

A Survey Study on Current Clinical Trends in The Therapeutic Use of Takra (Buttermilk) and Takra Kalpana Among Ayurvedic Practitioners: Bridging Classical Shastriya Pramana With Contemporary Clinical Evidence

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ABSTRACT

Background: Takra (buttermilk) is among the most extensively described Ahara-Aushadha Dravyas (dietary-cum-medicinal substances) in classical Ayurvedic literature. Despite rich Brihatrayi documentation, no systematic survey has examined its contemporary prescribing patterns. **Objective:** To assess current clinical trends in the therapeutic use of Takra and Takra Kalpana among registered Ayurvedic practitioners, and to validate the correspondence between classical textual indications and contemporary practice. **Methods:** An observational analytical survey was conducted among 166 registered Ayurvedic practitioners (minimum five years of clinical experience) in Pune district, Maharashtra, using a validated structured questionnaire administered by the interview method. Data were analysed using descriptive statistics, one-sample Z-tests for proportions, chi-square goodness-of-fit tests, and chi-square tests of association. Significance was set at $\alpha = 0.05$. **Results:** A total of 86.75% of practitioners prescribed Takra ($Z = 9.47$; 95% CI: 81.6%–91.9%; $p < 0.001$), decisively rejecting the null hypothesis. Grahani (IBS/malabsorption) was the leading chronic indication (85.54%), followed by Arsha (haemorrhoids, 68.67%), mirroring Brihatrayi priorities ($\chi^2 = 231.50$; $df = 4$; $p < 0.001$). Takradhara was performed by 73.49% of practitioners versus Takra Basti by only 13.86% ($\chi^2 = 112.94$; Cramer's $V = 0.59$; $p < 0.001$). Musta-Amalaki Siddha Takra was the most preferred formulation (43.37%). Adverse effects were reported by only 24.70% of practitioners ($Z = -6.52$; $p < 0.001$), confirming safety. **Conclusion:** Contemporary Ayurvedic clinical practice preserves the classical hierarchy of Takra indications with high statistical fidelity. Takra demonstrates clinically relevant efficacy, favourable safety, and expanding scope in integrative Panchakarma. Standardised protocols and rigorous clinical trials are warranted.

Keywords: Takra; buttermilk; Ayurveda; Grahani; Arsha; Takradhara; Siddha Takra; Brihatrayi; survey study; probiotic; integrative medicine.

1. INTRODUCTION

Ayurveda, the ancient Indian science of life, conceptualises health as the dynamic equilibrium of Dosha (biological humours), Dhatu (body tissues), and Mala (waste products), maintained through the judicious integration of Ahara (diet), Vihara (lifestyle), and Aushadha (medicine). Within this framework, several substances occupy the unique dual status of Ahara-Aushadha Dravya — substances that serve simultaneously as food and medicine. Of these, Takra (buttermilk) holds singular distinction, described in the Vaidyakiya Subhashitsahityam as Amrita-tulya (comparable to divine nectar) and declared by Charaka Samhita to be the pre-eminent therapeutic substance in its category.^{1,2}

Takra is obtained by churning Dadhi (curd) with the appropriate quantity of water and separating the butter fraction. Pharmacologically, it is characterised as Madhura-Amla in Rasa (sweet-sour taste) with Kashaya Anurasa (secondary astringent taste), Ushna Virya (warm potency), Laghu and Ruksha Guna (light and dry qualities), and Madhura Vipaka (sweet post-digestive transformation). Its principal Karma (actions) include Agnideepana (stimulation of digestive fire), Grahi (intestinal binding/absorbing), Kaphavatahara (pacification of Kapha and Vata Dosha), and Hridya (cardioprotection).^{3,4,5} This pharmacological profile, consistent across the Brihatrayi — Charaka Samhita, Sushruta Samhita, and Ashtanga Hridayam — accounts for its comprehensive therapeutic mandate in conditions ranging from Grahani (malabsorption syndrome) and Arsha (haemorrhoids) to Kushtha (skin disorders) and Manasa Vikara (psychosomatic conditions).

Modern biomedical research has progressively validated the classical claims for Takra. Its probiotic microorganisms — *Lactobacillus acidophilus*, *Lactobacillus casei*, *Lactococcus lactis*, and *Lactobacillus plantarum* — restore gut microbiome homeostasis, corresponding to the classical Deepana-Pachana action.^{6,7} Milk Fat Globule Membrane (MFGM)-derived phospholipids, sphingomyelin, and lactoferrin confer anti-inflammatory, cardioprotective, and neuroprotective effects, corroborating Takra's Hridya Karma and Shirorogahara properties.^{8,9} Fermented Takra formulations (Takararishtha) have

been shown to harbour potent probiotic strains including *Lactobacillus plantarum* TP5, constituting a synbiotic system with prebiotic herbal constituents.¹⁰

Despite extensive classical documentation and emerging scientific validation, no systematic survey study has examined how contemporary Ayurvedic practitioners actually prescribe Takra — which formulations they prefer, which indications they prioritise, and whether classical prescriptions are preserved in everyday practice. The absence of such survey data represents a significant lacuna, as it prevents objective assessment of the translational gap between Shastriya Pramana (textual evidence) and Anubhava Pramana (experiential clinical evidence). The present study was therefore designed to address this gap through a structured, validated, practitioner-level survey in Pune district, Maharashtra.

The aim of this study was to assess the current trends in the therapeutic use of Takra and Takra Kalpana (Takra formulations) among registered Ayurvedic practitioners. The specific objectives were: (i) to document the pharmacological characterisation of Takra from classical Brihatrayi texts; (ii) to develop and validate a structured questionnaire for survey study; (iii) to conduct a practitioner survey by the interview method; and (iv) to statistically analyse and interpret the generated data in the light of classical Ayurvedic principles.

2. MATERIALS AND METHODS

2.1 Study Design

An observational analytical cross-sectional survey study was designed to evaluate the current clinical trends in the therapeutic use of Takra among Ayurvedic practitioners. Data were collected through a structured, validated questionnaire administered via personal interview.

2.2 Study Setting and Duration

The study was conducted under the Department of Samhita, Siddhanta and Sanskrit, Bharati Vidyapeeth (Deemed to be University) College of Ayurveda, Pune, Maharashtra. Registered Ayurvedic practitioners from diverse clinical setups across Pune district were approached. The study period encompassed conceptualisation, literature review, questionnaire development and validation, data collection, statistical analysis, and interpretation.

2.3 Study Population and Sample Size

The study population comprised registered Ayurvedic practitioners actively engaged in clinical practice in Pune district. A total of 166 practitioners were enrolled, selected by purposive sampling from those fulfilling eligibility criteria. Given the observational, trend-documenting nature of the study, this sample size was considered adequate to represent prevailing prescribing practices.

2.4 Eligibility Criteria

Inclusion criteria: (i) registered Ayurvedic practitioners with a minimum of five years of clinical experience; (ii) practitioners primarily practising Ayurveda; (iii) practitioners operating within Pune district; (iv) practitioners providing written informed consent. Exclusion criteria: practitioners with fewer than five years of clinical experience; non-primary Ayurvedic practitioners; practitioners unwilling to participate.

2.5 Data Collection Instrument

A structured questionnaire was developed based on classical Ayurvedic references (Charaka Samhita, Sushruta Samhita, Ashtanga Hridayam, Ashtanga Sangraha) and contemporary clinical observations. It covered: demographic details; frequency and duration of Takra prescription; types of Takra and Takra Kalpana used; specific disease indications; use as Anupana (vehicle); Panchakarma applications; observed clinical outcomes; and adverse effects. The questionnaire was subjected to face validation and content validation by subject experts in Samhita, Kayachikitsa, and Ayurvedic clinical practice, with modifications incorporated based on expert recommendations. A pilot test was conducted before full-scale deployment.

2.6 Ethical Considerations

Institutional Ethics Committee approval was obtained prior to study initiation. Written informed consent was obtained from all participants. Confidentiality and anonymity of respondent data were strictly maintained throughout the study.

2.7 Statistical Analysis

Collected data were compiled in Microsoft Excel and analysed using Python 3.12 / SciPy. Descriptive statistics included frequency (n), percentage (%), and mean $\pm$ standard deviation. For the primary research hypothesis, a one-sample Z-test for proportions was applied. Chi-square goodness-of-fit tests were used for demographic distributions. Chi-square tests of association with Cramer's V effect-size estimation were used to compare categorical clinical practice variables. Statistical significance was set at $\alpha = 0.05$.

3. RESULTS

3.1 Demographic Profile of Respondents

A total of 166 registered Ayurvedic practitioners participated in the study (Table 1). The majority held the MD (Ayurveda) postgraduate degree (76.50%), followed by BAMS (23.49%). The predominant age group was 36–40 years (40.96%), followed by 41–45 years (22.89%) and 31–35 years (15.06%). With respect to clinical experience, 40.36% had 10–15 years of practice, 25.30% had 15–20 years, 17.47% had 6–10 years, and 16.87% had more than 20 years. Overall, 82.53% of respondents had more than 10 years of clinical experience.

Table 1: Demographic Profile of Respondents

Variable	Category	n	%
Qualification	MD (Ayurveda)	127	76.50
	BAMS	39	23.49
Age Group (years)	27–30	16	9.64
	31–35	25	15.06
	36–40	68	40.96
	41–45	38	22.89
	≥46	12	7.23
Years of Practice	6–10	29	17.47
	10–15	67	40.36
	15–20	42	25.30
	>20	28	16.87

3.2 General Use of Takra in Clinical Practice

Out of 166 respondents, 144 (86.75%) reported prescribing Takra or Takra Kalpana in clinical practice (Table 2). The one-sample Z-test against a null proportion of 0.50 yielded $Z = 9.47$, $p < 0.001$, 95% CI [81.6%, 91.9%], decisively rejecting the null hypothesis. Among users, 27.71% had been prescribing Takra formulations for more than 15 years. Regarding frequency of use, 51.81% used it frequently, 24.70% occasionally, 8.43% daily, and 1.81% rarely. A substantial majority (77.71%) prescribed Takra as Anupana (vehicle) for co-administered medicines, and 86.14% advised patients to prepare Takra at home.

Table 2: General Prescribing Patterns for Takra

Parameter	Response	n	%
Prescribes Takra/Takra Kalpana	Yes	144	86.75
	No	22	13.25
Frequency of Use	Daily	14	8.43
	Frequently	86	51.81
	Occasionally	41	24.70
	Rarely	3	1.81
Prescribes Takra as Anupana	Yes	129	77.71
	No	37	22.29
Advises home preparation of Takra	Yes	143	86.14
	No	23	13.86
Type of milk preferred	Cow's milk Takra	78	46.99
	Both cow's and buffalo's	82	49.40

Parameter	Response	n	%
	Buffalo's milk only	3	1.81

3.3 Types of Takra Formulations Used

Multiple responses were permitted for formulation type. Plain Takra was most commonly used (55.42%), followed by Siddha (medicated) Takra (48.19%), readymade Takra formulations (25.90%), and Takra-based Lepa (external paste, 9.64%). Among Siddha Takra varieties, Musta-Amalaki Siddha Takra was the most preferred formulation (43.37%), followed by Yavanyadi Siddha Takra (12.65%) and Pippalyadi Siddha Takra (10.84%) (Table 3).

Table 3: Takra Formulations Used in Clinical Practice (Multiple Responses Permitted)

Formulation	N	%
Plain Takra	92	55.42
Siddha (Medicated) Takra	80	48.19
Readymade Takra Formulations	43	25.90
Takra-based Lepa (external)	16	9.64
Musta-Amalaki Siddha Takra	72	43.37
Yavanyadi Siddha Takra	21	12.65
Pippalyadi Siddha Takra	18	10.84

3.4 Disease Indications — Shaman Chikitsa (Conservative Therapy)

Grahani (IBS/malabsorption syndrome) was the most frequently cited chronic indication (85.54%), followed by Arsha (haemorrhoids, 68.67%), Udara (abdominal disorders, 29.52%), Atisar (diarrhoea, 38.55%), and Pandu (anaemia, 9.64%) (Table 4). The chi-square goodness-of-fit analysis for chronic disease indications produced the highest chi-square value in the entire study ($\chi^2 = 231.50$; $df = 4$; $p < 0.001$), confirming that the disease-indication hierarchy is highly non-uniform and concentrated in Grahani and Arsha, mirroring the Brihatrayi therapeutic priorities with extraordinary statistical fidelity. Takra was prescribed significantly more in chronic conditions (84.9%) than in acute conditions (55.4%) ($\chi^2 = 34.56$; $df = 1$; Cramer's $V = 0.32$; $p < 0.001$).

Takra as exclusive diet (Takra Matra) was practised by 46 (27.71%) respondents, most commonly for Grahani (34.94%), Arsha (22.29%), and Agnimandya (impaired digestion, 21.69%). Takrarishta was used by 80.72% of practitioners for gastrointestinal indications, predominantly Grahani (70.48%) and Arsha (52.41%).

Table 4: Disease Indications for Takra in Shaman Chikitsa (n = 166)

Condition (Classical / Modern Correlate)	n Prescribing	%
Grahani (Malabsorption/IBS)	142	85.54
Arsha — Chronic (Haemorrhoids)	114	68.67
Atisara (Diarrhoea)	64	38.55
Gudshool — Acute pain in Arsha	85	51.20
Udara (Abdominal disorders/Ascites)	49	29.52
Pandu (Anaemia)	16	9.64
Kushtha (Skin disorders)	2	1.20
Ghrutvyapad (Complications of oleation)	92	55.42

3.5 Shodhana Chikitsa — Panchakarma Applications

Takradhara (continuous Takra stream over the head/body) was performed by 122 (73.49%) respondents, while Takra Basti (Takra enema) was performed by only 23 (13.86%). The difference between these two adoption rates was extraordinarily significant ($\chi^2 = 112.94$; $df = 1$; Cramer's $V = 0.59$; $p < 0.001$), representing a large clinical effect size (Table 5).

Scalp psoriasis was the leading indication for Takradhara (64.46%), followed by stress (19.88%), Anidra (insomnia, 19.28%), and Pittaja Shiroroga (head disorders of Pitta origin, 16.87%). A 7-day Takradhara course was most commonly prescribed (61.45%), followed by 14 days (7.83%) and 21 days (2.41%). Fresh Takra was used daily by 86.75% of practitioners performing Takradhara. For Takra Basti, the most common indications were Agnimandya (10.84%), Grahani (10.24%), Atisara (9.04%), and Arsha (7.23%).

Table 5: Panchakarma (Shodhana Chikitsa) Applications of Takra

Parameter	Response/Category	n	%
Performs Takradhara	Yes	122	73.49
	No	44	26.51
Leading indications — Takradhara	Scalp Psoriasis	107	64.46
	Stress	33	19.88
	Anidra (Insomnia)	32	19.28
	Pittaja Shiroroga	28	16.87
Takradhara duration	7 days	102	61.45
	14 days	13	7.83
Performs Takra Basti	Yes	23	13.86
	No	134	80.72
Leading indications — Takra Basti	Agnimandya	18	10.84
	Grahani	17	10.24
	Atisara	15	9.04

3.6 Observed Clinical Benefits and Safety Profile

Improvement in digestion was the most frequently reported clinical benefit (57.23%), followed by symptomatic relief (25.30%), reduction in inflammation (16.87%), and all three benefits combined (40.36%). No adverse effects were observed by 125 (75.30%) respondents; adverse effects were reported by 41 (24.70%). The adverse effect rate of 24.70% was significantly below 50% ($Z = -6.52$; $p < 0.001$), confirming the favourable safety profile of Takra therapy. A total of 133 (80.12%) respondents recommended active promotion of Takra-based therapies ($Z = 7.76$; $p < 0.001$), and 152 (91.57%) affirmed that Takra is utilised in contemporary Ayurvedic practice (Table 6).

Table 6: Clinical Benefits, Safety Profile, and Professional Endorsement (n = 166)

Parameter	Response	n	%
No adverse effects observed	Yes	125	75.30
Adverse effects observed	Yes	41	24.70
Reports improvement in digestion	Yes	95	57.23
Reports all three benefits	Yes	67	40.36
Recommends promoting Takra therapy	Yes	133	80.12
Affirms Takra used in contemporary practice	Yes	152	91.57

4. DISCUSSION

4.1 Validation of the Classical Agrya Dravya Designation

The primary finding of this survey — that 86.75% of qualified, experienced Ayurvedic practitioners prescribe Takra ($Z = 9.47$; $p < 0.001$) — constitutes what Ayurvedic epistemology terms Lokapramana: the collective testimony of qualified clinical professionals, recognised as a valid instrument of knowledge alongside Shastra Pramana (textual authority). The

classical characterisation of Takra as Amrita-tulya is not rhetorical hyperbole but reflects an empirically validated observation: a substance whose therapeutic relevance has been organically preserved across three millennia without centralised enforcement, sustained purely by the accumulated Anubhava Pramana of practitioner generations.

The Charaka Samhita includes Takra among the Agrya Dravyas — substances that are pre-eminent in their respective therapeutic categories. Its specific designation for Grahani, Shotha, and Arsha is among the strongest singular therapeutic endorsements in the classical literature. The present survey validates this designation with modern statistical authority.

4.2 Grahani and Arsha — Classical Hierarchy Confirmed

The emergence of Grahani (85.54%) and Arsha (68.67%) as the dominant chronic indications for Takra therapy, with the highest chi-square value in the entire study ($\chi^2 = 231.50$; $df = 4$; $p < 0.001$), directly mirrors the Brihatrayi hierarchy. Charaka's pharmacological analysis (Ch. Chi. 15/117–119) explains Takra's pre-eminence in Grahani through three synergistic mechanisms: Deepana (restoration of Jatharagni, the primary digestive fire), Grahi (reduction of excessive intestinal fluid loss), and Laghu (lightness that imposes no additional digestive burden). These three properties address the core pathophysiology of Grahani — Mandagni-driven Ama accumulation and Srotodushti — with a pharmacological precision that modern IBS management, relying primarily on symptom-suppression, has yet to replicate.¹¹

In Arsha management, the declaration "Vatashleshmarshasam takrat param naasteeha bheshajam" (Ch. Chi. 14/76–77) — there is no medicine superior to Takra for Vata-Kapha predominant haemorrhoids — represents one of the most unambiguous therapeutic endorsements in classical Ayurveda. The classical rationale combines direct pacification of the primary causative Doshas, Srotosuddhi (purification of the Gudavaha Srotas), and Shothahara (anti-inflammatory) action on the haemorrhoidal venous plexus. The MFGM-derived lactoferrin, sphingomyelin, and gangliosides in Takra offer a plausible molecular basis for its Shothahara and Srotosuddhi effects, by inhibiting NF- κ B signalling pathways and reducing pro-inflammatory cytokine expression.¹²

4.3 Pharmacological Basis of Tridoshic Versatility

The statistically significant predominance of Takra use in chronic conditions (84.9%) over acute conditions (55.4%) ($\chi^2 = 34.56$; Cramer's $V = 0.32$; $p < 0.001$) is pharmacologically consonant with its classification as a Shamana Dravya — one that gradually normalises Dosha imbalance, restores Agni, and nourishes Dhatus through sustained administration.¹³ This pharmacodynamic profile is directly analogous to that of modern probiotics, which require sustained mucosal colonisation and immune adaptation to exert their full therapeutic effects.¹⁴

The classical documentation of Dosha-specific Takra variants — Ruksha Takra for Kapha predominance, Ardhouddhrita Takra for Pitta, and Anuddhrita Takra for Vata (Ch. Chi. 14/83–84) — combined with the five-variety classification of Bhavaprakasha Nighantu (Ghola, Mathita, Takra, Udasvit, Chachika), represents an ancient system of individualised dietary pharmacotherapy whose biochemical basis rests on the varying fat content and fermentation state of each preparation.¹⁵ The survey preference for cow's milk-based Takra (96.39% using it exclusively or in combination) reflects classical prescription, as Gau-ksheera-ja Takra is recognised as therapeutically superior due to its Laghu, Deepana, and Srotosuddhi properties.

4.4 Musta-Amalaki Siddha Takra — Pharmacological Rationale for Clinical Preference

The dominant preference for Musta-Amalaki Siddha Takra (43.37%; $\chi^2 = 95.05$; $p < 0.001$) is pharmacologically well-grounded. Musta (*Cyperus rotundus*) is classified in classical texts as Deepana, Pachana, Grahi, Stambhana, Jwaraghna, and Shothahara — properties that synergistically augment Takra's own Deepana-Grahi action.¹⁶ Its phytochemicals — alpha-cyperone, beta-cyperone, sesquiterpene alkaloids, and flavonoids — demonstrate documented COX-2 inhibitory, antioxidant, anti-diarrhoeal, and immunomodulatory activities. Amalaki (*Emblica officinalis*), rich in vitamin C, tannins, gallic acid, ellagic acid, and quercetin, contributes Rasayana, hepatoprotective, and mucosal-protective effects. The clinical preference for this combination, sustained by centuries of Anubhava Pramana, now finds convergent molecular validation.

4.5 Takradhara — Classical Rationale and Contemporary Evidence

The finding that 73.49% of practitioners performed Takradhara, with scalp psoriasis as the leading indication (64.46%), reflects a remarkable convergence of classical documentation and modern evidence. Classically, Takradhara is indicated for Kushtha, Anidra, Shirorogam, Vata Vyadhi, and Manasa Vikara. Contemporary research has validated each of these indications. The CCRAS multicentric study in 85 patients with plaque psoriasis demonstrated a 78% reduction in PASI scores following Vamana and Takradhara.¹⁷ Clinical studies have confirmed significant improvement in insomnia, stress-related anxiety, hypertension, and diabetic neuropathy.^{18,19,20}

From a neurophysiological perspective, the mechanism of Takradhara in psychosomatic conditions is explained through stimulation of the Sthapani Marma region, normalisation of Prana Vayu circulation, and reduction of Pitta aggravation in the Shiras. Modern neuroscientific correlates include parasympathetic nervous system activation, reduction of cortisol and HPA-axis reactivity, and upregulation of GABAergic and serotonergic neurotransmission.²¹ The preference for a 7-day Takradhara course (61.45%) aligns with Vagbhata's prescription (AH. Chi. 8/38–40), and the 86.75% use of fresh daily Takra reflects adherence to the classical Navanava Takra principle, pharmacologically supported by the well-established degradation of *Lactobacillus* viability with storage.

The low adoption of Takra Basti (13.86%) compared to Takradhara (73.49%), representing a large effect size (Cramer's $V = 0.59$), reflects the greater procedural complexity, skilled administration requirements, and mandatory Purvakarma preparation associated with Basti therapy. However, the clinical evidence for Takra Basti in Grahani and Arsha management is compelling: Mallikarjun et al. (2023) demonstrated superior outcomes with Takra Basti compared to Erandamooladi Niruha Basti in IBS management.²² This under-utilisation represents an important target for structured practitioner training and protocol standardisation.

4.6 Safety Profile — Convergence of Classical Satmya and Statistical Evidence

The adverse effect rate of 24.70% — significantly below 50% ($Z = -6.52$; $p < 0.001$) — provides formal statistical confirmation of Takra's clinical safety, consistent with its classical classification as an Ahara-Aushadha Dravya of Satmya character (body-friendly substance). The adverse events reported by the 24.70% likely correspond to presentations of Anarha (classical contraindications) documented by Sushruta (Su. Su. 45/86): Raktapitta (bleeding disorders), Daha (burning sensation), Grishma Ritu (summer season), and Daurbalya (severe debility). These represent clinically identifiable presentations where Sushruta's systematic contraindication framework remains practically applicable, and they reinforce the importance of Dosha-based patient selection rather than indicating intrinsic pharmacotoxicity of Takra in correctly selected patients.

4.7 Implications for Standardisation and Integrative Practice

The strong professional consensus for promoting Takra-based therapies (80.12%; $Z = 7.76$; $p < 0.001$) constitutes a Bahumatam — the agreement of the majority of qualified practitioners — which is a classically recognised basis for clinical practice. This consensus mandates several translational actions: development of Dosha-specific standardised Takra therapy protocols grounded in the classical Sevana Krama (Ch. Chi. 14/78–82); inclusion in AYUSH clinical practice guidelines for Grahani/IBS, Arsha, and psoriasis, where both classical documentation and modern evidence are most robust; and integration into the National AYUSH Mission treatment framework. Equally important is the development of a structured pharmacovigilance protocol systematically identifying Anarha presentations to minimise inappropriate use.

5. CONCLUSION

This survey study, conducted among 166 registered Ayurvedic practitioners in Pune district, provides the first systematic, statistically grounded documentation of contemporary prescribing patterns for Takra and Takra Kalpana. All ten statistical tests yielded highly significant results ($p < 0.001$), supporting the following conclusions:

Takra is prescribed by 86.75% of qualified practitioners — a proportion nearly 9.5 standard errors above the null hypothesis threshold — confirming its role as an active and prevalent therapeutic modality, not a vestigial dietary tradition. The disease-indication hierarchy in contemporary practice mirrors the Brihatrayi framework with extraordinary statistical fidelity: Grahani (85.54%) and Arsha (68.67%) dominate, followed by Udara, Pandu, and Kushtha, precisely as the classical Acharyas predicted. Takradhara has emerged as a major integrative Panchakarma procedure, adopted by 73.49% of practitioners, with robust clinical evidence particularly in scalp psoriasis, insomnia, and stress-related disorders. Takra Basti, though underutilised (13.86%), carries documented clinical efficacy and warrants targeted practitioner development. The safety profile is favourable, with no adverse effects reported by 75.30% of practitioners.

These findings establish that the therapeutic legacy of Takra is not a historical artefact but a living, validated, and statistically confirmed clinical reality. The convergence of Shastriya Pramana and Anubhava Pramana upon precisely the same clinical conclusions — across three millennia of accumulated clinical observation and a twenty-first century statistical survey — is a testament to the empirical rigour of Ayurvedic classical science. Standardised protocols, well-designed randomised controlled trials on Siddha Takra in Grahani and Arsha, and integration into evidence-based AYUSH clinical practice guidelines are the immediate research and policy priorities that this study identifies.

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