KEMAS 22 (1) (2026) 99-111

Jurnal Kesehatan Masyarakat

http://journal.unnes.ac.id/nju/index.php/kemas

Integrating Usadha Bali into Modern Healthcare and Wellness Tourism

Made Kurnia Widiastuti Giri[1]✉, Made Satya Nugraha Gautama[2], Ni Kadek Diah Purnamayanti[2], Luh Putu Pranena Sastri[1], Made Bayu Permasutha[3], I Wayan Muderawan[4], Mahalul Azam[5]

[1]Department of Public Health, Faculty of Medicine, Universitas Pendidikan Ganesha2 School of Nursing, Faculty of Medicine, Universitas Pendidikan Ganesha
[3]Department of Biomedical Sciences, Faculty of Medicine, Universitas Pendidikan Ganesha
[4]Department of Chemistry, Faculty of Mathematics and Natural Sciences, Universitas Pendidikan Ganesha
[5]Department of Public Health, Faculty of Medicine, Universitas Negeri Semarang

Article Info

Article History:
Submitted March 2026
Accepted July 2026
Published July 2026

Keywords:
Usadha; Balinese traditional medicine; Wellness tourism; Complementary and alternative medicine; Mixed methods study

DOI
https://doi.org/10.15294/kemas.v22i1.44761

Abstract

Balinese traditional medicine, known as Usadha, represents a culturally rooted healing system with growing relevance for healthcare and wellness tourism. Healthcare providers in Bali face the challenge of aligning these practices with modern clinical standards while meeting global demand for authentic therapies. This study examined healthcare professionals' knowledge, perceptions, and practices regarding Usadha, as well as the opportunities and barriers for integration. Using a mixed-methods approach, 15 licensed providers completed a detailed survey combining quantitative and qualitative items. Results showed moderate knowledge of Usadha concepts and strong familiarity with herbal treatments, though nearly half lacked awareness of standardized dosages. Most participants acknowledged herb–drug interaction risks and expressed a strong interest in training and scientific validation. Thematic analysis highlighted barriers such as limited facilities and unclear legal frameworks, alongside calls for an integration blueprint with official protocols and education. Usadha's holistic approach to physical, mental, and spiritual health was recognized as a strength, with potential to enhance Bali's wellness tourism if managed professionally. Overall, findings emphasize the need for stronger evidence, standardized protocols, and competency-based training to ensure safe implementation and reinforce Bali's global position in wellness tourism.

Introduction

Interest in traditional and complementary medicine (T&CM) has grown steadily worldwide over the past two decades, with the World Health Organization estimating that more than 80% of the global population relies on traditional practices for primary healthcare needs (Hoenders *et al.*, 2024; World Health Organization, 2023) In Asia, traditional medical systems such as Ayurveda in India, Traditional Chinese Medicine (TCM) in China, and Jamu in Indonesia have long been integrated into community health and are increasingly recognized within formal health policies (Widowati *et al.*, 2024; X. Zhang *et al.*, 2022). Bali, renowned for its cultural heritage and spiritual identity, has preserved Usadha, a classical form of Balinese healing that combines herbal remedies, spiritual practices, and holistic approaches to wellbeing (Muderawan *et al.*, 2020; Suatama *et al.*, 2019) In parallel, wellness tourism has emerged as a rapidly expanding sector worldwide, valued at over USD 800 billion in 2023, with destinations such as Thailand, India, and China leveraging traditional medicine as a distinctive attraction (Global Wellness Institute, 2024; Majeed & Kim, 2022) Within this global context, Bali's

✉ Correspondence Address:
Udayana Street, No 11, Singaraja, Bali, Indonesia 81116
Email: kurnia.widiastuti@undiksha.ac.id

pISSN 1858-1196
eISSN 2355-3596

potential to integrate Usadha into healthcare and wellness tourism is significant, yet it remains underexplored in both research and practice.

The integration of Usadha Bali into health care is challenged by systemic, professional, and cultural factors. Usadha is an ethnomedicine and indigenous Balinese healing science that has been developed for more than six centuries, and its primary source is Ayurveda (Gusti *et al*., 2025; Suatama, 2021) It is documented in palm-leaf manuscripts (*lontar usada*), which detail disease diagnosis, herbal formulations such as *loloh* and *boreh*, healing mantras, and ritual practices(Suatama, 2021; Sugata *et al*., 2025) Balinese health views emphasize that illness may arise from both natural power (*kuasa sekala*) and supernatural power (*kuasa niskala*), requiring comprehensive approaches that combine pharmacological and spiritual dimensions(Muderawan *et al*., 2020; Sugata *et al*., 2025) Traditional healers (*balian*) continue to use these manuscripts as references for treatment (Anggaraini & SS, 2025) covering conditions across their lifespan, from childhood (*Usadha Rare*) to old age (*Usadha Tua*), as well as internal diseases (*Usadha Dalem*) (Rasna & Tantra, 2017; Suatama *et al*., 2019) Despite its cultural depth and holistic scope, Usadha remains situated in a "gray zone" between local practice and formal healthcare, constrained by limited training, unclear legal frameworks, and lack of standardized protocols (Muderawan *et al*., 2020) These challenges mirror broader barriers to traditional medicine integration worldwide, where issues of regulation, evidence quality, and professional competency often hinder its adoption into modern health systems (World Health Organization, 2019).

Traditional medical systems such as Ayurveda in India and Traditional Chinese Medicine (TCM) in China have demonstrated how indigenous healing practices can be integrated into modern healthcare and promoted internationally through wellness tourism (Leung, 2023; Rajapakshe & Arachchi, 2024; Wen *et al*., 2021) These models highlight the opportunities and challenges of combining cultural authenticity with scientific validation (Pandav *et al*., 2022) Although Ayurveda and TCM have benefited from government endorsement, standardized protocols, and global recognition (Fung, 2024; Naik *et al*., 2025) Usadha remains less formalized, with limited institutional support and unclear regulatory pathways (Muderawan *et al*., 2020) This gap underscores the need to position Usadha within broader international frameworks of traditional medicine integration, ensuring that its cultural and holistic strengths are matched by evidence-based guidelines and professional training. Such alignment would not only strengthen its role in healthcare but also enhance Bali's competitiveness in the global wellness tourism market, where the demand for authentic, nature-based therapies continues to rise (Hubner *et al*., 2025; Utama & Krismawintari, 2025).

Research focusing on the integration of Usadha into formal healthcare and wellness tourism is scarce and presents methodological limitations similar to those observed in other traditional medicine studies. Although interest in this topic is increasing, most existing reports remain descriptive with limited empirical evidence on clinical outcomes or professional perspectives (Muderawan *et al*., 2020; Wulanyani *et al*., 2020) Comparative studies on Ayurveda and Traditional Chinese Medicine have shown that integration into health systems requires not only cultural acceptance, but also standardized protocols, legal clarity, and professional training (Elahee *et al*., 2019; Leung, 2023; World Health Organization, 2023) Consequently, the absence of systematic research on Usadha leaves important gaps in understanding its role in modern healthcare and potential contribution to sustainable tourism. Given the paucity of data, information is needed on how Usadha can complement professional efforts to provide holistic care and strengthen Bali's wellness tourism sector. As healthcare providers' experiences and attitudes are known to influence the adoption of traditional medicine in clinical practice, but have so far been poorly documented in the Balinese context, we sought to explore their perceptions of Usadha, including barriers, needs, and opportunities for integration. For this purpose, we designed an exploratory mixed-methods study to describe professionals' knowledge, perceptions, and practices

regarding Usadha and its role in healthcare and wellness tourism.

Method

A mixed-methods exploratory design was employed to investigate healthcare providers' perspectives on integrating traditional Balinese medicine (Usadha) into formal clinical practice and its potential role in sustainable wellness tourism. Quantitative data were collected through structured surveys to assess providers' knowledge, ethical perceptions, and clinical practices, whereas qualitative data were obtained through thematic analysis of open-ended responses to capture deeper insights into barriers, needs, and opportunities. The study was grounded in a participatory approach by engaging academic researchers and local practitioners in developing the research framework(Windsor, 2013). This collaborative design ensured that the research questions reflected both scholarly priorities and community relevance. Whereas the integration of quantitative and qualitative strands allowed for triangulation and a more comprehensive understanding of the phenomenon under study.

The research team designed a mixed survey instrument consisting of 52 closed-ended items and one open-ended question. The closed-ended items captured sociodemographic characteristics, professional background, knowledge, and practices related to traditional medicine, while the open-ended questions invited participants to elaborate on their experiences, perceived barriers, and opportunities for integrating Usadha into healthcare and tourism. The inclusion of an open-ended field was intended to elicit nuanced insights beyond structured responses, allowing participants to articulate perspectives that were not captured by quantitative measures(O'Cathain & Thomas, 2004). All study procedures were reviewed and approved by the institutional ethics committee of the Universitas Pendidikan Ganesha (reference number: 023/UN.48.16.04/PT/2025). The study sample consisted of 15 licensed health care professionals currently practicing in Bali. Participants were recruited purposively to represent individuals with direct experience in both conventional healthcare and traditional practices. The eligibility criteria included (1) holding a valid healthcare license in Indonesia, (2) having worked in Bali for at least six months, and (3) willingness to share professional perspectives on traditional medicine integration. This purposive sampling strategy was chosen to capture informed viewpoints from practitioners at the intersection of modern and traditional health systems.

This study utilized a 57-item, self-administered instrument designed to assess the integration of Balinese traditional medicine (Usadha) into formal healthcare. The questionnaire was divided into five sections: The first section (12 items) gathered comprehensive demographic and professional background information, including profession, length of practice, and previous traditional medicine training. The second section (eight items) assessed the Knowledge of Usadha and Herbal Medicine, covering philosophical concepts, traditional modalities, and clinical safety, i.e., herb-drug interactions and dosage standardization. The third section (16 items) evaluated Perceptions of Regulation, Standardization, and Documentation, focusing on the ethical necessity of informed consent, inclusion of traditional therapies in medical records, and legal framework for professional collaboration. The fourth section (16 items) measured Professional Practices, including clinical self-efficacy, patient-screening habits, risk-benefit counseling, and the intention to collaborate or pursue further training. Most quantitative items were measured using a 5-point Likert scale, with response options ranging from 1 (strongly disagree) to 5 (strongly agree/always). To aid interpretation, cut-off points were established: scores of 1.00–2.49 were categorized as Low, 2.50–3.49 as Moderate, 3.50–4.49 as High, and 4.50–5.00 as Very High. Knowledge-based items utilized a combination of Likert scales and binary formats (true/false/unsure), with correct responses classified as adequate knowledge and incorrect/unsure responses as inadequate or limited knowledge. For practice frequency indicators (e.g., patient screening, referral, side-effect reporting), responses were categorized as frequent (high practice) and infrequent (low practice).

The fifth and final section of the study

consisted of three openended questions designed to elicit qualitative insights into the barriers, needs, and opportunities for Usadha in the wellness tourism sector. Questions were asked to Participants: *What barriers do you perceive in integrating Usadha Bali into formal healthcare practice? What opportunities or needs do you identify to strengthen the role of Usadha Bali in clinical services? How do you envision Usadha Bali's contribution to the development of sustainable wellness tourism in Bali?* This format allowed respondents to express their perspectives in their own words, enriching the dataset with contextspecific narratives that complemented the quantitative findings and provided a deeper understanding of professional viewpoints. Data were collected between May and July, 2025. The survey instrument was distributed in paper and electronic formats to eligible participants. Respondents were informed that participation was voluntary and anonymous, and their consent was embedded in the introductory section. The closed-ended items provided quantitative data on demographic and professional characteristics, while the open-ended questions generated qualitative narratives. Responses were typically two to five sentences in length, reflecting personal experiences, perceived barriers, and recommendations.

Quantitative data from closed-ended items were summarized descriptively to provide contextual information about participants' demographics, knowledge, perceptions, and practices scores. Statistical analyses were conducted using IBM SPSS Statistics, version 27. Qualitative responses were transcribed and analysed using thematic analysis(Tuckett, 2005). An inductive coding approach was applied to capture emergent themes directly from the data(Thomas, 2006). Three investigators independently coded all the responses and identified the initial categories and subthemes. Rather than calculating inter-rater reliability, the analytic process emphasizes consensus-building to ensure comprehensive coverage of perspectives. Following the initial coding, the team refined the codebook by merging overlapping codes, clarifying definitions, and aligning categories with overarching research questions. The final coding structure was then applied to all the responses. Text segments containing multiple concepts were assigned more than one code. Thematic analysis was conducted using the NVivo 12 qualitative data analysis software (QSR International, Australia).

Result and Discussion

The survey included 15 licensed healthcare professionals in Bali, including nurses (46.6%), midwives (26.7%), and physicians (26.7%). Most participants (60%) were women. Most participants had extensive experience, with 73.3% practicing for over 11 years. The majority worked in community health centers (60%), while the others were in private facilities (26.7%) or public hospitals (13.3%), with settings split between urban (53.3%) and rural (46.7%). Over half held undergraduate or professional degrees (53.3%), followed by postgraduates (33.3%), and diplomas (13.3%). Training in Usadha or traditional medicine varied as follows: none (26.7%), formal courses (20%), certification (20%), and workshops or combined formats (33.3%) (Table 1).

As shown in Table 2, the participants reported moderate knowledge of Usadha Bali concepts (mean = 3.53) and high familiarity with traditional and herbal modalities (mean = 4.07). Awareness of herb–drug interactions was strong (93.3% correct), but dosing protocol was limited (46.7% incorrect/unsure). Perceptions and ethics were consistently high, including the need for scientific validation (mean = 4.6), informed consent (mean = 4.4), and medical record documentation (mean = 4.27). Legal pathways for collaboration were rated high (mean = 4.13), while awareness of legal boundaries was rated moderate (mean = 3.33). Clinical practices showed very high intentions for training and collaboration (mean = 4.33), frequent patient screening, and high leadership support (mean = 3.73), but referral and side effect reporting remained infrequent.

Qualitative survey data were analyzed to explore the professional perspectives of healthcare providers regarding the integration of Balinese traditional medicine (Usadha) into formal clinical practice and its role in the tourism sector (Figure 1). Four main themes, each with corresponding subthemes,

TABLE 1. Characteristic of Participants (n=15)

Variables	Categories	Frequency (n)	Percentage (%)
Healthcare Profession	Nurse	7	46.6
	Midwife	4	26.7
	Physician	4	26.7
Years of Practice	High Experience (> 11 Years)	11	73.3
	Moderate Experience (6–10 Years)	3	20
	Low Experience (3–5 Years)	1	6.7
Type of Healthcare Facility	Community Health Center (Puskesmas)	9	60
	Public General Hospital	2	13.3
	Others (Private Practice, Private Hospital, etc.)	4	26.7
Work Setting	Urban	8	53.3
	Rural	7	46.7
Highest Educational Level	Undergraduate/Professional Degree	8	53.3
	Postgraduate Degree (Master/ Doctorate)	5	33.3
	Diploma	2	13.3
Gender	Female	9	60
	Male	6	40
Primary Patient Population	Diverse/Mixed (Including Children)	8	53.3
	Adult-focused (Adults only)	7	46.7
Religious/Cultural Identity	Hindu	12	80
	Moslem	2	13.3
	Christian	1	6.7
Training in Usadha/ Herbal/T&KM	None	4	26.7
	Formal Course	3	20
	Certification	3	20
	Others (Workshop/ Certification combination)	5	33.3

TABLE 2. Profile of Professional Knowledge, Perceptions, and Practices Regarding Usadha & T&CM (n=15)

Variable Group	Specific Indicators	Result (Mean / %)	Descriptive Level
Knowledge Profile	Concepts of Usadha Bali	3.53	Moderate
	Traditional & herbal modalities	4.07	High
	Awareness of Herb-Drug Interactions	93.30%	Correct
	Standardized dosage awareness	**46.70%**	**Incorrect/ Unsure**
Perceptions & Ethics	Scientific validation requirement	4.6	Very High
	Informed Consent for Traditional Use	4.4	Very High
	Medical record documentation	4.27	Very High
	Legal Pathways for Collaboration	4.13	High
	Perception of "Natural = Safe"	3.6	High
	Legal boundary awareness	**3.33**	**Moderate**
Clinical Practices	Training intention (next 3 months)	4.33	Very High
	Collaboration intention	4.33	Very High
	Patient screening habits	High	Frequent
	Leadership & management support	3.73	High
	Referral & side-effect reporting	Low	Infrequent

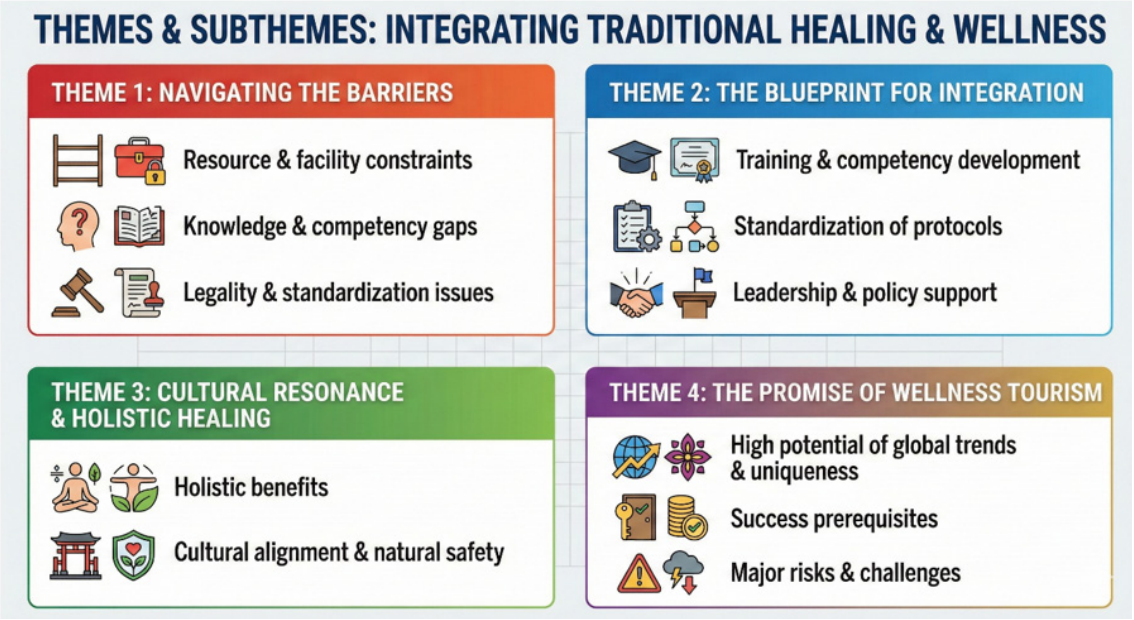

FIGURE 1. Theme and Subtheme of Qualitative Findings

are presented below to illustrate the barriers, needs, and opportunities identified by the participants. The following narrative describes the experiences, barriers, and opportunities perceived by the 15 healthcare professionals.

The three subthemes within theme 1 captured the systemic and personal challenges that hinder the integration of Usadha into formal healthcare, revealing a gap between cultural intent and clinical reality. Physical and financial limitations were cited as the most immediate hurdles. The participants described a lack of dedicated spaces, which forced traditional services to be sidelined or integrated awkwardly into general clinical areas. Without specific budgets for raw materials, the ability to provide tangible traditional treatment remains limited.

"The limited-service space means we are still merged with other general services; there is also no budget for preparing herbal remedies" (P14). *"Lack of facilities and materials for traditional health services in our center"* (P5). *"The main obstacle is the physical place to provide the service"* (P3).

A significant internal barrier is the lack of specialized expertise. Even in a culturally rich environment such as Bali, healthcare providers felt ill-equipped to practice Usadha professionally without formal training. This lack of knowledge leads to professional hesitation and reliance on conventional methods.

"The main obstacle is the lack of knowledge and understanding among the team members regarding traditional medicine" (P8). *"I have never attended specific training for traditional health services, which makes me hesitant to implement it fully"* (P9). *"Lack of knowledge is our biggest barrier"* (P2).

Participants expressed deep concerns regarding the "gray area" of traditional medicine within a modern legal framework. The absence of recognized clinical standards or standardized dosages for herbal preparations creates fear of medical error and legal liability among practitioners.

"We need standardized materials and recognized service standards to ensure safety and evidence-based medicine (EBM)" (P7). *"Standardized dosing and legal pathways are still not clear at the workplace level"* (P15).

The three subthemes in theme 2 explored the essential interventions that participants believe are necessary to transform traditional medicine from a marginal practice into a safe, professional service. There is a unanimous call for structured professional development. Participants felt that for Usadha to be taken seriously, it must be supported by continuous, hands-on training that allows providers to confidently bridge the gap between ancient wisdom and modern clinical practice.

"We need training on how to integrate conventional and traditional/complementary services safely" (P1). *"Specific training for designated health workers is essential to increase confidence"* (P6). *"Training that matches the required competencies for the staff"* (P9). *"Access to formal training and competency development is the most important factor for us to move forward safely"* (P13).

To move beyond "empirical" use, participants emphasized the need for official manuals and guidebooks. They argued that a standardized protocol would not only protect the patient but also provide a professional shield for the practitioner.

"The most important change needed is a clear guidebook or manual for the integration process" (P10). "Having a standardized service protocol that is officially recognized will ensure everyone follows the same safety procedures" (P7). "We need clear guidelines and protocols to ensure that the integration is safe for patients" (P11). *"Standardization of procedures and protocols is key to achieving a high quality of service"* (P12).

The participants highlighted that their individual enthusiasm was insufficient without systemic backing. They expected management and government bodies to provide the administrative legitimacy to make Usadha a permanent fixture in the healthcare system.

"Support from colleagues and the head of the facility is needed to make this service sustainable" (P2). *"We need clear policies and guidelines from the management to start*

providing these services legally" (P8). *"Strong leadership and clear policy directives are essential for the successful implementation of Usadha in our facility"* (P4).

Theme 3 explored the high levels of acceptance among practitioners rooted in the belief that traditional medicine offers a unique, holistic path to recovery that modern medicine alone cannot provide. Participants viewed Usadha not as a replacement, but as a vital partner of conventional medicine. They emphasized the "triadic" nature of Balinese healing—addressing the physical, mental, and spiritual—which is often missing in Western-centric care:

"I strongly agree; to support patient recovery, we need therapy for physical, mental, and spiritual aspects" (P1). *"This is intended for mild cases that are not cured by chemical drugs alone, acting as a holistic complement"* (P14). *"I agree because many patients still do not feel compatible with chemical drugs alone"* (P9).

Usadha is perceived as a "trusted friend" by the local community. Practitioners noted that its natural origins and deep cultural roots make it highly acceptable to patients, reducing the psychological barrier to seeking care and providing an affordable alternative.

"I agree because it is natural and the price is affordable for the community" (P2). *"Usadha is already part of our culture; it is in line with the culture of the Balinese people"* (P5). *"I agree because herbal medicine like Jamu is still very much used by the community in rural areas" (P3). "Agree, for the purpose of maintaining fitness and wellness"* (P8).

The final three subthemes of theme 4 examined the potential of Usadha as a pillar of Bali's "Wellness Tourism," balancing high optimism with cautious recognition of current failures in marketing and infrastructure. There is a strong belief that Bali can offer health experiences that the rest of the world cannot. By combining the island's spiritual reputation with professionalized Usadha, participants see a massive opportunity to capture the global "back to nature" market:

"Global society is currently facing high stress; Bali is already known as a spiritual island... they believe Bali has a special spirit" (P1). *"Usadha has a huge opportunity because it has comprehensive healing methods not found in Western medical treatment"* (P4). *"The potential is great in the future"* (P10). *"Very promising opportunity"* (P3).

Despite optimism, participants warned that potential was not a reality. Success is contingent on a professionalized "bundling" of services, where marketing, high-quality human resources, and standardized care meet the expectations of international tourists.

"It is very strategic... we must bundle it into 'Wisdom Health Tourism'" (P7). *"I agree as long as we prepare the human resources, promotion, and support from all parties"* (P2). *"It supports tourism, much like traditional medicine does in China"* (P5). *"It should be a signature experience"* (P8).

The primary threat to this potential is the lack of professional communication and external backing. Participants felt that the program currently lacks sufficient media exposure and government funding to gain international trust, leaving the potential underutilized.

"The opportunity is still small because of the lack of information media and promotion to support the program" (P9). *"It is currently not good because of a lack of support and patient trust"* (P2). *"We must demonstrate the link between Usadha and the Balinese spirit clearly so they can accept it well"* (P1). *"It will be a success if we can build trust through professional service"* (P6).

Our study addresses the limited research on the integration of Balinese traditional medicine (Usadha) into formal healthcare, and its potential role in wellness tourism sheds light on healthcare providers' perceptions of its benefits, challenges, and future opportunities. Combining the quantitative survey results with qualitative thematic analysis allows us to observe diverse perspectives regarding knowledge, ethical considerations, and clinical practices related to Usadha. While participants expressed strong support for ethical safeguards, such as scientific validation, informed consent,

and documentation, they also revealed gaps in standardized dosage knowledge and legal clarity. Many providers emphasized the cultural resonance and holistic healing potential of Usadha, yet reported barriers, including lack of training, inadequate facilities, and uncertainty about regulation. Despite these limitations, respondents demonstrated high intentions to pursue training and collaboration and highlighted the promise of Usadha as a distinctive feature of Bali's wellness tourism sector. Notably, enthusiasm for integration was tempered by concerns about insufficient promotion, policy support, and patient trust, underscoring the dual reality of optimism and caution in advancing Usadha within both the healthcare and tourism contexts.

Our results revealed diverse perceptions among healthcare providers regarding the integration of Usadha into clinical practice, reflecting broader global debates on traditional and complementary medicine (T&CM). Similar to findings in other regions, providers valued cultural resonance and holistic healing, but expressed uncertainty about standardized protocols and legal clarity. International studies have shown comparable tensions. For example, research in China and India highlights strong community trust in traditional modalities, yet integration into biomedical systems remains hindered by regulatory gaps and limited professional training (Seelamantula *et al*., 2025; Z. Zhang *et al*., 2024) In Africa, several studies have documented widespread reliance on traditional medicine but emphasized the need for evidence-based guidelines and safety monitoring to ensure patient protection (Bashir, 2025; James *et al*., 2018). Our findings also align with literature from Europe and North America, where enthusiasm for complementary medicine often coexists with skepticism due to perceived weak scientific grounding (Redvers & Blondin, 2020; Souček & Hofreiter, 2022) Importantly, professional experience appears to shape attitudes globally, and studies in oncology and primary care have shown that clinicians with personal or clinical exposure to T&CM are more likely to support its integration (Hernandez-Fuentes *et al*., 2025; Vankova, 2023). This international evidence underscores that Bali's situation is not unique but is part of a broader challenge of balancing cultural authenticity, patient demand, and scientific validation in integrating traditional medicine into modern healthcare and wellness tourism.

When participants in our study related their views on Usadha to the broader context of wellness tourism, they identified several areas where traditional medicine could be supporting. Participants emphasized its potential to address stress, lifestyle-related conditions, and the demand for holistic experiences among international visitors, while also acknowledging that current facilities and promotion are insufficiently supportive. In this case, they viewed Usadha as a promising complement to conventional healthcare and a distinctive cultural asset for tourism, or for the "undecided," as a safe and culturally acceptable option for wellness seekers (Hubner *et al*., 2025; Susanti *et al*., 2025) This aspect is consistent with the conclusions from recent reviews of health and wellness tourism in Asia (Yan, 2024; Zhong *et al*., 2021) which highlight the growing demand for culturally rooted nature-based therapies as part of global wellness trends.

Scholars have suggested that the positive impact of traditional medicine in tourism contexts is mediated by its cultural dimension, allowing visitors to engage with local heritage sites while pursuing health and relaxation (Peng *et al*., 2025; Zhu *et al*., 2025). Such approaches may also benefit international tourists unfamiliar with biomedical systems in two ways. First, they do not rely heavily on language or complex medical explanations, making them widely accessible and cost effective (Herman *et al*., 2012) Second, traditional therapies can serve as partial or complementary alternatives to biomedical care, particularly for wellness-focused travelers seeking preventive or restorative experiences (Tangkiatkumjai *et al*., 2020) In line with this, participants in our study identified Usadha as a "soft" therapy, either a standalone wellness practice or a facilitator for broader healthcare and tourism services. Our results and international perspectives point to the transcultural relevance of Usadha in wellness tourism. However, further research, including tourists' views and cross-cultural acceptance, is necessary to strengthen its role in

global health tourism.

Overall, our results show a contrasting picture of Usadha's integration into formal healthcare and its positioning within wellness tourism. On the one hand, healthcare providers perceive Usadha as culturally resonant, ethically acceptable, and promising for both patient care and tourism development. However, its clinical implementation remains hindered by unclear legal frameworks, limited standardized protocols, and insufficient reporting practices, which may reduce professional confidence and sustainability. These challenges raise the broader issue of structural and organizational factors that facilitate the adoption of traditional and complementary medicine in modern health systems. International reviews have grouped such factors into three categories: system (e.g., infrastructure, funding, policy support), staff (e.g., beliefs, skills, competing demands), and intervention characteristics (e.g., training, feedback, and evidence quality) (Park & Canaway, 2019; von Schoen-Angerer *et al*., 2023; Wang *et al*., 2025) Several of these were evident in our study, including the need for adapted facilities and budgets (system), improved knowledge and competency development (staff), and standardized guidelines supported by scientific validation (intervention). Therefore, implementing traditional medicine in healthcare and tourism is a complex task requiring alignment across these domains. Global recommendations for changing professional behavior in primary care. More specifically, concerning Usadha, the issue of evidence quality spans all three categories, influencing system readiness to fund and regulate services, staff motivation to train and collaborate, and the credibility of interventions in both clinical and tourism contexts (Chengxiang *et al*., 2023; Liu & Wang, 2025).

However, certain limitations of this study must be acknowledged. This study was conducted with a relatively small sample of healthcare providers in Bali, which may limit the generalizability of the findings beyond this specific context. In addition, we experienced difficulty in tracking the location of providers from several areas that were geographically out of reach and unrecorded in detail, particularly those practise complementary therapy and herbal medicine. This challenge may have restricted the inclusion of perspectives from diverse or informal practice settings. Furthermore, due to time constraints, we were unable to conduct follow-up discussions with participants to validate and refine the final themes, which may have affected the depth of triangulation. Taken together, these factors may restrict the generalizability of our results. Future studies with larger and more geographically diverse samples, including providers from both officially recognized and remote or informal settings, as well as longitudinal follow-up, are needed to extend the discussion to broader levels of practice and policy.

Conclusion

The integration of Balinese traditional medicine (Usadha) into formal healthcare and its potential role in sustainable wellness tourism are supported by emerging evidence and professional perspectives. Our study contributes to this under-researched field by showing: (1) healthcare providers' positive perceptions of Usadha, emphasizing its cultural resonance, holistic benefits, and ethical acceptability—tempered by gaps in standardized dosage knowledge, legal clarity, and reporting practices; (2) significant challenges to implementation, including limited facilities, insufficient training, and lack of policy support; and (3) strong intentions among providers to pursue training and collaboration alongside optimism about Usadha as a distinctive feature of Bali's wellness tourism. Further research, policy dialogue, and expert collaboration are needed to document the clinical and tourism benefits of Usadha, to clarify its place within healthcare systems, and to design recommendations for competency-based training in medical and nursing curricula, as well as continuing education. Future integration efforts could also benefit from tailored implementation guidelines that align cultural authenticity with the international standards of safety, evidence, and sustainability.

Acknowledgement

The authors would like to thank the healthcare providers who generously participated in this study and shared their valuable insights. Appreciation is also directed to the Direktorat Penelitian dan Pengabdian kepada Masyarakat, Direktorat Jenderal

Riset dan Pengembangan, Kementerian Pendidikan Tinggi, Sains, dan Teknologi Republik Indonesia for providing funding and support for this project.

References

Anggaraini, K.N., & SS, M., 2025. Balian as a Traditional Healer in Bali. *Jurnal Pendidikan Sosiologi Undiksha*, 7(1), pp.112–125.

Bashir, A., 2025. Integration of Traditional and Modern Medicine: A Review of Somali Healing Practices. *Annals of Medicine*, 57.

Chengxiang., Gao, C., & Somrak, T., 2023. The Role of Thai Local Herbs and Ingredients in Promoting Post-Pandemic Wellness and Medical Tourism for Sustainable Development Goal 3: A Critical Review of the Literature. *PSU Medical Journal*, 2023.

Elahee, S.F., Mao, H., & Shen, X., 2019. Traditional Indian Medicine and Traditional Chinese Medicine: A Comparative Overview. *Chinese Medicine and Culture*, 2(3).

Fung, V.S.W.C., 2024. A Harmonisation Approach to Traditional Chinese Medicine Registration in Asian Countries. *Journal of Traditional Chinese Medical Sciences*, 11(2), pp.143–147.

Global Wellness Institute., 2024. *2024 Global Wellness Economy Monitor - Global Wellness Institute*. Global Wellness Institute.

Gusti, I., Dwita, A., & Laksmi, W., 2025. Physical and Spiritual Health in Hindu Rituals in Bali. *Vidyottama Sanatana: International Journal of Hindu Science and Religious Studies*, 2025.

Herman, P.M., Poindexter, B.L., Witt, C.M., & Eisenberg, D.M., 2012. Are Complementary Therapies and Integrative Care Cost-Effective? A Systematic Review of Economic Evaluations. *BMJ Open*, 2(5), pp.e001046.

Hernandez-Fuentes, G.A., Gómez-Bueno, J.de D., Pérez-Santos, V.M., Valle-Capitaine, I.J., Villaseñor-Gonzalez, P.M., Hernández-Zamorano, C.J., Silva-Vázquez, C.G., Cruz-Ruiz, M.de la., Diaz-Martinez, J., & Garza-Veloz, I., 2025. Comparing Perspectives on Traditional and Complementary Medicine Use in Oncology: Insights from Healthcare Professionals and Oncology Patients in Western Mexico. *Current Oncology*, 32(2), pp.71.

Hoenders, R., Ghelman, R., Portella, C., Simmons, S., Locke, A., Cramer, H., Gallego-Pérez, D., & Jong, M., 2024. A Review of the WHO Strategy on Traditional, Complementary, and Integrative Medicine from The Perspective of Academic Consortia for Integrative Medicine and Health. *Frontiers in Medicine*, 11.

Hubner, I.B., Juliana, J., Lemy, D.M., Pramezwary, A., & Djakasaputra, A., 2025. Balancing Growth and Tradition: The Potential of Community-Based Wellness Tourism in Ubud, Bali. *Tourism and Hospitality*, 6(4), pp.205.

James, P.B., Wardle, J., Steel, A., & Adams, J., 2018. Traditional, Complementary and Alternative Medicine Use in Sub-Saharan Africa: A Systematic Review. *BMJ Global Health*, 3(5), pp.e000895.

Leung, P.-C., 2023. Integrative Practice in Asia – India and China. *Journal of Ayurveda and Integrative Medicine*, 14(1), pp.100591.

Liu, M., & Wang, B., 2025. Integrating Natural Non-Pharmaceutical Therapies into Medical Tourism: A Dynamic Health Portrait-Driven Model for Proactive Older Adult Health and Public Health Services. *Frontiers in Public Health*, 13.

Majeed, S., & Kim, W.G., 2022. Emerging Trends in Wellness Tourism: A Scoping Review. *Journal of Hospitality and Tourism Insights*, 2022.

Muderawan, I.W., Budiawan, I.M., Giri, M.K.W., & Atmaja, I.N.B., 2020. Usada: The Ethnomedicine of Balinese Society. *International Journal of Ayurvedic and Herbal Medicine*, 10(6), pp.3893–3905.

Naik, R., Patheja, G., & Unnikrishnan, A.R., 2025. Standardization of Ayurveda Medical Devices: A New Initiative by Bureau of Indian Standards. *International Journal of Ayurveda Research*, 6(1).

O'Cathain, A., & Thomas, K.J., 2004. "Any Other Comments?" Open Questions on Questionnaires – A Bane or A Bonus to Research?. *BMC Medical Research Methodology*, 4(1), pp.25.

Pandav, C.S., Kedari, H., Mishra, T., & Thigale, S.H., 2022. Integrative Health and Wellness – Time to Integrate Wisdom from Different Types of Medical Disciplines for Public Health. *Journal of Integrative Medicine and Public Health*, 1(1).

Park, Y.L., & Canaway, R., 2019. Integrating Traditional and Complementary Medicine with National Healthcare Systems for Universal Health Coverage in Asia and the Western Pacific. *Health Systems & Reform*, 5(1), pp.24–31.

Peng, C., Zou, Y.-G., & Jin, D., 2025. Wellness Tourism Healing: A Systematic Review Unveiling How Cultural Symbolic Experiences Influence Health Recovery. *Tourism Review*, 2025.

Rajapakshe, R., & Arachchi, R., 2024. Ayurveda Wellness Tourism: An Overview of the Sri Lankan Context. *Strategic Tourism Planning*

for Communities, 2024, pp.173–195.

Rasna, I.W., & Tantra, D.K., 2017. Medical Plants in Usadha: Loloh as Balinese Medicine and Traditional Herbal Product in Educational Perspective. *Proceedings of the 2nd International Conference on Innovative Research Across Disciplines (ICIRAD 2017)*, pp.189–194.

Redvers, N., & Blondin, B., 2020. Traditional Indigenous Medicine in North America: A Scoping Review. *PLOS ONE*, 15(8), pp.e0237531-.

Seelamantula, A., C, P., & Thulasingam, M., 2025. Unravelling AYUSH Providers' Perspectives on Healthcare Choices of People Residing in Urban Areas of Puducherry, India- A Concurrent Mixed Method Study. *Journal of Ayurveda and Integrative Medicine*, 16.

Souček, I., & Hofreiter, R., 2022. Medical Pluralism in East and West Europe: A Comparison of People Visiting Healthcare Practitioners Specializing in Complementary and Alternative Medicine. *Complementary Medicine Research*, 29(4), pp.297–308.

Suatama, I.B., 2021. *Usada Bali Modern*. AG Publishing, Yogyakarta.

Suatama, I.B., Kumbara, A.A.N.A., & Dewi, A.A.S.K., 2019. Commodification of Usada Bali: Between Profit-oriented and Negotiation of Sasana Balian. *International Journal of Social Sciences and Humanities*, 3(2), pp.136–144.

Sugata, I.M., Kartika, I.G.A.A., Apsari, D.P., & Wartana, I.G.N.A.W., 2025. The Cultural, Pharmacological, and Spiritual Significance of Tri Ketuka in Balinese Healing and Yoga. *Jurnal Kajian Bali (Journal of Bali Studies)*, 15(2), pp.770–796.

Susanti, P.H., Indriyani, S., & Kraugusteeliana, K., 2025. Transformation of Tourist Villages into Wellness Destinations Based on Community Participation and Digital Innovation. *International Journal of Community Service (IJCS)*, 4(1).

Tangkiatkumjai, M., Boardman, H., & Walker, D.-M., 2020. Potential Factors That Influence Usage of Complementary and Alternative Medicine Worldwide: A Systematic Review. *BMC Complementary Medicine and Therapies*, 20(1), pp.363.

Thomas, D.R., 2006. A General Inductive Approach for Analyzing Qualitative Evaluation Data. *American Journal of Evaluation*, 27(2), pp.237–246.

Tuckett, A.G., 2005. Applying Thematic Analysis Theory to Practice: A Researcher's Experience. *Contemporary Nurse*, 19(1–2), pp.75–87.

Utama, I., & Krismawintari, N.P.D., 2025. Revitalizing Bali: Exploring the growth of health and wellness tourism. *International Journal of Current Science Research and Review*, 8(3), pp.1405–1417.

Vankova, D., 2023. Integrating Complementary and Alternative Medicine in Education - A Needs Assessment Among Students and Primary Care Professionals in Bulgaria. *European Journal of Integrative Medicine*, 61, pp.102275.

von Schoen-Angerer, T., Manchanda, R.K., Lloyd, I., Wardle, J., Szöke, J., Benevides, I., Martinez, N. S. A., Tolo, F., Nicolai, T., Skaling-Klopstock, C., Parker, T., Suswardany, D.L., van Haselen, R., & Liu, J., 2023. Traditional, Complementary and Integrative Healthcare: Global Stakeholder Perspective on WHO's Current and Future Strategy. *BMJ Global Health*, 8(12), pp.e013150.

Wang, M., Liu, Z., Sun, Y., Zhang, Y., Ghaffar, A., & Ren, M., 2025. Integration of Traditional and Complementary Medicine into Primary Health Care Systems: A Systematic Review. *Bulletin of the World Health Organization*, 103(11), pp.675.

Wen, J., Wang, C.C., Goh, E., Su, Z., & Ying, T., 2021. Traditional Chinese medicine as a tourism recovery drawcard to boost China's inbound tourism after COVID-19. *Asia Pacific Journal of Marketing and Logistics*, 34(2), pp.385–400.

Widowati, L., Delima, N., Yulianto, A., Rustika, B.M., Istifiani, L.A., Pamungkas, S.A., & Ulhaq, Z.S., 2024. Exploring the Potential of Herbal Remedies in Indonesia: Insights from the Wellness Index in the Jamu Registry Database. *Journal of Herbal Medicine*, 45, pp.100865.

Windsor, L.C., 2013. Using Concept Mapping in Community-Based Participatory Research: A Mixed Methods Approach. *Journal of Mixed Methods Research*, 7(3), pp.274–293.

World Health Organization., 2019. *WHO Global Report on Traditional and Complementary Medicine 2019*. World Health Organization.

World Health Organization., 2023. *Integrating Traditional Medicine in Health Care*.

Wulanyani, N.M.S., Wahyuni, K.M., Bajirani, M.P.D., & Immanuel, A.S., 2020. Why do People in Bali Meet Traditional Healer? *Annual International Conference on Social Sciences and Humanities (AICOSH 2020)*, pp.131–136.

Yan, L., 2024. A Systematic Review of Traditional Health Tourism: A Priori of Wellness

Tourism. *Multidisciplinary Reviews*, 7(5), pp.2024096.

Zhang, X., Ren, J., Sun, L., & Liu, C., 2022. Perceived Quality of Traditional Chinese Medicine Care in Community Health Services: A Cross-Sectional Survey in Hangzhou of China. *Evidence-Based Complementary and Alternative Medicine*, 2022(1), pp.7512581.

Zhang, Z., Li, R., Chen, Y., Yang, H., Fitzgerald, M., Wang, Q., Xu, Z., Huang, N., Lu, D., & Luo, L., 2024. Integration of Traditional, Complementary, and Alternative Medicine with Modern Biomedicine: The Scientization, Evidence, and Challenges for Integration of Traditional Chinese Medicine. *Acupuncture and Herbal Medicine*, 4(1).

Zhong, L., Deng, B., Morrison, A.M., Coca-Stefaniak, J.A., & Yang, L., 2021. Medical, Health and Wellness Tourism Research—A Review of The Literature (1970–2020) And Research Agenda. *International Journal of Environmental Research and Public Health*, 18(20), pp.10875.

Zhu, T., Wu, Q., & Guenier, A., 2025. Transcultural dissemination of Traditional Chinese Medicine Through Tourism: Pathways, Challenges, and Innovations. *New Techno-Humanities*, 5, pp.66–74.