THE UNIVERSITY OF TRANS-DISCIPLINARY HEALTH SCIENCES AND TECHNOLOGY

Private University Established in Karnataka by ACT 35 of 2013

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Format for evaluation of PhD thesis: Examiners report

Name of the Examiner: **Dr. Kishor Patwardhan**
　　　　　　　　　　　Professor,
　　　　　　　　　　　Banaras Hindu University

Name of the Student:　**Mr. Vinay Mahajan**

Reg. No.: **20916020106**

Title of thesis: '**Analysis of hospital based Ayurvedic clinical practice to gain Real World data knowledge'.**

Name of Research Supervisor: **Dr. Ashwini Godbole,** Associate Professor, TDU, Bengaluru

1. General comments:

This is a meticulously planned and carefully executed study. There is a dearth of real-world data on the health seeking behaviour, prescription patterns, disease demography, socio economic diversity, and usefulness of interventions- in the context of Ayurveda at present. This has led to a lack of evidence-informed policy making in the sector. There is a huge variation in all these aspects from region to region in India and "one shoe fits all" approach is not suitable for Ayush-related policies. The present work provides an implementable solution to these problems. It uses a carefully curated hospital data that can give very useful insights when analysed rigorously. Such data would also be useful for communities, physicians, educators and researchers. The present work is a concrete step towards creating such database using computational methods. The work has been presented comprehensively in the thesis.

2. Review and Suggested revisions on specific chapter:

The introduction section addresses the need for electronically capturing the hospital data and discusses the potential uses of its analysis for the benefit of all the stakeholders of Ayurveda.

The second section describes the technical details of Ayurveda Hospital Management Information System-based database and the associated Electronic Medical Records. It also explains the mode of data extraction and tabulation. It presents a summary of analysis methods, and provides the context.

Next session on clinical data understanding shows the method of transforming individual observations into patient narratives. It also explains how different patterns of interventions and outcomes can be identified using the data. The examples given are appropriate and are convincing.

The section on demographic and patient characteristic analysis provides information about the possible utility of the database on disease surveillance and population health statistics.

Diagnostics and interventions section shows relations between diseases/ comorbidities and interventions/ combination of interventions. This also shows the clinical decision-making process followed by Ayurveda physicians.

All the above sections have been written lucidly and the interpretations drawn are logical and appropriate.

This examiner recommends the acceptance of the thesis in the present form and has no further recommendations for corrections or amendments.

3. Grading of the Thesis:

Sl. No.	Scale	Excellent	Very Good	Good	Fair	Poor
		5	4	3	2	1
1.	Originality and Novelty of the Research work	5				
2.	Methodological Standards	5				
3.	Clarity of results presentation	5				
4..	Overall assessment of the Thesis	5				

4. Conclusion and Recommendation:

The examiner is requested to place the Thesis in one of the following categories:

Sl. NO.	Category	Yes / No
(a)	Recommended for the award of the degree of Doctor of Philosophy recommended / Highly commended.	Yes
(b)	Recommended that the candidate revises the thesis as suggested in the report and the revised thesis be referred to the Supervisor for verification.	-
(c)	Recommended that the candidate revises the thesis as suggested in the report and the revised thesis be sent to the examiner for revaluation.	-
(d)	Not recommended	-

Short Report:

The present work is unique in its nature as it combines hospital data management, its interpretation by incorporating computational techniques. This kind of transdisciplinary work is precisely what is needed in the present scenario. I recommend that a few good papers should be derived out of this work and should be published in good scholarly journals. Healthcare seeking behaviour in the given set of patients, the kind of interventions they received, kind of health conditions for which patients mostly visit Ayurveda facilities etc would make an important contribution to the understanding of healthcare sector in general and Ayurveda in particular.

Since many tabulations and datasets have been linked to online databases, I recommend that this thesis be made available on the Shodha Ganga and other portals including the portal of TDU.

Recommended for the award of the degree of Doctor of Philosophy: Highly recommended.

Date: 26th May 2023   Signature of the examiner