

Aromatherapy and Essential Oils in Thai Spa Business

สுகนธบำบัด และน้ำมันหอมระเหยในธุรกิจสปาไทย

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Abstract

This study collected financial information and information on essential oils used in Thai spas via questionnaires mailed to 105 spa managers or owners who operate spas certified by the Ministry of Public Health of Thailand. The majority of investments were less than 50 million Thai Baht (64.76%), of which hotel and resort spas dominated (44.76%). The predominant spa services given were aromatherapy massage (87.20%), followed by facial and body treatment (80.78%) and steam/sauna (74.82%). Most of the spa owners used natural essential oils (77.14%) as opposed to synthetic essential oils (22.86%). The five most popular essential oils were lavender (35.71%), lemongrass (20.54%), orange (16.07%), peppermint (15.18%) and jasmine oils (12.50%), respectively. Factors affecting essential oil selection in order of importance were organoleptic properties, therapeutic efficacies, purity, certification, price, supplier and tester.

Keywords: Aromatherapy, Essential oils, Thai spa

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บทคัดย่อ

การศึกษานี้เป็นการสำรวจข้อมูลธุรกิจสปาไทยและน้ำมันหอมระเหยที่ใช้ โดยการตอบแบบสอบถามทางไปรษณีย์ของผู้จัดการหรือเจ้าของธุรกิจสปาในสถานประกอบการ 105 แห่งที่ผ่านการรับรองจากกระทรวงสาธารณสุข พบว่าธุรกิจสปาในประเทศไทยส่วนใหญ่มีขนาดการลงทุนน้อยกว่า 50 ล้านบาท (ร้อยละ 64.76) และมักตั้งอยู่ในโรงแรมหรือรีสอร์ท (ร้อยละ 44.76) มีการให้บริการหลัก คือ การนวดน้ำมัน (ร้อยละ 87.20) การบำรุงผิวหน้าและผิวกาย (ร้อยละ 80.78) และการอบไอน้ำ (ร้อยละ 74.82) เป็นต้น ผู้ประกอบการส่วนใหญ่ใช้น้ำมันหอมระเหยจากธรรมชาติ (ร้อยละ 77.14) มากกว่าน้ำมันหอมระเหยจากการสังเคราะห์ (ร้อยละ 22.86) โดยน้ำมันหอมระเหยที่ได้รับความนิยม 5 อันดับแรกในการให้บริการนวดน้ำมัน คือ น้ำมันลาเวนเดอร์ (ร้อยละ 35.71) ตะไคร้ (ร้อยละ 20.54) ส้ม (ร้อยละ

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16.07) สระแห่งฝรั่ง (ร้อยละ 15.18) และมะลิ (ร้อยละ 12.50) ผู้ประกอบการสปาในภูมิภาคต่างๆ คำนึงถึงปัจจัยที่มีผลต่อการเลือกซื้อน้ำมันหอมระเหย ได้แก่ กลิ่น สรรพคุณ ความบริสุทธิ์ ใบบรับรองคุณภาพ ราคา ตัวแทนจำหน่าย และสินค้าทดลองใช้ เป็นต้น

คำสำคัญ: สுகนธบำบัด น้ำมันหอมระเหย สปาไทย

วารสารเภสัชศาสตร์อีสาน 2552; 5(2): 160-166

Introduction

The history of the spa can be traced back to the Roman Empire (Mill, 2001). The word itself may be derived from “espa” meaning fountain (Colin, 1988) or “spagere” (to scatter, sprinkle, moisten) or an acronym of the phrase “sanitas per aquas” (health through water) (Tubergen and Linden, 2002). Spa is an alternative or complementary medical practice (Coccheri et al., 2008) to rectify an imbalance of body (Jackson, 1990). Visits to these establishments is associated with improved fitness, decreased stress, and pleasure leading to health and wellness. Spas are very popular in the USA, where the industry earns 9.4 billion US\$ a year (ISA, 2009). The global growth of spa business continuously increases including Thailand. It increased by 3.78% in 2006, compared to an increase of only 2.94% for other health based businesses (Small and Medium Enterprise Development Bank of Thailand, 2007).

There are many types of spa, each catering to different clients' needs (ISA, 2009). These include the club spa which serves members only, the cruise ship spa which offers hospitality to cruise ship passengers, the cosmetic spa which primarily offers aesthetic and cosmetic treatments, the day spa which operates on the same basis as the club and cosmetic spas but are open to non-members, the destination spa which governs a change of habit and environment for renewal of mind, body and spirit, the medical spa which is operated by a licensed health care professional as an alternative or complimentary therapy, the mineral spring spa which offers a mineral water treatment that is very famous among the

Japanese (Nasermoaddeli and Kagamimori, 2005), and the hotel/resort spa which provides spa services with accommodation. In addition to the many types of spa operated, the services also vary. However, the most popular service in spas is reported to be aromatherapy massage (Aromaweb, 2007) with its therapeutic and / or aesthetic use of natural essential oils (Buchbauer, 2000) inhaled (Buchbauer and Jirovetz, 1994) and incorporated with massaging. This holistic health remedy is widely used for stress relief (Steflitsch and Steflitsch, 2008).

Due to the steady increase in spa business, the Government has taken on a role in spa regulation for consumer protection. This ensures the highest efficacy and safety of the services, making sure that they are given in adequate facilities by skilled personnel in hygienic premises. The spa, therefore, needs to be certified by the Ministry of Public Health and registered as a ‘Certified spa’.

To encourage spa business and promote these venues as an alternative medicinal hub in Thailand, the current study collected various information including preference of essential oils used and factors affecting essential oil selection. It is anticipated that this data will enable the spa business to meet the desires of their clients and be informative to industries associated with essential oils production.

Materials and Methods

A questionnaire was structured, preliminary tested ($n = 10$), analyzed and revised prior to distribution. Population of sample was calculated (Yamane, 1967) at the level of confidence of 95%

and sample deviation of 0.05 from 271 certified spas by the Ministry of Public Health of Thailand as shown below.

$$n = N / [1 + (N \times e^2)]$$

n = number of samples (participated spas)

N = number of population (certified spas)

e = sample deviation

Therefore, the minimum number of spas that should participate in this survey was identified as 162. However, the questionnaires were sent to all of 271 spas in order to gain the highest level of confidence and answered by the spa managers or spa's owners. The questionnaire composed of two parts. The first part was preliminary information on the background of the spa, clients and services offered. The second part focused on essential oils used in the spa. All information was gathered and statistically analyzed by descriptive statistics and ANOVA.

Results and Discussion

The approved questionnaires were distributed to all of 271 spas, of which the adequate standard of hygiene, operation and services were certified by the

Ministry of Public Health of Thailand (B.E. 2550) and divided by region. However, there were only 105 respondents. Thus, the level of confidence statistically analyzed afterwards yields 92% with 0.08 of sample deviation. Among the 105 spas, the most common type of business was hotel and resort spa with an investment size of less than 50 million Thai Baht (THB) (44.76%) (Table 1).

Aromatherapy massage, was the major service offered (87.20%), which corresponds well with data from the global survey (Aromaweb, 2007). Facial and body treatment (80.78%) was the second major service, followed by steam/sauna (74.82%), bath/jacuzzi (71.57%) and Swedish massage (68.52%), respectively (Figure 1). Thai customers were mainly in Bangkok (65.00%), the Central (60.00%) and Northeast (80.00%) but customers of foreign nationality dominated in the North (70.00%) and South (85.00%), respectively. Furthermore, in each region the foreign customers were mainly from Europe, except in the Northeast where Americans (4.97%) were predominant. Northern spas mostly served Europeans (32.20%) followed by Thais

Table 1 Demographic data of Thai spas and essential oils used

Types		Bangkok n (%)	North n (%)	Central n (%)	East n (%)	Northeast n (%)	South n (%)	Total
Spas	Certified spas	68 (25.09)	48 (17.71)	27 (9.96)	24 (8.86)	18 (6.64)	86 (31.73)	271 (100.00)
	Participated spas	26 (24.76)	19 (18.09)	11 (10.48)	9 (8.57)	8 (7.62)	32 (30.48)	105 (100.00)
Allied business	Personal care product	3 (2.86)	3 (2.86)	0 (0.00)	0 (0.00)	0 (0.00)	3 (2.86)	9 (8.57)
	Massage school	6 (5.71)	2 (1.90)	0 (0.00)	0 (0.00)	5 (4.76)	4 (3.81)	17 (16.19)
	Hotel/Resort	5 (4.76)	8 (7.62)	8 (7.62)	4 (3.81)	4 (3.81)	18 (17.14)	47 (44.76)
	Stand alone	9 (8.51)	3 (2.86)	3 (2.86)	2 (2.86)	5 (4.76)	2 (1.90)	24 (22.86)
	Others	0 (0.00)	2 (1.90)	2 (2.86)	2 (1.90)	0 (0.00)	2 (1.90)	8 (7.62)
Investment size	< 50 million THB	21 (20.00)	11 (10.48)	6 (5.71)	9 (8.57)	7 (6.67)	14 (13.33)	68 (64.76)
	50-200 million THB	2 (1.91)	6 (5.71)	3 (2.86)	0 (0.00)	0 (0.00)	10 (9.52)	21 (20.00)
	> 200 million THB	3 (2.86)	2 (1.94)	2 (1.94)	0 (0.00)	1 (0.95)	8 (7.62)	16 (15.24)
Essential oils used in aromatherapy massage	Natural Thai essential oils	10 (9.52)	10 (9.52)	5 (4.76)	4 (3.81)	4 (3.81)	16 (15.24)	49 (46.66)
	Foreign essential oils	7 (6.67)	5 (4.76)	4 (3.81)	4 (3.81)	1 (0.95)	11 (10.48)	32 (30.48)
	Synthetic essential oils	9 (8.57)	4 (3.81)	2 (1.90)	1 (0.95)	3 (2.86)	5 (4.76)	24 (22.86)
Massage oil recipes	Blended by customer's selection	0 (0.00)	6 (5.71)	0 (0.00)	0 (0.00)	1 (0.95)	5 (4.76)	12 (11.43)
	Ready blended massage oil	23 (21.90)	12 (11.43)	9 (8.57)	6 (5.71)	7 (6.67)	23 (21.90)	80 (76.19)
	Both	3 (2.86)	1 (0.95)	2 (1.90)	3 (2.86)	0 (0.00)	4 (3.81)	13 (12.38)

(30.00%) and East Asians (18.97%). European customers (30.03%) also predominated in Southern spas followed by Australians (18.38%) and Americans (13.68%), respectively (Figure 2). The majority of spa clients being European is in accord with the fact that most tourists coming to Thailand were European (26.05%) (Tourism authority of Thailand, 2008).

The second part of the questionnaire focused on essential oils used, massage oil recipes offered and origin of the oil. The most popular essential oil used was directly shown by the volume consumed by each spa. In addition to factors affecting purchasing decision, trend of essential oil growth was also

monitored. The popular essential oils used for aromatherapy massage were lavender, lemongrass, orange, peppermint and jasmine oils, respectively (Figure 3). The popularity of lavender oil (35.71%) is attributed to its long established and scientifically proven therapeutic efficacy (Lis-Balchin, 2004). The order of preference for the different essential oils varied regionally (Table 2). This may reflect different racial preferences for organoleptic properties as different geographic locations are associated with different client race. Furthermore, most of the foreign spa clients, mainly Europeans, preferred the floral scents (jasmine and ylang ylang) which is consistent with the online survey (Aromaweb, 2007).

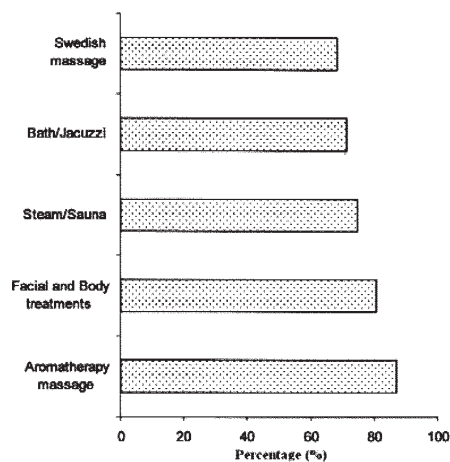


Figure 1: Top five services mostly offered in Thai spas

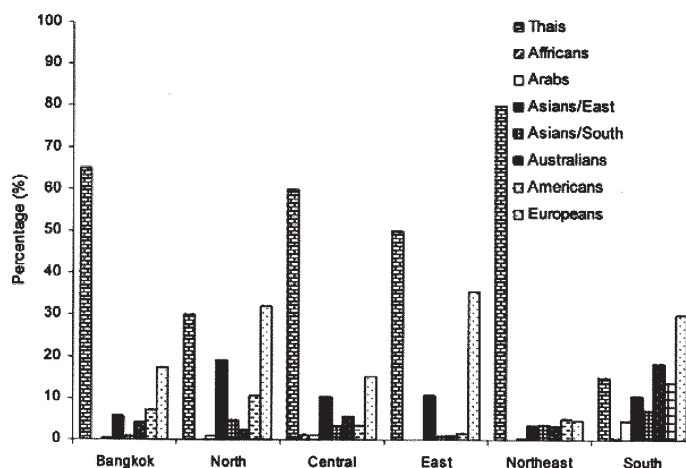


Figure 2: Spa clients in each region of Thailand

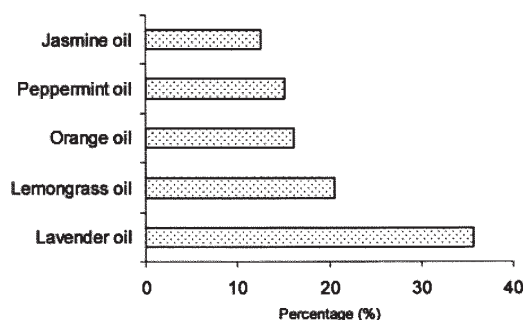


Figure 3: The popular essential oils used for aromatherapy massage

Table 2 The popular essential oils used classified by region in Thailand

Region Preference	Bangkok	North	Central	East	Northeast	South
1 st	Lavender	Lavender	Lavender	Lavender	Lavender	Lavender
2 nd	Lemongrass	Ylang ylang	Lemongrass	Orange	Jasmine	Eucalyptus
3 rd	Orange	Lemongrass	Jasmine	Lemongrass	Rosemary	Peppermint
4 th	Peppermint	Jasmine	Peppermint	Eucalyptus	Orange	Lemongrass
5 th	Jasmine	Peppermint	Orange	Peppermint	Peppermint	Orange

Table 3 Consumption volume and demand trends of natural and synthetic essential oils

Essential oils		Trends, n (%)			
		Increase	Decrease	Stableness	Fluctuation
Demand	Natural	67 (63.81)	2 (1.90)	16 (15.24)	20 (19.05)
	Synthetic	9 (8.57)	40 (38.10)	14 (13.33)	42 (40.00)
Consumption volume	Natural	67 (63.81)	2 (1.90)	13 (12.38)	23 (21.90)
	Synthetic	8 (7.62)	43 (40.95)	9 (8.57)	45 (42.86)

Additionally, natural essential oils were used much more (77.14%) than synthetic essential oils (22.86%). In particular, Thai essential oils (ie. essential oils from plants cultivated in Thailand) (46.66%) were preferred to essential oils from plants cultivated outside Thailand (30.48%) (Table 1). The demand for natural essential oils (63.81%) was obviously higher than the synthetic ones with a decline of demand (38.10%) (Table 3). Moreover, the consumption value of natural essential oils still elevated (63.81%), which might be due to their therapeutic efficacies. The greater use of natural

essential oils seems a good signal, revealing an understanding of the biological effects in aromatherapy.

The spas predominantly offered ready blended massage oil recipes (76.19%), rather than spa massage oil blended according to customer selection (11.43%). However, 12.38% of spas offered both choices (Table 1). The ready blends are convenient for the customer as well as the spa operator with lower operational cost. Thus, spa strategic marketing generally promotes the own blended recipes.

Factors affecting essential oil selection in order of importance were organoleptic properties, therapeutic efficacies, purity, certification, price, supplier and tester, respectively. Southern spas paid more attention to organoleptic properties than Bangkok spas ($p=0.017$). Therapeutic efficacies were more important in Northern spas than in Bangkok spas ($p=0.020$). Southern spas placed a greater emphasis on certification than Northern, Central and Bangkok spas, respectively ($p=0.020$, 0.003 and 0.031 , respectively). On price consideration, each region was significantly affected ($p<0.05$) except the Northeast.

Consumption value tended to increase significantly (63.8% , $p<0.05$) and was positively related to consumption trend. The spa clients' preferred essential oils were an indirect selection factor influenced by pleasantness of fragrance and biological properties.

Interestingly, several respondents suggested that other Thai essential oils e.g. kurchi, orange jessamine, tuberose, champaca, cork tree and lotus should be encouraged and used in Thai spas. Thus, these characteristic and pleasant fragrances should perhaps be promoted to supply the spa business's demand.

Conclusion

Although this survey was conducted in Thailand, many of the spa clients were of foreign nationality. Therefore, the study conceivably reveals the preferred essential oils of both Thais and Europeans. Information such as preferred spa service, most popular essential oils used, factors affecting essential oil selection and the size of budget invested in spa size has also been presented. This report is intended for those who are interested in spa business, and the government agencies seeking to strengthen spa business and promote other allied businesses relevant to spas.

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References

- Aromaweb. *Aromatherapy poll* [Online]. [cited 2007 Oct 8]. Available from <http://www.aromaweb.com/polls/favorite.asp>.
- Buchbauer G. The intimate analysis of essential oils leads to the understanding of their properties. *Perf & Flav* 2000; 25: 64–67.
- Buchbauer G, Jirovetz L. Aromatherapy – Use of Fragrances and Essential Oils as Medicaments. *Flav & Fragr J* 1994; 9: 217–222.
- Coccheri S, Gasbarrini G, Valenti M, Nappi G, Di Orio F. Has time come for a re-assessment of spa therapy? The NAIAD survey in Italy. *Int J Biometeorol* 2008; 52: 231–237.
- Colin A. Royal national hospital for rheumatic disease, Bath. A 250th birthday party [editorial]. *J Rheumatol* 1988; 15: 733–734.
- International Spa Association (ISA). Types of spas [Online]. [cited 2009 July 7]. Available from <http://www.experienceispa.com/spa-goers/spa-101/types-of-spas/>
- Jackson R. Waters and spas in the classical world. *Med Hist Suppl* 1990; 10: 1–13.
- Lis-Balchin MT. Lavender. In Peter KV, editor. *Handbook of herbs and spices*. Cambridge: CRC Press; 2004. 179–195.
- Mill RC. *Resorts: Management and operation*. New Jersey: John Wiley & Sons; 2001. 3–31.
- Nasermoaddeli A, Kagamimori S. Balneotherapy in medicine: a review. *Environ Health Prev Med* 2005; 10: 171–179.
- Steflitsch W, Steflitsch M. Clinical aromatherapy. *J Men's health* 2008; 5: 74–85.

- Tourism authority of Thailand. *Tourism statistics* [Online]. [cited 2008 Sep 11]. Available from <http://www2.tat.or.th/stat/download/0907/nat-1-9.xls>
- Tubergen A, Linden S. A brief history of spa therapy. *Ann Rheum Dis* 2002; 61: 273–275.
- Yamane T. *Statistics: An Introductory Analysis*. New York: Harper and Row Publishers; 1967. 752–844.