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Congress Abstract

Light as Treatment, Support as a Resource: The Role of Psycho-Oncology in Supporting Patients Undergoing Photodynamic Therapy

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Introduction: The growing cancer burden in Kazakhstan necessitates improvement not only in antitumor treatment but also in comprehensive patient-centered support. According to the analyzed statistical data, the number of patients under follow-up observation increased from 190,159 in 2020 to 246,205 in 2025, corresponding to a 29.5% increase. During this period, the number of registered breast cancer cases increased by 31.8%, and lung cancer by 64.9%. Cancer and its treatment can be accompanied by anxiety, emotional distress, and reduced quality of life. Photodynamic therapy (PDT) is a modern minimally invasive treatment for a range of oncological diseases; however, the psychological characteristics of patients undergoing this method and the effectiveness of specialized support remain insufficiently studied.

Objective: To analyze the dynamics of the cancer burden in Kazakhstan for 2020–2025 and to summarize data on the role of psycho-oncological support for patients undergoing PDT, while identifying prospects for further study in this area.

Materials and Methods: An analytical analysis of secondary data was conducted in two stages. At the first stage, a retrospective analysis of cancer incidence indicators in Kazakhstan for 2020–2025 was performed, calculating the absolute and relative change in the number of patients under follow-up observation, as well as indicators for breast cancer and lung cancer. At the second stage, a qualitative analysis of published scientific data on psycho-oncology, psychological distress, anxiety, quality of life, and psychological support for cancer patients, including materials on PDT, was conducted. Primary collection of clinical and psychometric data was not performed.

Results: During the study period, the number of patients under follow-up observation increased by 56,046 individuals (29.5%)—from 190,159 to 246,205. The number of breast cancer cases increased from 4,290 to 5,652 (31.8%), and lung cancer from 2,324 to 3,833 (64.9%). A literature analysis showed that cancer and antitumor treatment can be accompanied by emotional distress, anxiety, and reduced quality of life. Psycho-oncological interventions generally demonstrate a positive impact on the psychological state and quality of life of patients. In PDT, psychological tension may be related to the diagnosis, anticipation of the procedure, and treatment characteristics; however, the specific effectiveness of psychological support in this method remains insufficiently studied.

Conclusions: The growing cancer burden in Kazakhstan confirms the need to develop a comprehensive patient support system. Psycho-oncological support is regarded as a promising component of care in PDT; however, prospective clinical studies using validated psychometric instruments to assess anxiety, depressive symptoms, psychological distress, and quality of life before and after treatment are needed to confirm its effectiveness.

Keywords: Psycho-Oncology; Photodynamic Therapy; Oncological Diseases; Psychological Distress; Anxiety; Quality of Life