A Survey of Awareness, Opinion and Reported Use of Clinical Practice Guidelines (CPG) of the Royal College of Anesthesiologists of Thailand

Siriporn Pitimana-aree MD*,
Ketchada Uerpairojkit MD**, Yodying Punjasawadwong MD***,
Tanit Virankabutra MD****, Somrat Charuluxananan MD**

** Department of Anesthesiology, Siriraj Hospital, Mahidol University, Bangkok*
*** Department of Anesthesiology, Chulalongkorn University, Bangkok*
**** Department of Anesthesiology, Chiang Mai University, Chiang Mai*
***** Department of Anesthesiology, Ramathibodi Hospital, Mahidol University, Bangkok*

Background: *Up to the present (2006), The Royal College of Anesthesiologists of Thailand (RCAT) has proposed and revised six practice guidelines. For guidelines to achieve their objectives, anyone who gets involved needs to be aware of the guidelines, be able to accept, and adhere to them. Although the authors did introduce their guidelines by several passive means, the authors have not yet ascertained what the result were.*
Objective: *The primary objective of the present study was to assess awareness, opinion, limitation, and reported use of guidelines. The secondary objective was to identify factors associated with variation, agreement, and reported use of guidelines.*
Material and Method: *A cross sectional, self-report survey study was conducted. An anonymous questionnaire including prepaid-addressed reply envelopes was mailed to 600 anesthesiologists and 1,300 nurse anesthetists, nationwide, based on the college's list. The questions covered respondents' general characteristics: awareness, agreement, and reported use of the existing guidelines; opinion on implementation media, which guidelines the members need, their local guidelines, and the impact of guidelines on their practice. All data were extracted and reported using descriptive statistics. Multiple logistic regression was done to identify factors associated with an agreement with and a reported use of the guidelines.*
Results: *The overall response rate was 33.4% and nurse anesthetists had a higher response than anesthesiologists. Forty-six percent of the respondents were aware of the existing guidelines. This result corresponded to percentage of those who had read the guidelines (41%). Among the six existing guidelines, the least two guidelines reported use of and agreement with, were those for labor analgesia and conscious sedation (23-28%; 24-28%). The guidelines for spinal anesthesia received the most response (46%). For respondents who had read the guidelines, most of them (80% to 94%) rated the level of agreement and reported use as good to excellent. The respondents also rated the announcement of the guidelines during the annual meeting of the Royal College of Anesthesiologists of Thailand as the best implementation strategy. Impracticability, inadequate dissemination, and un-cooperation among colleagues were the three most important obstacles of using the guidelines. In addition, the present study demonstrated three significant factors, anesthesiologists, regional hospitals, and general hospitals, as associated with reporting frequent use of and high agreement with the guidelines.*
Conclusion: *The low level of awareness and reported use of the present guidelines among the members reflects poor implementation and dissemination. However, the present study reveals some information that will guide the authors to introduce intensive and targeted interventions to encourage the members to comply and adhere to the guidelines designed to improve the quality of patients' care.*

Keywords: *Guidelines, Awareness, Opinions, Practice, Questionnaire, Anesthesia*

J Med Assoc Thai 2007; 90 (9): 1853-9
Full text. e-Journal: *http://www.medassocthai.org/journal*

Correspondence to : Pitimanaaree S, Department of Anesthesiology, Faculty of Medicine, Siriraj Hospital, Mahidol University, Bangkok 10700, Thailand. E-mail: sispm@mahidol.ac.th

Clinical practice guidelines (CPG) have been developed to standardize the practice and to decrease any variations, with the aim of improve the quality of care, patients' safety, and use of resource. So far, The Royal College of Anesthesiologists of Thailand (RCAT) has proposed and revised six guidelines. These are: 1) CPG for conscious sedation 2) for providing anesthesia 3) for pre-anesthetic evaluation, 4) for labor analgesia 5) for emergency endotracheal intubation 6) for spinal anesthesia. For the guidelines to achieve their objectives, anyone who gets involved needs to be aware of them, be able to accept them, and adhere to them. Previous investigations suggest that there is a large variation in the success of guideline implementation[1,2]. This is because there are many obstacles to their success, from the implementation process to the compliance, and flexibility of the guidelines. Although the authors did introduce guidelines by many passive means (announcement in the annual meeting, in monthly newsletters, on the website and journal), the authors have not yet ascertained what the results are. Therefore, the primary objective of present study was to assess awareness, opinion, limitation, and reported use of guidelines. The secondary objective was to identify factors associated with variations in an agreement with and a reported use of the guidelines.

Material and Method

A questionnaire was developed to evaluate respondents' awareness, opinion, and reported use of guidelines. The questions covered respondents' general characteristics; awareness, agreement and reported use of the existing guidelines; opinion on implementation media, which guidelines the members need, their local guidelines and the impact of guidelines on their practice. An anonymous self-report questionnaire including prepaid-addressed reply envelopes was mailed to 600 anesthesiologists and 1,300 nurse-anesthetists, nationwide, based on the college's list. Even the systemic review identified that follow-up mailings of questionnaires were the effective strategies for increasing the response rate[3]. Investigators planned to mail the questionnaire only once because the questionnaires were distributed to a large number of the targeted populations. The other important reason was to ensure the respondents anonymity. Most of the questions are close-ended, but some were open-ended. To handle the open-ended answers, all of the answers were extracted and grouped by the investigators' team based on the authors' objectives and consensus.

Data were extracted and reported using descriptive statistics. Univariate analysis using Chi-square test and multiple logistic regression was done to identify factors associated with an agreement with and a reported use of the guidelines. A p-value of 0.05 was considered significant.

Results

The responses were received from 634 (33.4%) of the 1,900 mailed questionnaires. Nurse anesthetists had better responses than anesthesiologists, which were 38.7% and 20.7% respectively. Respondents' characteristics are shown in Table 1. Approximately nineteen percent of respondents did not have anesthesiologists in their hospitals; therefore, anesthesia work was handled by nurse-anesthetists under the supervision of physicians or by surgeons themselves. The majority of respondents' hospital status was general and district hospitals. Unfortunately, only 46% of the respondents were aware of our existing

Table 1. Respondents and hospitals' characteristics

	Number/total (percent)
Respondent status	
Anesthesiologist	124/600 (20.7)
Nurse Anesthetist	503/1300 (38.7)
Not identified	7
Hospital status	
University	92/634 (14.5)
Regional	115/634 (18.1)
General	194/634 (30.6)
District	164/634 (25.9)
Private	34/634 (5.4)
Not identified	9/634 (1.4)
Number of operating rooms	
> 10	174/634 (27.4)
6-10	168/634 (26.5)
3-5	109/634 (17.2)
1-2	172/634 (27.1)
Number of anesthesiologists	
> 10	87/634 (13.7)
6-10	36/634 (5.7)
3-5	127/634 (20.0)
1-2	163/634 (25.7)
0	119/634 (18.8)
Number of nurse anesthetists	
> 10	301/634 (47.5)
6-10	76/634 (12.0)
3-5	68/634 (10.7)
1-2	118/634 (18.6)
0	56/634 (8.8)

guidelines. The present results correspond to the percentage of those who had read the guidelines (41%). A reported use of and an agreement with these guidelines were assessed using 5 rating scales from the least to the most, or poor to excellent degree (Fig. 1, 2). The present study found that the response on reported use of and agreement with the existing guidelines varied from 23% to 46%. Among the six existing guidelines, the least two reported use of and with agreement were those for labor analgesia and conscious sedation (23-28%; 24-28%) whereas guidelines for spinal anesthesia received the most responses (46%), (Table 2). Considering only the respondents who answered the questions on reported use of and agreement with the existing guidelines, most of them (80%-94%) rated the level of agreement and reported use of those guidelines as good to excellent degree. In addition, there was no relevant difference in the response rate of agreement and reported use (Table 2). To assess how easy the efficacy of accessibility to the guidelines, question addressed on the medias, which respondents were able to access or receive details of the guidelines was asked. The presented usual strategies to implement guidelines were the following: announcements in

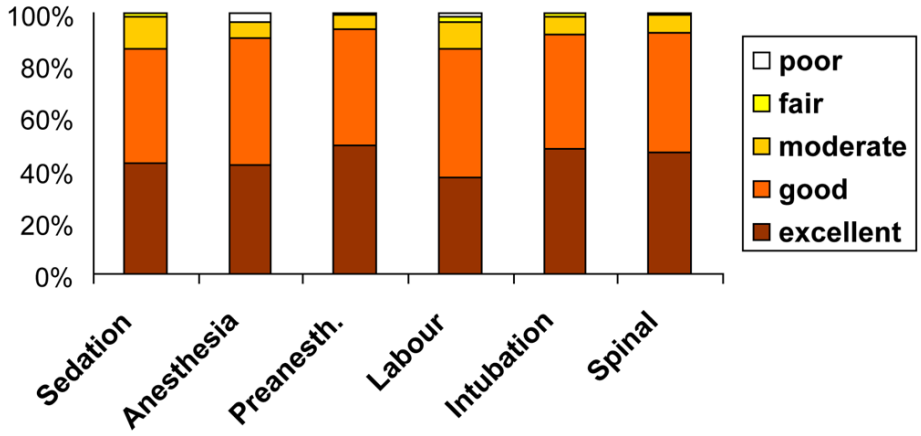

Fig. 1 Five rating scales of respondents' agreement with contents of our existing guidelines
Notice Guidelines for conscious sedation (Sedation); for providing anesthesia (Anesthesia); for pre-anesthesia evaluation (Preanesth.); for labour analgesia (Labour); for emergency intubation (Intubation); for spinal anesthesia (Spinal)

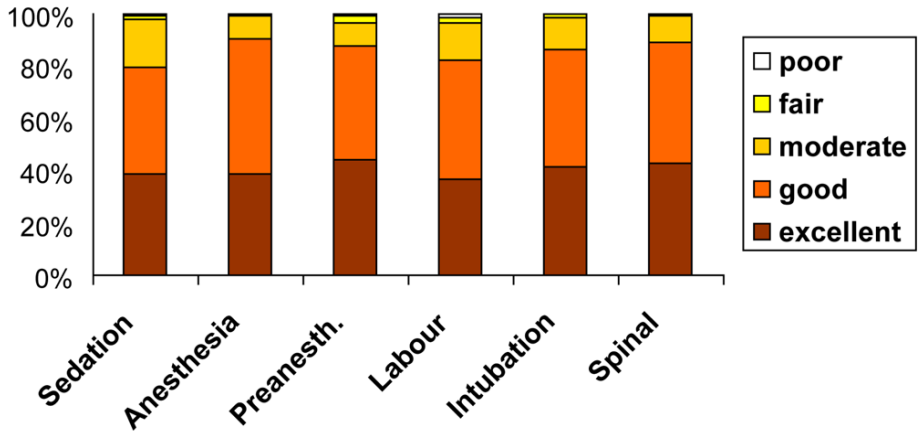

Fig. 2 Five rating scales of respondents' reported use our existing guidelines
Notice Guidelines for conscious sedation (Sedation); for providing anesthesia (Anesthesia); for pre-anesthesia evaluation (Preanesth.); for labour analgesia (Labour); for emergency intubation (Intubation); for spinal anesthesia (Spinal)

Table 2. Respondents' agreement and reported use of The Royal College of Anesthesiologists of Thailand clinical practice guidelines (CPG)

CPG (Total n = 634)	Response N (% of total)	Level of response N (% of total)				
		Poor	Fair	Moderate	Good	Excellent
Sedation						
Agreement	179 (28.2)	0 (0)	2 (0.3)	23 (3.6)	78 (12.3)	76 (12.0)
Reported use	176 (27.8)	1 (0.2)	2 (0.3)	33 (5.2)	72 (11.4)	68 (10.7)
Anesthesia						
Agreement	205 (32.3)	7 (1.1)	0 (0)	13 (2.1)	99 (15.6)	86 (13.6)
Reported use	196 (30.9)	0 (0)	1 (0.2)	18 (2.8)	101 (15.9)	76 (12.0)
Labour						
Agreement	154 (24.3)	2 (0.3)	3 (0.5)	16 (2.5)	76 (12.0)	57 (9.0)
Reported use	144 (22.7)	2 (0.3)	3 (0.5)	20 (3.2)	66 (10.4)	53 (8.4)
Pre-anesthetic						
Agreement	192 (30.3)	1 (0.2)	1 (0.2)	10 (1.6)	85 (13.4)	95 (15.0)
Reported use	191 (30.1)	1 (0.2)	5 (0.8)	17 (2.7)	84 (13.2)	84 (13.2)
Intubation						
Agreement	190 (30.0)	0 (0)	3 (0.5)	13 (2.1)	83 (13.1)	91 (14.4)
Reported use	191 (30.1)	0 (0)	3 (0.5)	23 (3.6)	86 (13.6)	79 (12.5)
Spinal						
Agreement	293 (46.2)	0 (0)	3 (0.5)	20 (3.2)	134 (21.1)	136 (21.5)
Reported use	291 (45.9)	0 (0)	2 (0.3)	29 (4.6)	135 (21.3)	125 (19.7)

Guidelines for conscious sedation (Sedation); for providing anesthesia (Anesthesia);
Abbreviation for labour analgesia (Labour); for pre-anesthetic evaluation (Preoperative); for emergency intubation (Intubation); for spinal anesthesia (Spinal); CPG for clinical practice guidelines

Table 3. Factors associated with the response rate of reported use of and agreement with our existing guideliness

Clinical practice guidelines	Respondent status (Anesthesiologist) OR (95% CI)	Hospital status	
		Regional hospital OR (95% CI)	General hospital OR (95% CI)
Sedation			
Agreement	4.0 (2.2-7.4)	3.5 (1.6-7.3)	2.4 (1.1-5.1)
Reported use	3.9 (2.1-7.2)	3.7 (1.7-7.7)	2.5 (1.2-5.4)
Anesthesia			
Agreement	2.7 (1.5-4.8)	2.5 (1.2-4.8)	-
Reported use	3.1 (1.7-5.6)	3.0 (1.5-6.0)	2.4 (1.2-5.0)
Labour			
Agreement	2.8 (1.5-5.2)	2.7 (1.3-6.0)	2.9 (1.4-6.6)
Reported use	2.7 (1.4-5.1)	2.6 (1.2-5.6)	2.5 (1.1-5.4)
Pre-anesthetic			
Agreement	4.3 (2.3-8.1)	3.1 (1.4-6.5)	2.2 (1.6-6.7)
Reported use	3.9 (2.1-7.2)	2.7 (1.2-5.9)	-
Intubation			
Agreement	2.4 (1.3-4.2)	2.8 (1.4-5.5)	2.1 (1.1-4.2)
Reported use	2.3 (1.3-4.1)	2.5 (1.3-4.9)	2.1 (1.1-4.1)
Spinal			
Agreement	3.4 (1.9-6.1)	-	-
Reported use	3.8 (2.1-6.8)	-	-

Guidelines for conscious sedation (Sedation); for providing anesthesia (Anesthesia); for labour analgesia (Labour); for pre-anesthetic evaluation anesthetic; for emergency intubation (Intubation); for spinal anesthesia (Spinal)

the annual meeting, in the monthly newsletter, on the website, in the journal, and via a formal document sent directly to the director of the hospitals. The respondent rates to announcements in the annual meeting and in the monthly newsletter as the two most effective ways (34%) and the announcement via a formal document sent directly to the director of the hospitals as the least (14.5%). Announcements in website and journal were in between (22%-28%). Multiple logistic regression was done to identify which factors were associated with an agreement with and reported use of guidelines. This indicated three significant independent factors (OR $\geq$ 2) - anesthesiologists, regional and general hospitals associated with both an agreement with and a reported use of the six guidelines (Table 3).

The obstacles in using or following the guidelines were assessed as an open-ended question. After grouping of the answers (total n = 119), the three most common opinions as obstacles were those related to practicability (n = 39), dissemination (n = 23), and co-operation among the colleagues (n = 18) whereas 29 respondents commented as no obstacle. The questionnaire also evaluated the impact of the guidelines in three different aspects (patient care, teaching, and legal action). Their opinion on patient care and teaching (n = 20, n = 24) were the benefit of guidelines as a standard of practice (n = 15-20), for patient safety (n = 12), and evidence based practice (n = 2-4). When the impact of guidelines associated with legal action were asked, positive attitude on this issue was more than the negative responses (n = 20; n = 6 respectively).

In addition to an agreement with and reported use of the existing guidelines, the information of locally developed guidelines, and the need for other guidelines were asked. A large number of local guidelines, critical pathways, or care maps have been developed (Table 4). Guidelines for difficult intubation, preoperative evaluation, and spinal block were in the top five interesting issues. An open-ended question about the need for other guidelines gave information to the Royal College task forces for the development of other guidelines. The list of needed guidelines is shown in Table 5. Guidelines for patients with co-existing diseases received the most need.

Table 4. List of local guidelines, Critical pathways, and Care maps that existed in the respondents' hospital

	Number of response
Difficult intubation	44
Preoperative evaluation	41
Patients with co-existing diseases	39
Spinal anesthesia	30
General anesthesia	28
CPR	19
Post anesthesia care	16
Postoperative pain	7
Postoperative visit	6
Anesthetic machine check5	5
Miscellaneous (Blood transfusion, Mass casualty, Resource utilization)	15

Table 5. List of needed guidelines

	Number of response
Patients with co-existing diseases	44
Post-anesthesia care	28
Pediatric patients	13
Postoperative pain	11
Ambulatory anesthesia	11
Neuroanesthesia	10
CPR	8
Difficult intubation	7
Miscellaneous (Rural hospital, C-section, Geriatrics)	14

Discussion

The result of the present study indicated the low level of awareness and of having read the existing guidelines among respondents, which are only 46% and 41% respectively. This finding could reflect the authors' inefficiency of implementation and dissemination of the guidelines. Although the majority of respondents who had read the guidelines reported their high level (good to excellent) of agreement and reported use of guidelines, there were some obstacles of using these guidelines. Charuluxananan et al[4,5] found in their studies that electrocardiography and capnometry were monitored in only 80% and 20% respectively and almost none in general and district hospitals performed fiberoptic aided endotracheal intubation. The present study showed that about 19% of the respondents' hospitals do not have anesthesiologists. This may be the explanation of impracticability for our guidelines due to lack of equipment and experience of anesthesia care providers. In addition, lack of communication and co-operation among the health care providers were important obstacles of

using guidelines. This result will help us to plan for implementation and dissemination of the guidelines to not only the members but also to the related care provider teams. For guidelines to achieve their aims, anyone who get involved need to be aware of, be able to access, accept and adhere to them. Besides implementation and dissemination processes, the enthusiasm of the users was one of the key success factors. This supports the experience of why the spinal anesthesia guideline received the highest agreement and reported use. Because there have been unexpected serious adverse events and death following spinal anesthesia reported during the past few years. Although the majority of the respondents were nurse-anesthetists and almost 26% were from district hospitals, these were not the key factors associated with agreement and reported use of the guidelines. This result may help the authors to fill in the gaps of success.

The present study has potential limitations. First, the questionnaire was sent to targeted populations only once and the response rate for the present study was only 34% compared with 48% to 56% response rates after 2-3 mailings[6-8]. Second, in contrast with the study of Hagemeister et al[7], an adequate awareness of hypertension guidelines was recognized when five out of eight answers were correct, the authors' assessment used only simple questions not tracking knowledge of the guidelines. Third, the cross-sectional, self-reported nature and many targeted guidelines limit the ability to draw a firm conclusion particularly in an individual guideline. However, the present study is a preliminary report on awareness, agreement, and reported use of the guidelines and may highlight some data that will improve the strategies of implementation and increase the use of guidelines.

In conclusion, the low level of awareness and reported use of the guidelines among the members reflected inefficiency in implementation and dissemination. However, the present study revealed some information that will guide the authors to introduce intensive, targeted interventions to encourage the members to comply and adhere with guidelines to improve the quality of patient care.

Acknowledgement

The present study was financially supported by the Health Systems Research Institute (HSRI); Faculty of Medicine of Chiang-Mai University, Chulalongkorn University, KhonKaen University, Mahidol University (Ramathibodi Hospital and Siriraj Hospital), Prince of Songkla University and National Research Council of Thailand. The authors also wish to thank Professor Pyatat Tatsanavivat head of Clinical Research Collaborative Network (CRCN) for his continued support, encouragement and helpful suggestions.

References

1. Davis DA, Thomson MA, Oxman AD, Haynes RB. Changing physician performance. A systematic review of the effect of continuing medical education strategies. JAMA 1995; 274: 700-5.
2. Bero LA, Grilli R, Grimshaw JM, Harvey E, Oxman AD, Thomson MA. Closing the gap between research and practice: an overview of systematic reviews of interventions to promote the implementation of research findings. The Cochrane Effective Practice and Organization of Care Review Group. BMJ 1998; 317: 465-8.
3. Edwards P, Roberts I, Clarke M, DiGuiseppi C, Pratap S, Wentz R, et al. Increasing response rates to postal questionnaires: systematic review. BMJ 2002; 324: 1183-91.
4. Charuluxananan S, Punjasawadwong Y, Suraseranivongse S, Srisawasdi S, Kyokong O, Chinachoti T, et al. The Thai Anesthesia Incidents Study (THAI Study) of anesthetic outcomes: II. Anesthetic profiles and adverse events. J Med Assoc Thai 2005; 88(Suppl 7): S14-29.
5. Charuluxananan S, Chinachoti T, Pulnitiporn A, Klanarong S, Rodanant O, Tanudsintum S. The Thai Anesthesia Incidents Study (THAI Study) of perioperative death: analysis of risk factors. J Med Assoc Thai 2005; 88(Suppl 7): S30-40.
6. Switzer GE, Halm EA, Chang CC, Mittman BS, Walsh MB, Fine MJ. Physician awareness and self-reported use of local and national guidelines for community-acquired pneumonia. J Gen Intern Med 2003; 18: 816-23.
7. Hagemeister J, Schneider CA, Barabas S, Schadt R, Wassmer G, Mager G, et al. Hypertension guidelines and their limitations - the impact of physicians' compliance as evaluated by guideline awareness. J Hypertens 2001; 19: 2079-86.
8. Di Iorio D, Henley E, Doughty A. A survey of primary care physician practice patterns and adherence to acute low back problem guidelines. Arch Fam Med 2000; 9: 1015-21.

การวิจัยเชิงสำรวจโดยการตอบแบบสอบถามบุคลากรวิสัญญี ถึงการรับรู้ ความเห็น และการใช้แนวเวชปฏิบัติของราชวิทยาลัยวิสัญญีแพทย์แห่งประเทศไทย

ศิริพร ปิติมานะอารี, เกศชาดา เอื้อไพโรจน์กิจ, ยอดยิ่ง ปัญจสวัสดิ์วงศ์, ธนิต วีรังคบุตร, สมรัตน์ จารุลักษณานันท์

ภูมิหลัง: *ราชวิทยาลัยวิสัญญีแพทย์แห่งประเทศไทยได้พัฒนาและปรับปรุงแนวเวชปฏิบัติมาแล้วทั้งหมด 6 เรื่อง การทำให้มีการใช้แนวเวชปฏิบัติอย่างเหมาะสมและบรรลุวัตถุประสงค์นั้น จำเป็นต้องมีมาตรการที่ทำให้ผู้ที่เกี่ยวข้องสามารถรับรู้ เข้าถึง ยอมรับ และปฏิบัติตามกับแนวเวชปฏิบัตินั้น ๆ แม้ว่าราชวิทยาลัยวิสัญญีแพทย์แห่งประเทศไทยได้เสนอแนวเวชปฏิบัติโดยวิธีต่าง ๆ เช่น การประกาศหรือ แจ้งแก่สมาชิกในการประชุมวิชาการประจำปีของราชวิทยาลัยวิสัญญีแพทย์แห่งประเทศไทย การประกาศ หรือ แจ้งแก่สมาชิกในจดหมายข่าว เป็นต้น แต่ผลของการเผยแพร่ดังกล่าว ไม่ทราบผลแน่ชัด*

วัตถุประสงค์: *เพื่อประเมินการรับรู้ ความเห็น การใช้ และปัจจัยที่มีผลต่อการยอมรับและการใช้แนวเวชปฏิบัติของราชวิทยาลัยวิสัญญีแพทย์แห่งประเทศไทย*

วัสดุและวิธีการ: *แบบสอบถามจำนวนทั้งหมด 1,900 ฉบับรวมทั้งซองตอบกลับซึ่งจ่าหน้าและปิดตราไปรษณียากรแล้ว ได้จัดส่งทางไปรษณีย์ถึงบุคลากรวิสัญญี ประกอบด้วยวิสัญญีแพทย์จำนวน 600 คน และวิสัญญีพยาบาลอีก 1,300 คน ตามรายชื่อและที่อยู่ซึ่งอยู่ในรายชื่อของราชวิทยาลัยวิสัญญีแพทย์แห่งประเทศไทย แบบสอบถามครอบคลุมคุณลักษณะทั่วไปของผู้ตอบ ลักษณะของโรงพยาบาลที่วิสัญญีแพทย์หรือวิสัญญีพยาบาลนั้นปฏิบัติงานอยู่ รวมทั้งการรับรู้ การยอมรับ และการนำแนวเวชปฏิบัติของราชวิทยาลัยวิสัญญีแพทย์แห่งประเทศไทยไปใช้ นอกจากนั้นในแบบสอบถามยังถามถึงความเห็นของผู้ตอบในเรื่องการรับรู้แนวเวชปฏิบัติดังกล่าว จากการนำเสนอแก่สมาชิกของราชวิทยาลัยวิสัญญีแพทย์แห่งประเทศไทย ผลกระทบของการใช้แนวเวชปฏิบัติในด้านต่าง ๆ และความต้องการแนวเวชปฏิบัติอื่น ๆ ข้อมูลทั้งหมดจะถูกรวบรวม วิเคราะห์ และนำเสนอโดยใช้สถิติเชิงพรรณนา สำหรับปัจจัยที่คาดว่าจะมีความเกี่ยวข้องกับการยอมรับ และการนำแนวเวชปฏิบัติของราชวิทยาลัยวิสัญญีแพทย์แห่งประเทศไทยไปใช้นั้น วิเคราะห์โดยสถิติที่เหมาะสม*

ผลการศึกษา: *การศึกษานี้พบผู้ตอบแบบสอบถามทั้งหมดร้อยละ 33.4 โดยวิสัญญีพยาบาลตอบแบบสอบถามมากกว่า วิสัญญีแพทย์ในจำนวนนี้รับรู้แนวเวชปฏิบัติของราชวิทยาลัยวิสัญญีแพทย์แห่งประเทศไทยคิดเป็นร้อยละ 46 ซึ่งสอดคล้องกับผลของผู้ตอบว่าได้อ่านแนวเวชปฏิบัติดังกล่าว (ร้อยละ41) ในจำนวนแนวเวชปฏิบัติทั้ง 6 เรื่อง แนวเวชปฏิบัติเรื่องการให้การระงับปวดระหว่างการคลอดและการบริหารยากล่อมประสาทผู้ตอบมีการรับรู้น้อยที่สุด ในขณะที่แนวเวชปฏิบัติเรื่องการระงับความรู้สึกโดยการบริหารยาชาเข้าช่องน้ำไขสันหลังมีการรับรู้สูงสุดถึงร้อยละ 46 อย่างไรก็ตามในกลุ่มผู้ตอบว่าได้อ่านแนวเวชปฏิบัตินั้นเห็นด้วยและปฏิบัติตามแนวเวชปฏิบัติในระดับมากถึงมากที่สุดถึงร้อยละ 80-94 สำหรับการนำเสนอแนวเวชปฏิบัติแก่สมาชิกของราชวิทยาลัยวิสัญญีแพทย์แห่งประเทศไทยนั้นพบว่า การนำเสนอในการประชุมวิชาการประจำปีของราชวิทยาลัยมีผลต่อการรับรู้สูงสุดเมื่อเปรียบเทียบกับสื่ออื่น ๆ การศึกษาถึงปัญหาของการใช้แนวเวชปฏิบัติพบว่า การไม่ได้รับความร่วมมือจากผู้ร่วมงาน การประชาสัมพันธ์ หรือ นำเสนอและการปฏิบัติตามแนวเวชปฏิบัติ เป็นอุปสรรคที่สำคัญ นอกจากนั้นปัจจัยที่มีผลต่อการยอมรับและการใช้แนวเวชปฏิบัติจากการศึกษานี้ได้แก่ วิสัญญีแพทย์ และผู้ที่ปฏิบัติงานในโรงพยาบาลศูนย์ และโรงพยาบาลทั่วไป*

สรุป: *การศึกษานี้พบว่าการรับรู้และการใช้แนวเวชปฏิบัติแก่สมาชิกของราชวิทยาลัยวิสัญญีแพทย์แห่งประเทศไทยยังอยู่ในระดับต่ำ ซึ่งแสดงถึงการนำเสนอและการกระจายแนวเวชปฏิบัติแก่สมาชิกยังไม่มีประสิทธิภาพ อย่างไรก็ตามผลและข้อมูลของการศึกษานี้อาจช่วยให้ราชวิทยาลัยวิสัญญีแพทย์แห่งประเทศไทย พัฒนากลยุทธ์ในการส่งเสริมสนับสนุนแก่สมาชิกเพื่อให้มีการรับรู้ และการนำแนวเวชปฏิบัติไปใช้อย่างมีประสิทธิภาพเพื่อคุณภาพในการดูแลผู้ป่วย*