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Revolutionizing Cancer Patient Care in Sri Lanka: A Comprehensive Analysis of Artificial Intelligence-Driven Approaches

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Abstract

For the sake of free health in Sri Lanka, the government has provided the opportunity for patients to get free health tests, monitoring, and treatment. Subsidies are also given to low income earners. But identifying and treating patients in remote rural areas is a challenge. This is due to the lack of available technology. Currently, there is no proper guidance to diagnose cancer conditions in patients and refer them for proper treatment. To prove this, a group of cancer patients in remote areas were given a questionnaire and according to the data obtained from them, 90% have used traditional methods and the majority have used herbal remedies, spiritual remedies and acupuncture remedies, life risk has increased. And 66.7% of them were diagnosed by local doctors and traditional healers and 60.8% by health care providers. For these reasons, the death rate of cancer patients in Sri Lanka has increased. Consider the review of the analysis, so an AI-based cancer patient care system can help build the right direction to protect the patient's life. There is still no proper system to diagnose cancer and provide medical advice. This paper attempts to define the concept of developing an AI-based cancer patient care system for self-guided cancer patients to diagnose their disease conditions and seek medical advice for proper treatment. The aim is to develop a system based on AI technology and provide health knowledge and guidelines for self-management to patients in remote rural areas. Using AI technology for the purpose of early detection of diseases through self-assessment in rural areas through personalized digital interfaces will be of great help to patients.

Keywords: *Artificial intelligence, Technology, Cancer patient care system, Cancer*