Abstract:

Background: The COVID 19 pandemic magnify the numerous challenges in both the curative and preventive sector locally and globally. This demonstrates the weakness of routine disease surveillance and the adversity of unavailable existing health information systems. Rapidly developed health information systems implemented from time to time with the purpose of epidemic monitoring, early detection, and warning, contact tracing, prevention and control, and disease prediction. This study aims to evaluate gaps, system usability, implementation and usage barriers, and service quality of the currently implemented systems to identify to enhance the capabilities of health information systems in Sri Lanka.

Methodology: A quantitative analysis was designed via an online self-administered questionnaire and conducted among government and private laboratories and selected MOHs in Sri Lanka. All 47 laboratory end-users and 204 MOH end-users were selected to participate in this study.

Results: 47 system end-users from laboratories and 186 users from MOHs respond to the questionnaire. Results show User acceptance, Usability, and service quality are found better in the National COVID 19 health information system among three of the systems. Further excessive workload and mixed of paper and digital information systems were identified as main usage barriers. Knowledge, Confidence, and experience of using the information system are finer than expected.

Conclusion: Several factors were identified that can utilize the successful development and implementation of new health information systems. Additionally, without abandoning the use of the National covid 19 health information system following decreased level of COVID 19, It must use in future emerging diseases due to various advanced features like barcoding.