

## **“CheckPrivate”: Artificial Intelligence Powered Mobile Application to Enhance the Well-Being of Sexual Transmitted Diseases Patients in Sri Lanka under Cultural Barriers**

**Authors :** Warnakulasuriya Arachichige Malisha Ann Rosary Fernando, Udalamatta Gamage Omila Chalanka Jinadasa, Bihini Pabasara Amandi Amarasinghe, Manul Thisuraka Mandalawatta, Uthpala Samarakoon, Manori Gamage

**Abstract :** The surge in sexually transmitted diseases (STDs) has become a critical public health crisis demanding urgent attention and action. Like many other nations, Sri Lanka is grappling with a significant increase in STDs due to a lack of education and awareness regarding their dangers. Presently, the available applications for tracking and managing STDs cover only a limited number of easily detectable infections, resulting in a significant gap in effectively controlling their spread. To address this gap and combat the rising STD rates, it is essential to leverage technology and data. Employing technology to enhance the tracking and management of STDs is vital to prevent their further propagation and to enable early intervention and treatment. This requires adopting a comprehensive approach that involves raising public awareness about the perils of STDs, improving access to affordable healthcare services for early detection and treatment, and utilizing advanced technology and data analysis. The proposed mobile application aims to cater to a broad range of users, including STD patients, recovered individuals, and those unaware of their STD status. By harnessing cutting-edge technologies like image detection, symptom-based identification, prevention methods, doctor and clinic recommendations, and virtual counselor chat, the application offers a holistic approach to STD management. In conclusion, the escalating STD rates in Sri Lanka and across the globe require immediate action. The integration of technology-driven solutions, along with comprehensive education and healthcare accessibility, is the key to curbing the spread of STDs and promoting better overall public health.

**Keywords :** STD, machine learning, NLP, artificial intelligence

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