## Healthcare Professionals' Attitude Toward Travel Medicine Online Video clips Developed by the Institute of Preventive Medicine

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#### **Abstract**

International tourism increases the risks of communicable diseases and health problems for tourists. Therefore, the Ministry of Public Health, Thailand, established the Institute of Preventive Medicine to provide training on Travel Medicine. However, many Healthcare professionals were unable to communicate effectively in English. To solve this problem, the Institute of Preventive Medicine developed the Travel Medicine online video lessons (TM-Video clips) broadcasted on social media to provide opportunities for professionals to practice their English skills, focusing on speaking.

After launching the lessons for media evaluation, the Institute initiated a project to gather feedback from healthcare professional learners who had already practiced English through the online TM-Video clips. This study investigates the healthcare professional's attitudes toward learning English oral communication and English related to Travel Medicine via TM-Video clips broadcasted on YouTube in three aspects: affective, behavioral, and cognitive. A set of questionnaires was given to 40 healthcare professionals who had already studied the online TM-Video clip lessons during September – December 2021.

The results showed that the healthcare professionals participating in this survey demonstrated their positive attitudes toward learning English from the online TM-Video clips. Their English proficiency and skills in travel medicine improved in all aspects, particularly their speaking ability. They also reported that they could improve listening, grammar, vocabulary, speaking and reading, writing skills, and English pronunciation, including Travel Medicine content. Furthermore, they indicated that they could apply the knowledge to perform their services at their workplaces better and in their daily lives.

In conclusion, the healthcare professionals expressed positive attitudes towards learning English oral communication and English related to Travel Medicine through

online video clips. The TM-Video clips, which contained the travel medicine contents and contexts in English, provided the knowledge to fulfill the professionals' needs for completing their tasks. In addition, the online TM-Video lessons offered them more opportunities to practice English wherever and whenever they were ready to learn, as they could conveniently access the lessons through the Internet. However, some healthcare professionals admitted that the real classroom was better because there was no human interaction while learning the online TM-Video lessons.

**Keywords:** English; online learning; Travel Medicine; Healthcare professional; communication skill

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# ทัศนคติของบุคลากรทางการแพทย์และสาธารณสุขที่มีต่อวีดีโอออนไลน์ด้านเวชศาสตร์ การเดินทางและท่องเที่ยวที่พัฒนาขึ้นโดยสถาบันเวชศาสตร์ป้องกันศึกษา

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### บทคัดย่อ

การเดินทางท่องเที่ยวระหว่างประเทศนำมาสู่การระบาดของโรคติดต่อระหว่างประเทศ และปัญหาสุขภาพต่าง ๆ เช่น โรคโควิด 19 รวมทั้งอาจส่งผลกระทบต่อระบบการแพทย์และสาธารณสุข ของแต่ละประเทศ ดังนั้นกระทรวงสาธารณสุขประเทศไทยจึงกำหนดให้มีเวชศาสตร์การเดินทาง และท่องเที่ยวขึ้นเพื่อดูแลสุขภาพอนามัยที่เกี่ยวกับการเดินทางและท่องเที่ยว ซึ่งบุคลากรทางการ แพทย์และสาธารณสุขที่ปฏิบัติงานจะต้องมีทักษะทางด้านภาษาอังกฤษเพื่อให้สามารถปฏิบัติงานได้ อย่างมีประสิทธิภาพ อย่างไรก็ตามพบว่าบุคลากรทางการแพทย์และสาธารณสุขที่ปฏิบัติงานเวชศาสตร์ การเดินทางและท่องเที่ยวขาดโอกาสในการเรียนรู้และฝึกทักษะด้านภาษาอังกฤษ สถาบันเวชศาสตร์ ้ ป้องกันศึกษาจึงจัดทำสื่อการเรียนรู้ภาษาอังกฤษด้านเวชศาสตร์การเดินทางและท่องเที่ยวในรูปแบบ วีดีโอออนไลน์ (TM-Video clips) เผยแพร่ทางโซเซี่ยลมีเดียเพื่อให้บุคลากรทางการแพทย์และสาธารณสุข ได้มีโอกาสฝึกฝนทักษะการสื่อสารด้วยภาษาอังกฤษ การจัดทำสื่อการเรียนรู้ภาษาอังกฤษด้านเวชศาสตร์ การเดินทางและท่องเที่ยวในรูปแบบวีดีโอออนไลน์นี้มีประโยชน์และมีประสิทธิภาพ ควรมีการติดตาม ประเมินและปรับเปลี่ยนให้สอดคล้องกับความต้องการของผู้เรียน สถาบันเวชศาสตร์ป้องกันศึกษา จึงทำการศึกษานี้ขึ้นเพื่อประเมินความรู้ทัศนคติด้านความรู้สึกด้านพฤติกรรมและการรับรู้ของบุคลากร ทางการแพทย์และสาธารณสุขที่มีต่อวีดิโอคลิปออนไลน์ที่พัฒนาขึ้นโดยมีบุคลากรทางการแพทย์ และสาธารณสุขจำนวน 40 รายที่ได้เรียนภาษาอังกฤษจากวีดีโอออนไลน์ดังกล่าวในช่วงเดือนตุลาคม – สันวาคม 2564 เข้าร่วมในการตอบแบบสอบถาม

ผลการศึกษาพบว่าบุคลากรทางการแพทย์และสาธารณสุขมีทัศนคติเชิงบวกต่อการเรียน ภาษาอังกฤษจากวีดีโอออนไลน์ (TM-Video clips) นอกจากนี้ยังพบว่าทำให้ความสามารถและทักษะ ภาษาอังกฤษในด้านเวชศาสตร์การเดินทางและท่องเที่ยวดีขึ้นโดยเฉพาะความสามารถในการสื่อสาร ด้านการฟัง ไวยากรณ์ คำศัพท์ การสื่อสาร การอ่านการเขียนและการออกเสียงภาษาอังกฤษที่ เกี่ยวกับเวชศาสตร์การเดินทางและท่องเที่ยว นอกจากนี้ยังสามารถประยุกต์ใช้ความรู้ดังกล่าวเพื่อให้ ปฏิบัติงานได้ดีขึ้นในที่ทำงานและในชีวิตประจำวัน แม้ว่าการเรียนภาษาอังกฤษจากวีดีโอออนไลน์ (TM-Video clips) ที่พัฒนาขึ้นโดยสถาบันเวชศาสตร์ป้องกันศึกษาจะทำให้บุคลากรทางการแพทย์ และสาธารณสุขมีโอกาสในการฝึกภาษาอังกฤษมากขึ้นโดยสามารถเรียนรู้ได้ทุกที่และทุกเวลาที่พวกเขา พร้อมเรียนเนื่องจากสามารถเข้าถึงบทเรียนผ่านอินเทอร์เน็ตได้อย่างสะดวก การเรียนภาษาอังกฤษ

จากวีดีโอออนไลน์ (TM-Video clips) นี้ยังไม่สามารถตอบโต้ได้ทันทีและไม่สามารถสื่อสารกับ ผู้เรียนแบบสองทางได้ ควรมีการปรับเปลี่ยนและพัฒนาให้ตอบสนองต่อความต้องการของผู้เรียนได้ ดียิ่งขึ้นต่อไป

คำสำคัญ: ภาษาอังกฤษ; การเรียนผ่านระบบออนไลน์; เวชศาสตร์การเดินทางและท่องเที่ยว; บุคลากร ทางการแพทย์และสาธารณสุข;ทักษะการสื่อสาร

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#### Introduction

Tourism is one of the world's economic sectors, which generates a large amount of income for many countries, especially Thailand. It was the country's most potent driver of economic growth and development (Ministry of Tourism and Sport, 2018). However, international tourism increases the risks of health problems because of travelers' mobility and the possibility of contracting diseases outside their home country. Recently, many countries, including Thailand, locked down their countries due to this current pandemic of COVID-19. The pandemic of COVID-19 had a significant impact on every sector, particularly the tourism industry. The number of foreign travelers was reduced by 38% to 6.98% in 2020 due to travel restrictions (Tourism Authority of Thailand, 2020).

Travel Medicine, a branch of Medicine specializing in international disease prevention and control, was established in Thailand to cope with this problem in 2016. However, some health professionals have difficulties in English communication, which is an essential skill for international work. In addition, English is considered a common global language that enables people from diverse

backgrounds and ethnicities to communicate with each other (Crystal, 1997).

Simply put, they must utilize English oral communication with international travelers for their professional performance. Unfortunately, many of these professionals lack English speaking skills. Hayes (1993) pointed out that communication problems might arise if professionals have an inadequate or insufficient understanding of English. From interviews with healthcare professionals about their problems in providing health services to foreign patients in 2017, it was found that many had limited ability to speak English to non-Thaispeaking patients.

To fulfill their tasks in dealing with foreign patients and to overcome these problems, the Ministry of Public Health decided that an English oral communication training course should be developed to provide opportunities for healthcare professionals to improve their English skills and knowledge necessary for their work. However, many of the in-service Thai healthcare professionals have fixed work schedules. Therefore, they have limited time to attend classes as they have to work a day or night shift. Apart from that, with

COVID-19 on the rise, in-person classes are being canceled to prevent the spread of COVID-19. To solve this problem, the Institute of Preventive Medicine produced online learning materials, particularly video clips, for Thai healthcare professionals to practice the necessary oral English to carry out their specific tasks. It is important to note that this online platform can be accessed anytime.

The Institute of Preventive Medicine created online materials related to the English vocabulary and formulaic expressions used in the context of Travel Medicine and medical knowledge and services. These online clips could be accessed at any time via the Internet, enabling healthcare professionals to use them, whatever their schedules. However, the online clips might have a more practical value if the feedback from the learners were accessed. Therefore, the objective of this study was to investigate the attitudes of healthcare professionals toward. Travel Medicine online video clips developed by the Institute of Preventive Medicine.

#### Method

This study was descriptive. It was done using purposive sampling with 40 healthcare professionals (i.e., nurses and

public health officers) from Travel Medicine Network working under the Department of Disease Control, Ministry of Public Health. Thailand. The purpose was to survey their attitudes toward learning from 11 online video clips using questionnaires. Healthcare professionals had already engaged in English oral communication and English related to the Travel Medicine lessons presented in online video clips developed by the Institute of Preventive Medicine during September - December 2021. The length of each clip was 3 minutes; however, the participants were supposed to spend some time practicing speaking up to their preferences. After completing the lessons, they were requested to complete the questionnaire.

#### Research instrument

The questionnaire was used to access healthcare professionals' attitudes toward. Travel Medicine online video clips developed by the Institute of Preventive Medicine in 3 aspects proposed by Fishbein and Ajzen (1975), Eagly and Chaiken (1993), Kiesler & Miller (1969). In addition, there were affective, behavioral, and cognitive aspects. This questionnaire was distributed in Thai/English language, adapted from

Akimanimpaye (2015), Başöz, 2014), Sivaci (2016), and Tafazoli (2018).

#### Data Analysis

The data were analyzed by descriptive statistics, and percentages, frequencies, and mean scores were calculated and presented.

#### Results

The demographic information and participants' satisfaction information were summarized and provided in the following section.

# 1. Description of demographic characteristics of participants

The results obtained from the questionnaire about the characteristics of the participants are presented in Table 1.1. Out of 40 participants, 75% were

females, and 25% were male. The majority of the participants (27.5%) were aged between 26 to 30, followed by 31-35 year-olds, 36-40 years olds and 21-25-yearolds with percentages of 25.0, 22.5, and 20.0, respectively, while only 5% were aged between 41-45. Most participants had received a bachelor's degree (95%), while the rest, 5%, had a master's degree. The percentage of participants who were nurses outnumbered the public health officers were 55% and 45%, respectively. Their working experience was from 1-5years (32.5%) and more prolonged than ten years at 20%. Almost all participants (92.5 %) had their computers to access the online clips. The most popular time for learning was 6.00 – 11.00 p.m. (50%), while two percent of the participants studied in the morning (07.00 -12.00 a.m.).

Table 1.1 Demographic characteristics of participants

Demographic characteristics	n	%
Gender		
Male	1	2.5
Female	30	75.0
LGBT	4	10.0
Prefer not to answer	5	12.5
Age		
21 –25year olds	8	20.0
26 –30 year olds	11	27.5
31 –35 year olds	10	25.0
36 –40 year olds	9	22.5
41 –45 year olds	2	5.0
> 46 year olds	0	0.0
Education		
Bachelor degree	38	95.0
Master degree	2	5.0
(PhD) degree	0	0.0
Position		
Nurse	22	55.0
Public health officer	18	45.0
Work experience		
< 1 year	7	17.50
1 – 5 years	13	32.5
>5-10years	12	30.0
> 10years	8	20.0
Computer equipment to access online clips	S	
Have personal device	37	92.5%
Not have personal device	3	7.5%
Timing for online learning		
07.00 -12.00 a.m.	2	5.0%
12.00 -13.00 p.m.	9	22.5%
13.00 -18.00 p.m.	6	15.0%
18.00 – 23.00 p.m.	20	50.0%
after 23.00 p.m.	3	7.5%

2. The healthcare professionals' attitudes toward. Travel Medicine online video clips in three aspects: affective, behavioral, and cognitive.

The following tables demonstrated the participants' attitudes toward Travel Medicine video clips. Each item was reported by a Likert scale with five options ranging from "strongly disagree/Never" (1) to "strongly agree/Always" (5).

Table 2.1 shows that the healthcare professionals "agreed" that learning. Travel Medicine online video clips developed by the Institute of Preventive Medicine with an overall average mean score of 4.04, which means that they had "positive" attitudes towards online learning. As mentioned earlier, the learners' attitudes in this study were considered according to the three categories provided below.

The first category is the affective attitude which investigated the participants' opinions about practicing English for oral communication related to Travel Medicine using the online TM-Video clips. They indicated they had "positive"

attitudes with an average mean score of 4.13 (x = 4.13, SD = 0.40). The second category is behavioral, which includes the participants' responsibility for practicing their English for oral communication related to Travel Medicine by using the online TM-Video clips and the outside class activities they performed while not practicing their lessons online. The results revealed that the participants "agreed" that they were responsible for the practice of the online lessons with average mean scores of 4.08 (x= 4.08, SD = 0.54) and 3.78 (x=3.78, SD=0.65). The average scores in this category seem to be the lowest category. The last category was the cognitive knowledge from learning the online TM-Video clips. The average score was 4.15 (x= 4.15, SD = 0.49), which means that the participants "agreed" that they had gained knowledge at a "high" level. Of these three categories concerning the participants' attitudes toward learning using the online TM-Video clips, the participants showed that they consider the cognitive knowledge gained from studying the lessons the most important.

**Table 2.1** Participants attitudes are in 3 categories: affective, behavioral, and cognitive.

Categories	$\overline{x}$	S.D.
1. Affective		
The attitude of the participants about practicing English by	4.13	0.40
using the online TM-Video clips.		
2. Behavioural		
2.1 The participants' responsibility for practicing their English	4.08	0.54
by using the online TM-Video clips.		
2.2 The outside class activities performed by the learners when they were	3.78	0.65
not practicing their English by using the online TM-Video clips.		
3. Cognitive		
The knowledge the participants gainedfrom learning English through the online	4.15	0.49
TM-Video clips and their improvement after studying.		
Average $\overline{\mathcal{X}}$ =	4.04	0.52

3. Healthcare professionals' attitude toward the Travel Medicine video online clips (TM-Video clips) for practicing English for communication-related to Travel Medicine.

The overall mean score in this category was 4.13, and the standard deviation was 0.40. Most participants had a positive attitude toward the TM-Video clips. It is observed that participants "strongly agreed" that learning English by using the TM-Video clips saved much time from commuting to the regular classroom (x=4.55, SD=0.50). They could easily choose any topics to learn (x=4.45, SD=0.50), and the

TM-Video clips allowed them to learn from a distance (x=4.40, SD= 0.59). The participants had "very positive" attitudes towards these three items, which were about the convenience of practicing oral English for communication in the Travel Medicine context as they could save time and learn from a distance, and they could also choose the topics they wanted to study according to their preferences.

On the contrary, many participants thought the online TM-Video clips could not replace actual classroom activities (x=3.08, SD=1.37), and there was no human interaction through the TM-Video clips

(x=3.68, SD=1.14). They also thought it was difficult to contact teachers if they had

studying problems. Table 3.1. The percentages demonstrate the participants' affective attitudes in the first category.

**Table 3.1** The descriptive statistics for the participants' affective attitudes toward the TM-Video clips for practicing English for communication-related to Travel Medicine.

Items	Mean	S.D.
1. I can get access to a reliable Internet connection whenever I need.	4.13	0.65
2. The process to access to the TM-Video clips is easy.	4.35	0.48
3. I can choose the topics which Iwant to learn easily.	4.45	0.50
4. Learning English through the TM-Video clips saves a lot of time commuting to	4.55	0.50
regular classroom.		
5. Learning English throughthe TM-Video clips online increases my chance to study.	4.38	0.54
6.The TM-Video clips offer the opportunity fordistance learning.	4.40	0.59
7.The TM-Video clips is more convenient to learn than learning in the real	4.35	0.58
classroom.		
8. I feel less inhibited when communicating in English language with the TM-Video	4.28	0.60
clips.		
9. The TM-Video clipsconstitute stress-free atmosphere.	4.25	0.63
10. The TM-Video clips can replace the real classroom.	3.08	1.37
11. The TM-Video clipsare useful but do not replace the real classroom.	3.68	1.14
12. There is no human interaction in English through the TM-Video clips.	3.85	0.83
13. The lessons in the TM-Video clips are well-organized and totally comprehensive.	4.23	0.53
14. The explanation in each lesson is clear.	4.18	0.50
15. The presentation in the TM-Video clips is interesting.	4.23	0.53
16. The length of each lesson in the TM-Video clips is appropriate.	4.28	0.68
17. When I have some doubts or questions about the lessons in the TM-Video clips,	3.70	0.85
I can easily contact the teacher.		
Total	4.13	0.40

4. The participants' behaviors and responsibility in practicing their English for oral communication related to Travel Medicine by using the online TM-Video clips and the outside class activities

As shown in Table 4.1, it was indicated that the participants were able to practice their oral communication ability with an average mean score of 4.08 (x=4.08, SD=0.54). It can be concluded that the participants had a "positive" attitude

toward learning and practicing the lessons, as demonstrated by their behavior. Furthermore, the participants rated their behavior for each item almost at the same level, which was above 4.00. Similar to practicing oral communication skills, the

participants revealed that they "often" practiced their speaking outside the online lesson times with an average mean score of 3.78 and an SD of 0.65. The participants' perceptions of their performance outside the online classes were rated at a mean of 4.13 and a standard deviation of 0.40.

**Table 4.1** The descriptive statistic for participants' perceptions of their learning behaviors Perceptions

Perceptions	Mean	S.D.			
1. I always practice attentively while I am in the online speaking-listening classes.					
2. I arrange my schedule so that I can study English through the TM-Video clip	4.05	0.64			
3 I can study English through the TM-Video clips as I have scheduled according	4.08	0.69			
4. If I am not able to attend the online class I have scheduled, I can find ano	ther	4.00	0.60		
time to take the lessons.					
5. I am willing to participate in the lesson activities in the TM-Video clips with	out	4.10	0.55		
being forced.					
٦	Γotal	4.08	0.54		
Outside classroom behaviour		Mean	S.D.		
6. I always find an opportunity to practice my English speaking.		3.73	0.68		
7. I often practice my English listening skillsfrom other materials such as movies/music.		3.83	0.75		
movies/music.					

5. Knowledge gained from learning English through the online TM-Video clips and performance improvement after learning.

Some of the most valuable in formation gained from this study was about the knowledge and skills that the

participants derived from the online TM-Video clips. The details are provided in Table 4.5.It should be noted from the table above that the participants stated that they were able to improve their overall English skills.

They pointed out that they could develop their English skills from the

contents related to Travel Medicine, their vocabulary, and their listening skills at a "very high" level with average scores of 4.38, 4.28, and 4.23, respectively. In addition to these results, the participants "strongly" agreed that they were able to improve their speaking, pronunciation, reading, grammar, and writing while they were studying the online TM-Video clips. Therefore, it is evident that the online TM-Video clips effectively practice the learners' English skills. The results showed that the participants were "delighted" with their cognitive knowledge and improved English skills from learning with the online TM-Video clips.

Additionally, the healthcare professionals participating in this survey

agreed that they gained knowledge through the online TM-Video clips, and their performance improved after learning (x = 4.15, SD = 0.49). In the survey, most participants strongly agreed or agreed on item 1 (80%, x=3.98, SD = 0.82), item 2 (92.5%, x= 4.28, SD = 0.60), item 3 (92.5%, x= 4.28, SD = 0.60)x = 4.23, SD = 0.58). Combining strongly agreed or agreed options, item 4 (90%, x = 4.20, SD = 0.61) and item 5 (90%, x =4.08, SD = 0.53), also showed similar responses. While item 6 (75%, x= 3.90, SD = 0.63) showed the lowest response and mean in Writing, both item 7 (90%, x=4.18, SD = 0.59) and item 8 (95%, x = 4.38, SD = 0.59) indicated that the mean of their positive statements was high.

**Table 5.1** Descriptive Statistics of knowledge gained by learning English through the TM-Video clips and performance improvement after learning in each category.

		Ν	%	М	SD
Grammar	Neutral (3)	8	20.0%	·	·
	Agree(4)	25	62.5%	3.98	0.82
	Strongly Agree (5)	7	17.5%		
	Neutral (3)	3	7.5%		
Vocabulary	Agree(4)	23	57.5%	4.28	0.60
	Strongly Agree (5)	14	35.0%		
	Neutral (3)	3	7.5%		
Listening	Agree(4)	25	62.5%	4.23	0.58
	Strongly Agree (5)	12	30.0%		
	Neutral(3)	4	10.0%		
Speaking	Agree(4)	24	60.0%	4.20	0.61
	Strongly Agree (5)	12	30.0%		
	Neutral (3)	4	10.0%		
Reading	Agree(4)	29	72.5%	4.08	0.53
	Strongly Agree (5)	7	17.5%		
Writing	Neutral (3)	10	25.0%		

**Table 5.1** Descriptive Statistics of knowledge gained by learning English through the TM-Video clips and performance improvement after learning in each category.

		N	%	М	SD
	Agree(4)	24	60.0%	3.90	0.63
	Strongly Agree (5)	6	15.0%		
Pronunciation	Neutral(3)	4	10.0%		
	Agree(4)	25	62.5%	4.18	0.59
	Strongly Agree (5)	11	27.5%		
Contents related to	Neutral(3)	2	5.0%		
Travel Medicine	Agree(4)	21	52.5%	4.38	0.59
	Strongly Agree (5)	17	42.5%		
	Total		4.15	0.49	

#### Conclusion

The results of the present study support those of previous studies (Kenny, 2002; Karaman, 2011; Yu, 2006; Xing, 2018), which found that learners had positive attitudes toward online learning because of its availability and flexible timing. Also, it was found that the learners' study schedule and their improvement in English were crucial factors in their satisfaction with the course.

In summary, participants expressed positive attitudes toward. Travel Medicine online video clips developed by the Institute of Preventive Medicine. They accepted that online learning allowed them to practice English oral communication in travel medicine, medical knowledge, and services.

Moreover, it provided them with the opportunity to study during COVID-19. While studying, the healthcare professionals claimed that they behaved responsibly in their online class (e.g., practicing the lessons attentively, arranging times for studying, being willing to participate in the lessons, etc.) and practicing their English speaking and listening skills. Thus, the TM-Video clips served the needs of healthcare professionals, mainly the Travel Medicine staff. However, some healthcare professionals believed that the real classroom was better because there was no human interaction while studying online. Future studies will therefore need to consider this issue as well.

#### Recommendation and Limitations

Online video clips toward learning English could improve Travel Medicine healthcare professionals' English skills for daily work such as consultation and vaccine recommendations for travelers. Institutions should consider what learners need to create new online learning for their learners. The lessons should meet the **References** 

learners' needs, be interesting and benefit their jobs. However, there are some limitations of online learning that need further improvement. For example, there is no two-way communication and no human interaction.

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