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Private University Established in Karnataka by ACT 35 of 2013

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DECLARATION BY THE CANDIDATE

I declare that this thesis entitled “Analysis of hospital based Ayurvedic clinical practice to gain Real World data knowledge” submitted for the award of Doctor of Philosophy to THE UNIVERSITY OF TRANS-DISCIPLINARY HEALTH SCIENCES AND TECHNOLOGY, Bengaluru, is my original work, conducted under the supervision of my guide Dr. Ashwini Godbole. I also wish to inform that no part of the research has been submitted for a degree or examination at any university. References, help and material obtained from other sources have been duly acknowledged.

I hearby confirm the originality of the work and that there is no plagiarism in any part of the dissertation.

Place: Bengaluru Signature of the candidate: A close-up of a signature

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Date: 21Sept2023

Name of the candidate: Vinay Mahajan

Reg. No.: 20916020106

(Month Year of Admission) Dec 2018

Declaration by the Supervisor:

THE UNIVERSITY OF TRANS-DISCIPLINARY HEALTH SCIENCES AND TECHNOLOGY

Private University Established in Karnataka by ACT 35 of 2013

BENGALURU – 560064

CERTIFICATE

This is to certify that the work in this thesis “Analysis of hospital based Ayurvedic clinical practice to gain Real World data knowledge” submitted by Vinay Mahajan was carried out under my supervision. No part of this thesis has been submitted for a degree or examination at any university. References, help and material obtained from other sources have been duly acknowledged. I hereby confirm the originality of the work and that there is no plagiarism in any part of the dissertation.

Research Supervisor: A close-up of a signature

Description automatically generated

Date: 21Sept2023

Name, designation & address details: Dr. Ashwini Godbole, Associate Professor, Ayurveda Biology and Holistic Nutrition, TDU.

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# List of Figures

[Figure 1‑1: RCTs on ClinTrials.gov 2](#_Toc124970577)

[Figure 1‑2: Screenshot of a dashboard from AYUSH website 9](#_Toc124970578)

[Figure 1‑3: Ayurvedic practitioners and patients from AYUSH dashboard 10](#_Toc124970579)

[Figure 2‑1: Pictorial representation of analysis 19](#_Toc124970580)

[Figure 2‑2: Flow diagram from data source to final usage by various usage types 24](#_Toc124970581)

[Figure 2‑3: A glimpse of data tables used to store source data from the database 28](#_Toc124970582)

[Figure 2‑4: Extraction of relevant data from Source database 29](#_Toc124970583)

[Figure 2‑5: Staged data converted into 6 datasets 30](#_Toc124970584)

[Figure 2‑6: Staged data 31](#_Toc124970585)

[Figure 2‑7: Final dataset with 39 source variables and 33 new derived variables 32](#_Toc124970586)

[Figure 2‑8: Data flow from source data to interpretable results 33](#_Toc124970587)

[Figure 3‑1: A snippet of disease table by gender 61](#_Toc124970588)

[Figure 3‑2: Variable classification by categories 61](#_Toc124970589)

[Figure 3‑3: Visit pattern analysis 63](#_Toc124970590)

[Figure 3‑4: Patient visit profile – Horizontal view 64](#_Toc124970591)

[Figure 3‑5: Patient visit profile – Vertical view 64](#_Toc124970592)

[Figure 3‑6: Total Number of Patients 65](#_Toc124970593)

[Figure 3‑7: Country-wise Visualization 65](#_Toc124970594)

[Figure 3‑8: Age distribution by country, age distribution by gender 66](#_Toc124970595)

[Figure 3‑9: Blood-group Distribution by gender 67](#_Toc124970596)

[Figure 3‑10: Number of Visits, and Visit Types 67](#_Toc124970597)

[Figure 3‑11: Descriptive summary statistics by number of Diseases by Age and Gender 68](#_Toc124970598)

[Figure 3‑12: Data tabulation for patients reporting RMSD and Metabolic diseases 69](#_Toc124970599)

[Figure 3‑13: Disease distribution by age and gender 70](#_Toc124970600)

[Figure 3‑14: Patient visit duration for Disease categories by Gender 70](#_Toc124970601)

[Figure 3‑15: Disease distribution by Seasonal Variations and gender 70](#_Toc124970602)

[Figure 3‑16: Pre and Post Disease Classification Analysis 71](#_Toc124970603)

[Figure 3‑17: ICD classification by Gender 79](#_Toc124970604)

[Figure 3‑18: Age distribution by ICD classification and Gender 80](#_Toc124970605)

[Figure 3‑19: Visit distribution by ICD classification and Gender 81](#_Toc124970606)

[Figure 3‑20: Duration distribution by ICD classification and Gender 81](#_Toc124970607)

[Figure 3‑21: Disease classification by Prakriti and Gender 82](#_Toc124970608)

[Figure 3‑22: Co-morbidity analysis approach 1 example 1: Vaatavyadhi 83](#_Toc124970609)

[Figure 3‑23: Co-morbidity analysis approach 1 example 2: Pandu 83](#_Toc124970610)

[Figure 3‑24: Co-morbidity analysis approach 1 example 3: Madhumeha 84](#_Toc124970611)

[Figure 3‑25: Co-morbidity analysis approach 2 84](#_Toc124970612)

[Figure 3‑26: Co-morbidity analysis approach 3: collapsible tree view 84](#_Toc124970613)

[Figure 3‑27: Patient Disease and Treatment administration by Study Day 85](#_Toc124970614)

[Figure 3‑28: Patient Disease by Study Day and Treatment administration by Study Day 86](#_Toc124970615)

[Figure 3‑29: Patient Cumulative Disease and Treatment administration by Visit 86](#_Toc124970616)

[Figure 3‑30: Area graph representation of diseases 86](#_Toc124970617)

[Figure 3‑31: Mosaic plot: Disease and treatment representation example 1: Prameha 87](#_Toc124970618)

[Figure 3‑32: Disease and treatment example 2: P5.0: Prameha and Oil: Kottamchukkadi 89](#_Toc124970619)

[Figure 3‑33: Disease and treatment example 3: P5.0: Prameha and Vati: Diabecon DS 90](#_Toc124970620)

[Figure 3‑34: Mosaic plot Disease and treatment representation example 4: Treatment: Oil: Kottamchukkadi 91](#_Toc124970621)

[Figure 3‑35: Cross tabulation of prescribed treatments and disease group by gender Example 1 92](#_Toc124970622)

[Figure 3‑36: Cross tabulation of prescribed treatments and disease group by gender Example 2 93](#_Toc124970623)

[Figure 3‑37: Circular view: Co-occurrences of disease – disease Example 1 94](#_Toc124970624)

[Figure 3‑38: Circular view: Co-occurrences of disease – treatment Example 2 94](#_Toc124970625)

[Figure 3‑39: Pre and Post distance analysis for disease: M2.0: Madhumeha 95](#_Toc124970626)

[Figure 3‑40: Pre and Post distance analysis for medicines given for diseases: P5.0, V2.23, V2.63 95](#_Toc124970627)

[Figure 3‑41: Radar plot 96](#_Toc124970628)

[Figure 3‑42: Dynamic bubble plot: Example 1: Disease: A6.0: Amavaata 98](#_Toc124970629)

[Figure 4‑1: Treatment principles defined in different texts 102](#_Toc124970630)

[Figure 4‑2: Data understanding from an observation – patient – disease to a clinical picture 106](#_Toc124970631)

[Figure 5‑1: Real World Evidence life cycle 120](#_Toc124970632)

# List of tables

[Table 2‑1: Visit window table for Pre and post analysis 37](#_Toc124970633)

[Table 2‑2: Proposed methods and analysis use cases 43](#_Toc124970634)

[Table 3‑1: Versions of data used for analysis 59](#_Toc124970635)

[Table 3‑2: Summary statistics and t-test for bhasma usage 93](#_Toc124970636)

[Table 4‑1: Proposed vital sign data structure 100](#_Toc124970637)

[Table 4‑2: Proposed idea for clinical coding timetable 103](#_Toc124970638)

[Table 5‑1: Different types of documents 122](#_Toc124970639)

[Table 6‑1: Details of the Reference Dataset “01adsl\_met\_rmsd” 125](#_Toc124970640)

[Table 6‑2: Metabolic and RMSD disease code and de-code 133](#_Toc124970641)

[Table 6‑3: All variables in the source database 137](#_Toc124970642)

# Acronyms

ACD: Ayurvedic Classification Dictionary

A-HMIS: Ayurveda Hospital Management Information System

AYUSH: Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy

CCRAS: Central Council for Research in Ayurvedic Sciences

CDISC: Clinical Data Interchange Standards Consortium

COPD: Chronic Obstructive Pulmonary Disease

COSTART: Coding Symbols for Thesaurus of Adverse Reaction Terms

CTC: Clinical Toxicity Grade

DARWIN EU: Data Analysis and Real-World Interrogation Network

EHR: Electronic Health Record

EMA: European Medicinal Agency

EMR: Electronic Medical Record

EU: European Union

GCP: Good Clinical Practice

GCRP: Good Clinical Research Practice

GDP: Gross Domestic Product

HM: Hospital Management

I-AIM: Institute of Ayurveda and Integrative medicines

ICD: International Classification of Diseases

ICH: International Council for Harmonization of Technical Requirements for Pharmaceuticals for Human Use

IDC: International Data Corporation

IDC: International Data Corporation

IP visit: In-Patient visit

ISO: International Organization for Standardization

LOINC: Logical Observation Identifiers Names and Codes

MedDRA: Medical Dictionary for Regulatory Activities

NCI: National Cancer Institute, USA

NEJM: New England Journal of Medicine

OP visit: Out-Patient visit

PMDA: Pharmaceuticals and Medical Devices Agency (Health Authority Japan)

RCT: Randomized Controlled Trial

RMSD: Rheumatic and Musculoskeletal disease

RWD: Real World Data

RWE: Real World Evidence

SQL: Structured Query Language

TDU: The University of Trans-Disciplinary Health Sciences & Technology

THERAN: THE Research Application Nexus

TKDL: Traditional Knowledge Digital Library

UHC: Universal Health Coverage

US FDA: US Food and Drug Administration

WHO: World Health Organization

WHO-ART: World Health Organization Adverse Reactions Terminology

WHO-DDE: World Health Organization Drug Dictionary Enhanced