study underscores the critical role of prognostic awareness in the decisionmaking process for cancer therapeutics. Interestingly, patients receiving palliative care often hold onto a belief, sometimes quite strong, that a cure is possible, even when faced with their incurable advanced condition and aware of metastases.²⁻⁴ The question arises: should we really expect rational decisions in these situations?

A major focus of the discussion is the theoretically inadequate communication process, as pointed out by Carmona-Bayonas et al,¹ where provision of vague information without alluding to death was over 2 times more associated with inaccurate perceptions of curability. However, communication does not appear to be the sole issue. This misperception regarding curability can be illuminated through the lens of Elizabeth Kubler-Ross's stages of grief framework, which offers insight into emotional progression when dealing with serious illnesses. The initial stages of denial, anger, and bargaining may be specifically linked to these inaccurate perceptions. Patients in denial may struggle to fully acknowledge the true extent of their illness, and it is likely that hope serves as a driving force behind their denial.⁵ In addition, anger and bargaining may emerge as emotional responses to their perceived loss of control over the disease.

Furthermore, it is important to consider the impact of the fourth Kubler-Ross stage, depression, which may be associated with the realization of incurability. Prognosis awareness, characterized by an understanding of the limited treatment options and poor prognosis, was shown by Carmona-Bayonas et al to be related to increased levels of anxiety, depression, and reduced quality of life.¹ In contrast, the final stage, acceptance, permits patients, and physicians to collaboratively make mature decisions aligned with patient preferences and values.⁶

When patients participating in a study are asked, "Do you believe that your disease is curable?" they are faced with the task of choosing between "yes" and "no," sometimes even assigning percentage probability values. Insights from research in the realm of behavioral economics, particularly the contributions of Daniel Kahneman, reveal that decisionmaking is not always driven by rationality but is rather shaped by emotional influences.⁷ Kahneman's theory of 2 systems suggests that individuals often rely on intuitive and emotional processes rather than strict analytical reasoning when making decisions. Moreover, the exploration of emotions' role in decision-making, as demonstrated in prior works,^{8,9} underscores the significance of emotional cues and past experiences in molding personal preferences. Thus, it is reasonable to contemplate that individuals dealing with advanced cancer might be swayed by emotional factors, such as hope and optimism, leading to an overly optimistic perception of potential cure, even when confronted with objective clinical realities.

The incorrect perception of cure in patients with advanced cancer is concerning, as it may lead to unrealistic expectations and inadequate decision making. Understanding the underlying psychological mechanisms behind this incorrect perception can provide valuable insights for improving physician-patient communication and offering more effective emotional support.

Conflict of Interest

The authors indicated no financial relationships.

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Received: 1 September 2023; Accepted: 26 September 2023.

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