Nurturing Advanced Research Culture among Medical Practitioners through ETDs: A case study from University of Kelaniya Sri Lanka

University of Kelaniya
Faculty of Medicine

Dr Lanka Ranaweera
Department of Anatomy
Faculty of Medicine
University of Kelaniya
Sri Lanka

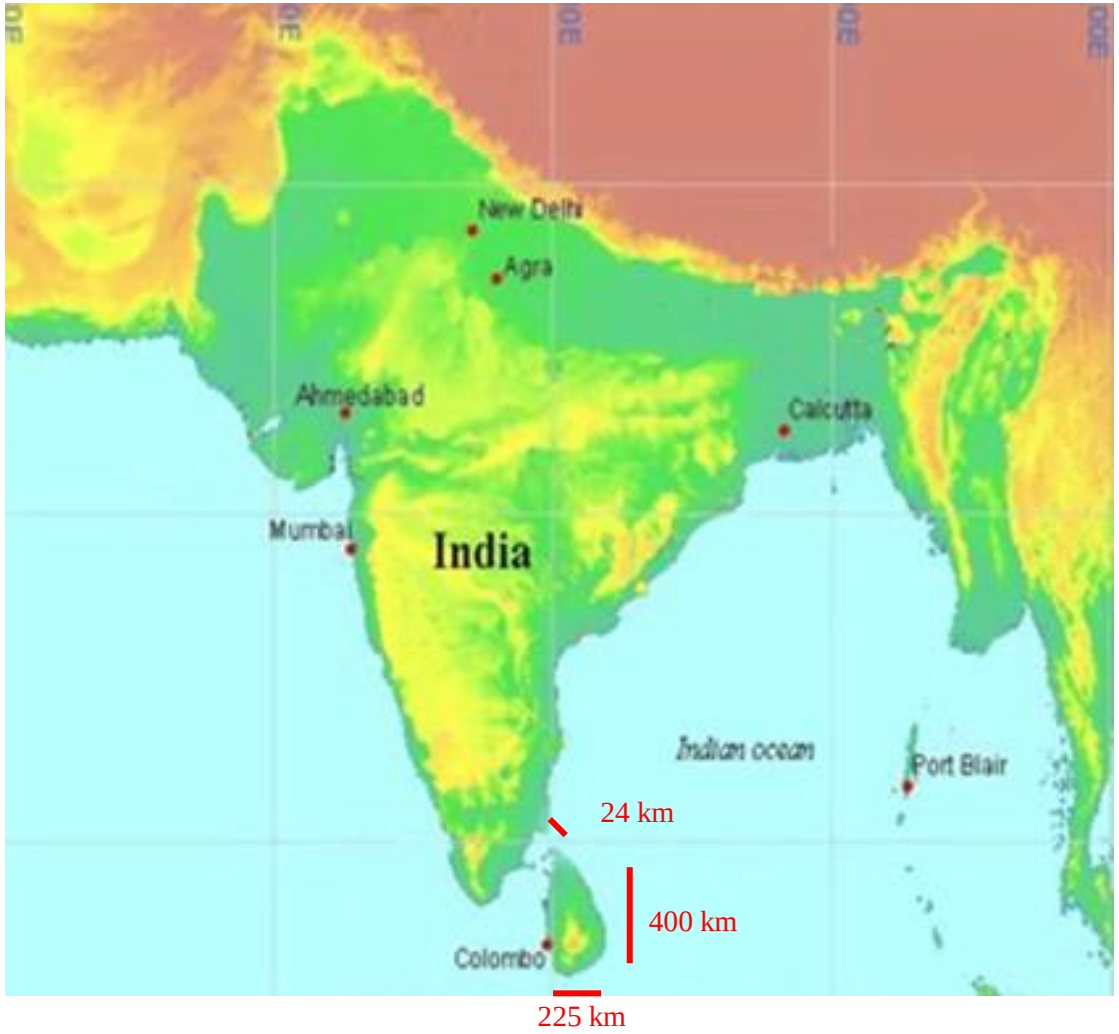
Presentation Outline

- Introduction
- Objective
- Material and methods
- Results
- Discussion and conclusion

Introduction

Introduction – Sri Lanka

- Cross road : East to West
- Southern costal root
- Anatomically modern *Homo sapiens* *42000 BP*
- 17 - State universities
- Free Education & Free Health




කැලණිය විශ්වවිද්‍යාලය, ශ්‍රී ලංකාව
கொளும்பு பல்கலைக்கழகம், இலங்கை
UNIVERSITY OF KELANIYA, SRI LANKA


UNIVERSITY OF KELANIYA
FACULTY OF MEDICINE
RAGAMA
SRI LANKA

BACKGROUND
Spotlights

- **Ayati Centre (Faculty + MoH + Sponsors)**
  - A national centre for children with disabilities
  - Managed by a trust
- **CNCLD (Faculty + MoH)**
  - National centre for liver transplantation
  - Operated collaboratively by FoM and MoH
- **Clinical Trials Unit (public-private partnership)**
- **Student Hub**
  - **New canteen model** - Run by KUFMTA - (Run with a surplus and 250 sponsored "food tags" per month)
  - **Laundry** – Run on pay-by-item model (Run with a surplus)
  - **Saloon** (Out-sourced)
- **Vegetable Garden** (800 Kg in 2024)
  - Run by the Faculty's Green Practices Committee
- **Simulation ward**

Introduction

- University of Kelaniya - Ranked No 3 in Sri Lanka
- Faculty of Medicine at the University of Kelaniya - Forefront of advancing medical research in Sri Lanka.
- **Four professors** from the University of Kelaniya among the **World's Top 2%** of scientists. All of them from Faculty of Medicine.
- **Electronic Theses and Dissertations (ETDs)** are playing an increasingly important role in shaping research culture within this institution.
- These digital theses contribute not only to the academic progress of students but also to the broader field of healthcare by making research more accessible, searchable, and shareable globally.

BACKGROUND

Study Programmes

- **Undergraduate (Internal)**
  - MBBS
  - BSc SHS (Hons)
  - BSc OT (Hons)
- **Postgraduate**
  - Master of Public Health (MPH)
  - MPhil/ PhDs
- **Sub-degree courses**
  - Higher Diploma in Crime Investigation
  - Diploma in Paramedical Sciences

Objectives

- To highlight the significance of ETDs in advancing medical research data.
- To showcase the diverse applications of ETDs across different academic programs at the Faculty of Medicine, University of Kelaniya.

Material and Methods

• **A comprehensive review** of the ETDs produced by students across four different academic programs within the Faculty of Medicine.

•**Master of Public Health (MPH)**: Focus on public health interventions and policy research.
•**BSc in Speech and Hearing Sciences**: Focus on hearing disorders and communication therapies.
•**BSc in Occupational Therapy**: New program, still in early stages.
•**PhD in Molecular Medicine**: Specialized research in genetics, diagnostics, and infectious diseases.

- Data were analyzed to identify key themes, contributions, and impacts of ETDs on healthcare services and research activities.

Results

MPH Program Contributions

- **Focus:** The MPH program is designed to equip students with evidence-based approaches for improving public health, promoting health, and preventing diseases.

- **ETD Contributions:** MPH students' research is primarily oriented toward health policy development and public health interventions.

  ETDs provide a rich source of data, analyses, and case studies that contribute to policy formulation at both local and national levels.

  Example: A student's research on vaccination programs could directly influence policy decisions on immunization in Sri Lanka.

- **Impact:** These ETDs directly influence public health outcomes and contribute to the development of evidence-based strategies to address health issues like infectious diseases, non-communicable diseases, and health systems strengthening.

Molecular Medicine Unit Contributions

- **Focus:** The Molecular Medicine Unit conducts cutting-edge research in molecular diagnostics, genetic diseases, and infectious diseases.

- **ETD Contributions:** PhD dissertations in Molecular Medicine are a cornerstone of applied research in genetics and molecular diagnostics.
  These studies not only **advance scientific knowledge** but also provide **consultancy services for molecular diagnosis** (e.g., DNA typing for genetic disorders and infectious diseases).
  Example: Research into genetic disorders could lead to improved diagnostic techniques, which would enhance healthcare services across Sri Lanka.

- **Impact:** By applying molecular research in practical healthcare settings, the Molecular Medicine Unit improves the quality of diagnostics, patient care, and treatment protocols for a variety of diseases.

BSc in Speech and Hearing Sciences

- **Current Practice:**

  Unlike other programs, students in the Speech and Hearing Sciences program produce compact discs (CDs) containing their research findings rather than electronic theses.

- **Challenge:**

  CDs are less accessible compared to ETDs, which are open-access and can be shared widely through digital repositories.

  Limited dissemination: CDs are not as easily indexed in academic databases, hindering the potential impact of student research.

BSc in Speech and Hearing Sciences

- **Recommendation:**
  - Transition from CDs to **ETDs** to improve the **visibility** and **accessibility** of research.
  - ETDs would facilitate **greater interdisciplinary research** and collaboration, as well as ensure that research reaches a wider audience, including **global researchers** and **healthcare professionals**.

- **Potential Impact:**
  - Increased exposure could lead to **collaborations** with international institutions, enhancing research quality and **policy relevance**.

BSc in Occupational Therapy

- **Current Status:**
  The Occupational Therapy program has only been established recently
  Not yet produced any theses: provides an opportunity to integrate ETD practices

- **Recommendation:**
  Introduce ETD production for this program to maximize the impact of student research early on.

  ETDs can serve as a platform to highlight emerging research in the field of occupational therapy and contribute to global evidence-based practices in rehabilitation and therapy.

- **Long-term Benefits:**
  Establishing ETDs early will ensure that the program contributes to global knowledge on occupational therapy techniques and will help students develop skills in research dissemination.

Discussion – Contributions to Healthcare

- **Public Health (MPH):**
  Evidence-based interventions developed through ETD research contribute to improving public health outcomes by addressing local health needs and shaping national health policies.
- **Molecular Medicine:**
  Research in molecular diagnostics leads to better healthcare delivery and the development of innovative treatment solutions for complex diseases.
- **Speech and Hearing Sciences:**
  The shift to ETDs will enhance research visibility, foster collaborations, and improve clinical practices in the diagnosis and treatment of hearing and communication disorders.
- **Occupational Therapy:**
  ETD adoption will ensure that students' research is accessible and impactful in the global healthcare community, enhancing evidence-based rehabilitation practices.

Conclusion / Key Takeaways

- ETDs play a **critical role** in advancing research and improving healthcare services by making research more accessible, shareable, and impactful.
- **Transitioning to ETDs** for programs like Speech and Hearing Sciences and Occupational Therapy will enhance research visibility and impact.
- The widespread adoption of ETDs across the Faculty of Medicine will foster **interdisciplinary research** and create opportunities for **collaborative partnerships**.

Future Directions

- **ETD Adoption:** Continue to promote ETD adoption across all faculties and academic programs within the university.
- **Global Collaboration:** Seek collaborations with international research institutions to amplify the impact of Sri Lankan research on global healthcare challenges.
- **Ongoing Research:** Foster continuous improvement in the accessibility and quality of research through the integration of innovative technologies and digital platforms.


Thank
you


Any
Questions?