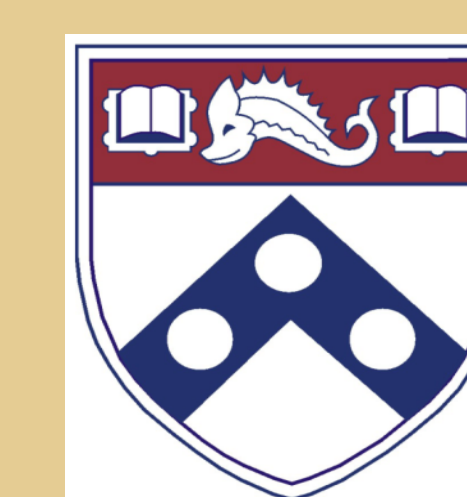




Lessons from Skin Allograft Banking in LMICs

A systematic review on implementation and management



Roberson JL, Pham J, Shen J, Stewart K, Hoyte-Williams PE, Mehta K, Rai S, Morales Pedraza J, Allorto N, Pham TN, Stewart BT

UW Medicine Regional Burn Center and Hospital of the University of Pennsylvania

INTRODUCTION

- Low- and middle-income countries (LMICs) a disproportionate burden of burn incidence and morbidity
- LMICs have limited access to allograft
- No previous work identifies the barriers to establishing and maintaining tissue banks in LMICs

METHODS

- Systematic review
- PubMed, MEDLINE, CINAHL, WHO Catalog (inception to 2018)
- Criteria
 - Provide primary data on tissue bank LMIC focus
 - Insight into: governance/regulation, human resources and training, maintenance and operation, and ethics/sociocultural issues

RESULTS

- 3,346 initial records
- **33** met criteria
- **17** countries
- Common barriers
 - High capital cost: 100k-400k USD
 - Operational cost/training
 - Opt-in donation
 - Sociocultural stigma

RECOMMENDATIONS

- **Capital and Operational Cost**
 1. Seek matching contributions
 2. Multisectoral coordination
- **Training**
 1. IAEA programs on-site
 2. Internet modules
- **Opt-In Donation**
 1. Public programming: Radio/TV, social media
 2. Community health workers
- **Sociocultural Barriers**
 1. Align education with local religion
 2. Strict code of ethics from IAEA
 3. Stakeholder engagement

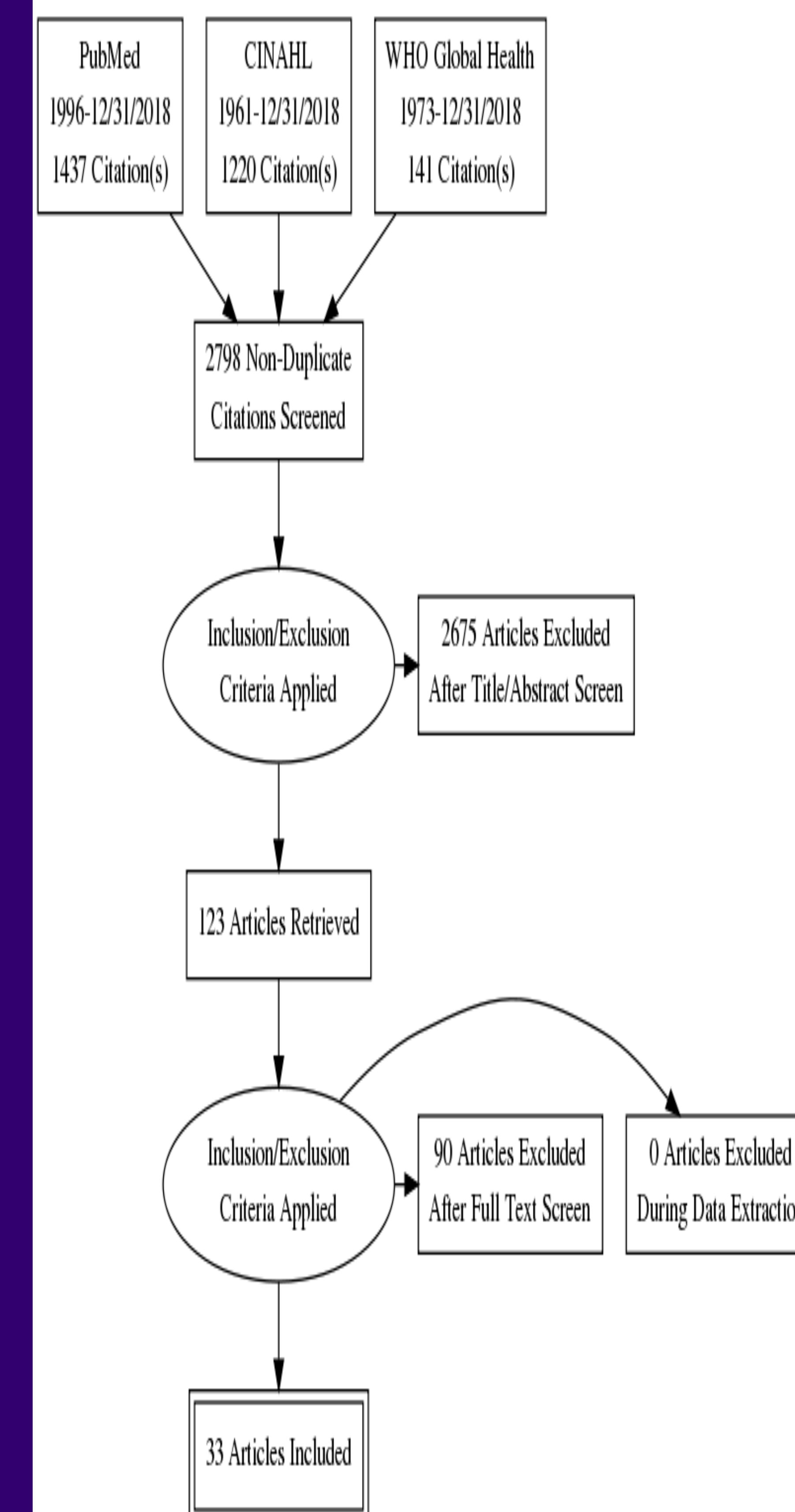
CONCLUSION

- Establishment of tissue bank in LMIC requires strategic investment, international cooperation, and public awareness.

Effective tissue banks require **strategic investment, international cooperation** with standardized protocols, and **inclusive public awareness campaigns.**



PRISMA



NATIONS

Nation	N (%)
India	7 (21)
Mexico	4 (12)
Malaysia	3 (10)
South Africa	3 (10)
Argentina	2 (6)
Brazil	2 (6)
China	2 (6)
Thailand	2 (6)
Bangladesh	1 (3)
Indonesia	1 (3)
Iran	1 (3)
Japan	1 (3)
Myanmar	1 (3)
Nepal	1 (3)
Peru	1 (3)
Sri Lanka	1 (3)
Vietnam	1 (3)