Telemedicine for early detection of oral potentially malignant disorders and oral cancer in Sarawak: EPIS framework to guide pre-implementation planning

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ABSTRACT

Introduction: Oral cancer (OC) is amenable to early detection through visual examination. The Ministry of Health (MOH) has programs for opportunistic screening in dental clinics and the community, aiming to double the detection of early-stage tumours by 2030. MeMoSA® is a telemedicine App that captures oral images and medical information and allows remote communication between healthcare providers and their patients. As digital health is a strategy outlined in the national oral health policy, we aim to utilize MeMoSA® in the community for early detection of oral cancer. Methods: The EPIS implementation science framework was used to guide stakeholder engagement, contextual assessment and selection of implementation strategies in the pre-implementation phase of the study. Key stakeholders were identified, and the processes and gaps of screening programs were discussed and identified. Strategies to close the gap were identified, and the implementation strategy was agreed unanimously through iterative stakeholder meetings. Additional stakeholders were invited to join the team based on the chosen implementation strategy. Results: Fifteen meetings with 11 stakeholders, including dental specialists, administrators, researchers and healthcare volunteers (HCVs), were held. It was agreed that HCVs would be equipped with MeMoSA® to enable them to conduct screening in the communities to help identify individuals at risk of oral cancer. The outcome measures agreed upon for the implementation study are feasibility, acceptability and appropriateness. Conclusion: Translation of research to practice requires key stakeholders’ support, and implementation science provides an avenue for co-creation with stakeholders.