

Cancer Pain Management Insights and Reality in Southeast Asia: Expert Perspectives From Six Countries

executive summary

This expert opinion report examines the current realities of the cancer pain management landscape and the various factors that hinder optimal pain control in six countries in Southeast Asia, describes ongoing efforts to advance patient care, and discusses approaches for improving cancer pain management. Information was gathered from leading experts in the field of cancer pain management in each country through an initial meeting and subsequent e-mail discussions. Overall, there are vast disparities in cancer pain management practices and access to opioids in the Southeast Asian countries. The experts considered cancer pain as being generally undermanaged. Access to opioids is inadequate in most countries, and opioid use for analgesia remains inadequate in the region. Several system-, physician-, and patient-related barriers to adequate pain relief were identified, including widespread over-regulation of opioid use, shortage of trained health care workers, inadequacies in pain assessment and knowledge about managing pain, and widespread resistance among patients and physicians toward opioid treatment. According to the experts, many of the ongoing initiatives in the Southeast Asian countries are related to educating patients and physicians on cancer pain management and opioid use. Efforts to improve opioid availability and reduce regulatory barriers in the region are limited, and much work is still needed to improve the status of cancer pain management in the region. Enacting necessary change will require recognition of the unique needs and resources of each country and collaboration across interdisciplinary professional teams to improve cancer pain care in this region.

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INTRODUCTION

The worldwide burden of cancer is increasing at an alarming pace. The annual number of new cancer cases is projected to rise from 14 million in 2012 to 22 million over the next two decades.¹ Asia bears a disproportionate burden of the disease; about half the new cases are expected to occur in Asia by 2030.² Pain is one of the most burdensome symptoms of cancer. It is complex and dynamic and often has multiple etiologies arising from the tumor or from cancer treatments and diagnostic procedures.³ More than half of all patients with cancer experience pain. In advanced disease, close to two thirds of patients report pain, about half of whom suffer pain of moderate-to-severe intensity.⁴ If cancer pain is not adequately treated, it can have devastating consequences that affect the quality of life of patients and their families.

The WHO introduced a three-step analgesic ladder in 1986 as a framework to guide cancer pain control worldwide.⁵ Various international guidelines and recommendations have since been developed to improve the management of cancer

pain.⁶⁻⁸ With proper application of recommended therapeutic approaches, adequate pain relief can be achieved in the vast majority of patients. However, unrelieved pain continues to be a substantial global public health concern in patients with cancer,⁹⁻¹¹ with more than 40% of patients worldwide not receiving adequate pain medications.⁹ The prevalence of undertreated cancer pain in Asia is particularly high: 59% compared with 40% in Europe and 39% in the United States.⁹

Inadequate cancer pain management is a multifactorial problem. Poor resources, inadequate pain assessment, poor opioid access, excessive opioid regulations, misconceptions about pain analgesics, lack of knowledge about chronic pain, and knowledge deficiency among physicians on cancer pain management and prescription of pain analgesics contribute to undue suffering in many patients.¹²⁻¹⁴ Although strong opioids represent the first-line treatment of choice for the management of moderate-to-severe cancer pain, many countries in Asia record low or even no use of opioid analgesics relative to the estimated need for opioid analgesics.¹⁵ Access to opioids is significantly impaired in several Asian countries

because of limited opioid formularies or excessively restrictive opioid policies.¹³ Moreover, many physicians and patients are reluctant to use opioids because they have inadequate knowledge about their use.¹⁶⁻¹⁸ As a result, many patients with moderate or severe pain do not receive adequate treatment to relieve their suffering. Considering the rapidly rising incidence of cancer in Asia, there is an urgent need for better pain control in the region.

There is a significant gap between clinical guideline recommendations and the reality of cancer pain management, but understanding the challenges of cancer pain management will guide decisions that can narrow this gap. Because there has not been much research on cancer pain management practices in Southeast Asia, an expert panel was convened to examine the current status and challenges of cancer pain management and to identify areas that require prompt interventions to achieve appropriate patient care. This report provides an expert summary of the current realities of the cancer pain management landscape and the trends in practice environment that are affecting patient access to adequate pain relief in six Southeast Asian countries. It also describes ongoing efforts to advance patient care and discusses management approaches that could be applied to improve pain management in these countries.

PANELISTS AND METHODS

The panel consisted of leading experts (oncologists, pain specialists, anesthesiologists, and palliative care specialists) from six Southeast Asian countries: Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Vietnam. All six panelists were chosen because of their recognized expertise in providing pain care for patients with cancer and in using opioids to treat chronic pain syndromes in their respective countries. These specialists are affiliated with associations, societies, or institutions that focus on pain medicine, oncology, or palliative medicine, and they have extensive knowledge of the health care standards and practice environment for pain management in their respective countries.

The panelists met to discuss the current cancer pain management landscape in their respective countries. They examined the challenges of adequate cancer pain care and discussed initiatives that are being undertaken to improve the status of cancer pain care in their countries. The experts developed a structured document that contained specific themes chosen on the basis of their

discussions during the initial meeting and on topics in the literature, contributions made during the meeting, and relevant information from published studies. The document was circulated by e-mail among the experts to collect their inputs on the chosen themes, as well as insights and developments since the initial meeting. The following themes were discussed: opioid accessibility for pain relief, regulatory barriers to opioid access, availability of health care resources, availability of pain management guidelines, pain assessment practices, management of adverse effects of opioids, physicians' knowledge of cancer pain management, and patients' and physicians' perceptions of opioid use.

Responses were collated, and a draft report was developed and sent by e-mail to all experts for comments and critiques. Feedback was incorporated, and a revised draft was recirculated to the panel for review and input. The report was finalized when the panel was satisfied with the content.

RESULTS

Availability, Accessibility, and Consumption of Opioids for Pain Relief

The availability and consumption of six common strong opioid formulations are summarized in [Table 1](#). According to the experts, Malaysia and the Philippines have all six formulations on the national formulary, Thailand has five, and Indonesia, Singapore, and Vietnam have four. The most common opioid formulations were immediate- or controlled-release oral morphine, injectable morphine, and transdermal fentanyl. In terms of actual availability, the experts stated that patients have access to most of the formulations on the formulary at least 70% of the time in the Southeast Asian countries except for the Philippines, where most opioid formulations are available to patients only half the time. In Indonesia, patients have access to immediate-release oral morphine and injectable morphine only half the time, and in Thailand, transdermal fentanyl is available only half the time. In Vietnam, controlled-release oral morphine is available only occasionally (5% to 10% of the time) as is transdermal fentanyl (25% to 30% of the time).

The experts stated that strong opioids are widely available in all public and university hospitals in Malaysia, Singapore, and Thailand. However, they are accessible primarily in higher-level hospitals in Indonesia, the Philippines, and Vietnam. Although medical opioid use has increased in the six countries over the past decade, use remains low: 0.32 mg morphine equivalence minus methadone

Table 1 – Opioid Availability and Actual Consumption in Six Southeast Asian Countries

Country	Formulary* and Actual Availability†						Opioid Use (2012 v 2002)‡ ¹⁹
	IR Oral Morphine	CR Oral Morphine	Injectable Morphine	IR Oral Oxycodone	CR Oral Oxycodone	Transdermal Fentanyl	
Indonesia							0.32 v 0.06
Formulary	Yes	Yes	Yes	No	No	Yes	
Actual	Half the time	80% of the time	Half the time	Not available	Not available	70% of the time	
Malaysia							6.23 v 2.72
Formulary	Yes	Yes	Yes	Yes	Yes	Yes	
Actual	All the time	All the time	All the time	> 80% of the time	> 80% of the time	> 80% of the time	
Philippines							0.56 v 0.49
Formulary	Yes	Yes	Yes	Yes	Yes	Yes	
Actual	Half the time	Half the time	Half the time	Half the time	At least half the time	Half the time	
Singapore							8.70 v 3.37
Formulary	Yes	Yes	Yes	No	No	Yes	
Actual	All the time	All the time	All the time	All the time	All the time	All the time	
Thailand							2.27 v 1.06
Formulary	Yes	Yes	Yes	No	Yes	Yes	
Actual	> 80% of the time	> 80% of the time	All the time	Not available	Not available	Half the time	
Vietnam							1.13 v 0.24
Formulary	Yes	Yes	Yes	No	No	Yes	
Actual	All the time	5%-10% of the time	All the time	Not available	Not available	25%-30% of the time	

CR, controlled release; IR, immediate release.

*Formulary availability refers to the inclusion of opioids in a national essential medicines list; actual availability refers to the actual availability of opioids to a patient holding a valid prescription (definitions were obtained from Cherny et al²⁰).

†Information relating to formulary availability of opioids in Singapore was obtained from the standard drug list that was maintained by the Ministry of Health.²¹

‡Milligrams morphine equivalence minus methadone per person.

per person in Indonesia, 0.56 mg in the Philippines, 6.2 mg in Malaysia, and 8.7 mg in Singapore in 2012 (Table 1).¹⁹ The greatest increase in opioid use was in Indonesia and Vietnam, about five-fold from 2002. Malaysia, Singapore, and Thailand doubled their use over the last decade, but opioid use in the Philippines remains largely the same.

Regulatory Barriers

The experts identified common regulatory barriers to opioid access in the six Southeast Asian countries that are summarized in Table 2. Regulations governing opioid access vary among the countries: Indonesia, the Philippines, and Vietnam have considerable regulatory restrictions on the use of opioids, reporting three or more of the identified barriers, Malaysia reported one, and Thailand reported two. Singapore did not report any of the regulatory restrictions.

The most common barrier was limited duration of the opioid prescription, which was reported in five

countries with the limit ranging from a few days to 3 months. Half the countries—Indonesia, the Philippines, and Vietnam—reported burdensome procedures and restrictions on physicians who prescribed opioids (Table 2). Indonesia reported that physicians had to cope with complex procedures to receive special authority to prescribe opioids and with burdensome procedures for reporting every prescription to the Ministry of Health. In the Philippines, the procedures for applying for a narcotics license are complex and complicated. In Vietnam, caregivers are required to produce a certificate of survival before they can collect prescribed opioids for their family members. In Indonesia and Vietnam, opioid prescription is restricted to specific groups of specialists; in the Philippines, opioid prescription is restricted to only those physicians who have a narcotics license (Table 2).

Two of the six countries reported a requirement for special prescription forms and excessive bureaucratic policies governing the use of opioids (Table 2). Medical use of opioids is governed by

Table 2 – Common Regulatory Barriers to Accessibility of Strong Opioids for Cancer Pain Relief in Six Southeast Asian Countries (From Experts' Opinions and Relevant Published Articles)

Country	Limited Prescription Duration	Burdensome Procedures Relating to Prescription	Physician Prescriber Restrictions	Requirement for Special Prescription Form	Excessive Bureaucratic Regulation Policies
Indonesia	Yes, few days	Yes	Yes, restricted to oncologists and anesthesiologists only	No	No
Malaysia	Yes, up to 90 days	No	No	No	No
Philippines	Yes, up to 1 month	Yes ¹⁷	Yes, restricted to physicians who have a narcotics license	Yes	Yes
Singapore	No	No	No	No	No
Thailand	Yes, up to 1 month	No	No ²²	Yes ²²	No
Vietnam	Yes, up to 10 days	Yes	Yes, restricted to oncologists only	No	Yes

stringent laws and is closely monitored in the Philippines and Vietnam. Physicians face severe penalties such as criminal charges or suspension of their license for overprescribing opioids. Because of this, many physicians are reluctant to prescribe strong opioids or they hesitate to prescribe an adequate dose, even when patients have unresolved pain.

Resource Barriers

There are still many resource barriers to optimal pain relief in the region.²⁴⁻²⁶ According to the experts, the most prominent constraint is a shortage of health care personnel and physicians who are trained in cancer pain management or palliative care, reported in Malaysia, Singapore, and Thailand. In Indonesia, lack of trained personnel and funding to provide training in cancer pain management are still unconquered barriers, and the Philippines and Vietnam contend with limited funding for pain relief.

Availability of Pain Management Guidelines

The experts stated that local pain management guidelines²⁷⁻³⁰ are available in Malaysia, Singapore, Thailand, and Vietnam, but not in the Philippines and Indonesia, where physicians consult international guidelines for guidance. In countries in which local guidelines have not been updated regularly—Singapore and Vietnam—physicians also use international guidelines. According to the experts, the WHO analgesic ladder⁵ and the National Comprehensive Cancer Network clinical practice guideline⁶ are more commonly used among the countries. Pain guidelines are widely used by physicians in Malaysia, Singapore, and Thailand. However, in the Philippines and Vietnam, the use of pain guidelines is limited primarily to specialists.

Current Pain Assessment Practices and Management of Adverse Effects of Opioids

The experts stated that cancer pain is managed by the attending physicians who are primarily oncologists, palliative care specialists, pain specialists, or anesthesiologists in most countries, but it is managed by specific specialists (oncologists and/or anesthesiologists) in Indonesia and Vietnam. Pain is being widely assessed as a fifth vital sign in Malaysia³¹ and Singapore. In contrast, pain is gaining acceptance as a vital sign in Indonesia, the Philippines, and Thailand, but Vietnam does not yet consider it a fifth vital sign. Pain scoring systems are widely used in hospitals in Malaysia and Singapore to evaluate pain severity; however, such systems are used primarily in higher-level hospitals in Indonesia, the Philippines, Thailand, and Vietnam because health care providers in other hospitals do not have adequate knowledge about the proper use of these tools. In lower-level hospitals in these countries, pain is not evaluated or is assessed primarily on the basis of patients' verbal description. Unidimensional pain scoring systems such as the Visual Analog Scale, Numerical Rating Scale, or Face Pain Scale represent the most commonly used pain scoring systems across the countries to measure pain intensity. Only three countries (the Philippines, Singapore, and Thailand) reported using multidimensional tools, primarily in pain clinics.

In all six countries, common adverse effects of opioid treatment are generally managed by the attending physicians who prescribed the opioids, primarily medical oncologists or palliative care practitioners who are able to manage the basic symptoms. However, complicated cases are often referred to pain specialists, anesthesiologists, or intensivists who are better equipped to manage more complex symptoms or conditions.

Physicians' Knowledge of Cancer Pain Management

The experts stated that physicians in Malaysia and Singapore generally possess an adequate knowledge of cancer pain management. Content on palliative care and cancer pain management has been widely integrated into the curricula for undergraduate and postgraduate medical students in Malaysia and Singapore. In addition, practicing physicians attend training sessions or workshops on a regular basis to maintain their competency in providing quality pain management care. But there is still a widespread deficit in knowledge about cancer pain management and palliative medicine among physicians, particularly among nonspecialists, in Indonesia, the Philippines, Thailand,^{27,32} and Vietnam. Palliative care and cancer pain care are often not included in the curriculum or are not adequately taught in medical schools in these countries. In addition, health care providers and physicians have limited educational opportunities for keeping up with current trends and expanding their skills, but the situation in Thailand and Vietnam is improving. Efforts are being made to integrate palliative care medicine into undergraduate and postgraduate curricula and to provide opportunities for continuing education so that physicians and other health care providers can increase their competency.

Experts' Perceived Physician and Patient Perceptions of Opioid Use

According to the experts, physicians in most countries have negative perceptions of opioid prescription, but those in Singapore generally recognize the need to prescribe opioid treatment for optimal relief of moderate-to-severe cancer pain. Indonesia, Malaysia, Thailand, and Vietnam reported that the most common barrier identified was fear of adverse effects of opioid treatment. Other barriers include fear of possible legal, regulatory, or licensing sanctions related to opioid prescriptions reported in the Philippines and Vietnam, perceived complexity of opioid administration in Vietnam, and perceived danger of opioid use because of stigmatizing language in the Philippines.

The experts noted that patient-related barriers to opioid use exist in all six countries. The most common barrier perceived by the experts was fear of addiction or of being labeled as a drug addict reported in Malaysia,¹⁸ Singapore, and Thailand. Other identified barriers include perceived association with the end of life reported in the Philippines and Vietnam, perceived danger with opioid use in the Philippines, and fear of adverse effects of opioid treatment in Malaysia.

Ongoing Efforts

The experts said that work is currently being undertaken to improve the management of cancer pain in the six Southeast Asian countries. Efforts to improve opioid regulation, opioid accessibility, standard of care for pain, and physicians' and patients' knowledge of pain management were identified and are presented in Table 3. According to the experts, Malaysia, the Philippines, and Thailand devote considerable effort to improving the current status of cancer pain management, and these countries report an array of initiatives in four of the aforementioned aspects; the other three countries reported initiatives in three aspects. The most common initiative identified was physician and patient education, which is being implemented in all six countries. Other initiatives—increasing the supply of opioid analgesics and widening opioid access to less accessible regions in the country or to patients with limited access—are being undertaken in fewer countries. Additional efforts are being made to eliminate prescriber restriction in emergency situations, to increase regulators' knowledge regarding the use of opioids in the management of cancer, and to improve standard of care for pain management.

SUMMARY

Current Cancer Pain Management Landscape in Six Southeast Asian Countries

This expert opinion report examined the current status of cancer pain management in six countries in Southeast Asia. It also described the barriers influencing cancer care and the strategies taken to improve patient care. Overall, there is significant disparity in cancer pain management across the countries. In general, pain management practices are suboptimal in most of the Southeast Asian countries except Malaysia and Singapore. There are vast disparities in access to opioids among the countries. Indonesia, the Philippines, and Vietnam continue to have poor access to opioids. Opioid use for analgesia remains inadequate in all six countries and continues to lag behind the average global rate.¹⁹

Several system-, physician-, and patient-related barriers that could potentially hinder optimal pain control in the six Southeast Asian countries were identified by the experts. Over-regulation of opioid use for the management of cancer pain and shortage of trained health care workers were reported in half the countries. There is widespread inadequacy of pain assessment and inadequate understanding of pain management among physicians except in Malaysia and Singapore. In addition, opioid phobia

Table 3 – Summary of Ongoing Initiatives to Improve Cancer Pain Management in Six Southeast Asian Countries

Country	Opioid Regulation	Opioid Accessibility	Standard of Care	Education in Cancer Pain Management	
				Physicians	Patients and the Public
Indonesia	Eliminate physician restriction in prescribing opioids in emergency situations	—	—	Ongoing education efforts across the country	Via road shows in selected cities
Malaysia	—	Advocate access to essential pain relief medicines	Establish pain as the fifth vital sign in all hospitals ²⁷	Regular training on local guidelines and education initiatives to advocate prescribing strong opioids for moderate-to-severe pain. Ongoing education at undergraduate and postgraduate level and continuous education for practicing physicians	Via leaflets and patient information sheet
Philippines	Regulatory bodies are attending conferences to understand the unmet needs of patients with cancer pain	—	Set up pain management clinics in hospitals and attain hospital accreditation	Implement education at postgraduate level, conduct ongoing pain fellowship programs, and conduct regular lectures and symposia on pain-related topics	Via lay fora
Singapore	—	—	Increase numbers of physicians specializing in pain medicine or palliative medicine	Ongoing education at undergraduate and postgraduate level and continuous education for practicing physicians	Via awareness programs
Thailand	—	Increase the supply of opioid analgesics to hospitals	Implement local guidelines in community hospitals	Develop curriculum on pain management for implementation in medical schools and healthcare education programs. ³³ Provide regular training in palliative care for physicians and other health care workers	Via media or health care workers
Vietnam	—	Widen opioid access to less accessible regions and patients with limited access	—	Integrate palliative care education into curriculum of undergraduate and postgraduate medical schools and nursing schools. Organize palliative care courses for practicing physicians	Via media, health care workers, hospital Web site, leaflets

is perceived to be rampant among physicians and patients in most of the Southeast Asian countries. In general, physicians and patients alike resist use of strong opioids, even when pain is not alleviated adequately because of fear of adverse effects and perceived danger of opioid treatment. Patients often refuse opioid treatment because they fear addiction and perceive an association with the end of life. Similar barriers have been reported in previous studies conducted in Asia^{13,16}; for example, the Global Opioid Policy Initiative survey reported widespread over-regulation across many Asian countries.¹³ A recent study conducted in Asia reported inadequacy in pain assessment and

knowledge of pain management, as well as widespread resistance toward opioid treatment.¹⁶

Ongoing Initiatives in Six Southeast Asian Countries

Many of the current initiatives in the six Southeast Asian countries are related to educating patients, clinicians, and other health care workers on managing cancer pain and the role of opioids in cancer care. Adequate training for pain management and opioid use is vital for improving pain assessment practices and increasing willingness to prescribe opioids. Regular training or workshops can help clinicians and health care workers stay abreast of

current pain management practices and maintain their competency to deliver quality care for cancer pain. Increasing public and patient awareness through counseling and education on opioids is helpful for addressing stigmas associated with opioid use, increasing acceptance of opioid treatment of pain relief, and improving communication of pain-related needs. Other initiatives are being carried out in a limited number of South-east Asian countries.

The Way Forward in Southeast Asia

Although several initiatives are in progress in the six Southeast Asian countries, efforts to improve opioid availability and reduce regulatory barriers are limited. WHO advocates that medication availability, education, and government policy must be addressed if cancer pain is to be overcome.³⁴ Much work is needed to improve the status of cancer pain management in the region. It is imperative that current regulations governing opioid use are reviewed and unnecessary legal and burdensome barriers are eliminated to make opioid analgesics more accessible while preventing their abuse. Concerted efforts must be made to facilitate and expand opioid access for lower-level hospitals in affected countries. Current clinical practices must be improved via adequate pain assessment and optimization of treatment. Standardized pain assessment protocols need to be developed in each country to improve pain assessment practices. Continuous education for patients, the public, and health care professionals on pain-related topics is critical for promoting sustainable improvement in patient care. To enact necessary changes, the unique needs and resources of each country must be recognized, and interdisciplinary teams, including governments, health ministries, health care professionals, pain management specialists, drug regulators, medical

associations, and the pharmaceutical industry, must be engaged.

The key limitation of this study is the small number of participants: one expert from each country provided opinions on the status of cancer pain management in his or her respective country. There is a potential for bias, particularly in countries with varied health care settings, such as Indonesia, the Philippines, and Vietnam, in which the standards of health care facilities differ between cities and rural areas. Opinions from a multidisciplinary panel of experts is needed in each country to construct a more comprehensive perspective. This article is one of only a few that present an overview of the current realities of the cancer pain management landscape and the barriers that are affecting patient access to adequate pain relief in six countries in the Southeast Asia region. It represents the first step in trying to understand the initiatives that are being undertaken by the individual countries to improve management of cancer pain. This article provides a valuable foundation for countries that want to improve their management of cancer pain. Future research that evaluates the patterns of prescribing analgesics and patient satisfaction will help elucidate treatment practice and patient care in the region. A multicenter, observational study is currently underway to investigate the status of pain control in patients with cancer in six Southeast Asian countries. This article highlights several barriers that interfere with appropriate patient care in these countries. Considering the public health burden of unrelieved pain, these barriers must be addressed to bridge the gap between existing treatment guidelines and real world clinical practice.

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