

RESEARCH ARTICLE

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Exploring Awareness, Usage, Motivations, and Barriers of Question Prompt Lists Among Asian National Cancer Centers Alliance (ANCCA) Members

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Abstract

Objectives: Effective communication between cancer patients and healthcare providers is essential for patient-centered care and often depends on patients asking questions during consultations. The Question Prompt List (QPL) is a structured communication tool designed to encourage patients to ask questions and support informed decision-making. Most studies on QPL implementation have been conducted in Western countries, where communication practices differ from those in Asia. This study aimed to assess awareness of and willingness to use QPLs among cancer care providers affiliated with the Asian National Cancer Centers Alliance (ANCCA). **Study design:** Cross-sectional, semi-structured online survey. **Methods:** An anonymized, self-administered, semi-structured online survey was conducted via Google Forms between July and October 2024. Survey invitations were distributed via email, professional networks, and social media where appropriate. The survey assessed respondents' demographics, respondents' prior use of QPLs (Yes/No), prior awareness of the existence of QPLs (Yes/No), preferred communication style (single-response, multiple-choice), and perceived barriers and facilitators to implementation (open-ended response). All questions excluding the two open-ended questions were required for submission. Descriptive statistics were used to analyze quantitative data, and thematic analysis following Braun and Clarke's framework was used for open-ended responses. **Results:** Among 85 respondents, 84.7% reported being unaware of QPLs, and 22.4% reported having implemented QPLs in their clinical practice. Among respondents who had not implemented QPLs, 68.2% indicated that they were "Somewhat" or "Very" willing to implement them. Most respondents favored communication styles that emphasize sharing information (16.4%), open and inclusive communication (15.6%), and supportive counseling (15.6%). QPLs are aligned with current attitudes toward patient-provider communication in ANCCA countries. **Conclusion:** There is substantial opportunity to introduce QPLs across ANCCA countries. This study provides foundational evidence to guide their effective implementation, promoting patient-centered care in Asia.

Keywords: Question Prompt List, ANCCA, Cancer, Patient-Centered, Communication

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Introduction

Effective communication between cancer patients and their clinicians is an important component of patient-centered healthcare as it promotes continuity of care, enhances physical and mental health outcomes, and empowers patients [1]. Communication is a reciprocal process between providers and patients that relies upon patients being able to ask questions. However, patients often struggle to formulate their own questions, which led to the development of the Question Prompt List (QPL), a communication tool designed to support this need (See Supplementary Table 1 for an example QPL) [2]. QPLs employ structured question lists to encourage patients to ask questions during consultations, thereby facilitating informed decision-making [3, 4]. From a theoretical perspective, QPLs can be understood as an intervention that supports patient activation and functional health literacy by scaffolding question-asking behavior during clinical encounters. In contexts where cultural norms, power distance, and health literacy may limit patients' active participation, QPLs may serve as a practical mechanism to operationalize patient-centered communication in routine care [5, 6]. QPLs function as a practical optimization of patient-centered communication by facilitating patient participation and question-asking during consultations [7, 8].

QPLs have demonstrated effectiveness in improving provider-patient communication in multiple countries. However, this research was primarily conducted in Australia and the United States [3, 9-12]. A 2015 systematic review showed that patients who use QPLs demonstrate improved communication, psychological, and cognitive outcomes [13], leading to their inclusion in the American Society of Clinical Oncology Consensus Guidelines [14]. These benefits are maximized when QPLs are actively endorsed by healthcare providers and adapted to patients' specific medical and cultural contexts. Although the review included some Asian countries, its findings may be biased as the majority of the included studies were conducted in Western countries, where patient-provider communication practices differ from those in Asia [15].

Emerging evidence from Japan suggests the potential for QPL use in Asian contexts [16]. A randomized control trial conducted in Japan demonstrated the positive effects of QPL use on patient outcomes [16]. Building on these promising results, Japan has incorporated QPLs into clinical practice guidelines [17] and is now proceeding towards a second phase of clinical implementation. Many Asian countries have not yet initiated large-scale implementation, which is necessary to establish the effectiveness of QPLs and inform context-specific implementation strategies. Cancer care providers' awareness and acceptance of QPLs constitute foundational prerequisites for successful uptake [18]. Nevertheless, little information is currently available regarding the level of awareness and acceptance of QPLs among cancer care providers in most Asian countries. Additionally, more research is needed to identify barriers to QPL adaptation to inform the design of effective implementation strategies.

To address this gap, our study leverages the Asian National Cancer Centers Alliance (ANCCA), a regional network founded in 2005 by leading cancer centers in China, Japan, Korea, Singapore, and five other countries [19]. As of July 2025, ANCCA comprises 21 full and associate members, primarily national cancer centers formally recognized by their respective ministries of health. The medical contexts of ANCCA member countries vary considerably in terms of population size, healthcare infrastructure, and most common cancer sites (See Supplementary Table 2). These variations are further compounded by differing cultural attitudes toward patient involvement and provider-patient communication [20].

Previous international efforts to implement QPLs underscore the importance of cultural and contextual adaptation. For instance, end-of-life QPLs developed in the United States and Australia resulted in divergent question sets reflective of cultural differences in end-of-life communication [21]. Similarly, adaptation of the QPL to the Italian context involved a systematic cultural translation process to accommodate more paternalistic norms of physician practice [22]. In many Asian healthcare settings, culturally embedded norms such as hierarchical clinician-patient relationships, family-centered decision-making, and relatively high-power distance may further discourage patients from actively voicing concerns or questions, thereby increasing the relevance of QPLs as a structured support for participation.

Against this background, the present study aims to take a preliminary step toward QPL implementation in Asia by assessing levels of awareness of and willingness to use QPLs among cancer care providers working in ANCCA member countries. Findings from this study will serve as a foundation for developing implementation strategies aligned with the unique medical and cultural contexts of each country.

Materials and Methods

Survey Design

This study employed a scoping survey to collect preliminary information on awareness of and willingness to use QPLs amongst cancer-care providers in Asia. An anonymized, self-administered, semi-structured online survey was conducted using Google Forms between July and October 2024. The survey included dichotomous (yes/no), multiple-choice, and open-ended questions. Participation was voluntary, and informed consent was obtained electronically prior to survey completion. Participants were required to answer all mandatory questions before submission.

The target population comprised healthcare providers, including oncologists, pharmacists, nurses, medical social workers (MSWs), and community health workers, working in all 21 ANCCA member countries.

The survey instrument was developed based on evidence from previous papers on QPL implementation and its influence on patient-provider relationships in ANCCA countries [23, 24]. A multidisciplinary team at the National Cancer Center Japan Institute for Cancer Control including epidemiologists, patient representatives,

oncologists, psychiatrists, clinical psychologists, and nurses distributed the first iteration domestically. Due to the limited availability of literature on QPL awareness and willingness to use in Asia, the team collaborated with ANCCA members to refine and finalize the English version of the survey through several rounds of expert review to ensure clarity and regional relevance.

The final survey included 14 mandatory, and two optional questions organized into three thematic sections. The first section collected demographic information, such as gender, age, country of practice, occupation, and workplace. It also inquired about the number patients seen daily (multiple-choice, single response) and the communication styles employed when interacting with patients and their families (multiple-choice, multiple response). In the second section, participants were asked whether they are aware of or currently use QPLs (yes/no) and how willing they are to implement them (multiple-choice, single response). The third section asked how often patients bring question notes during consultations (multiple-choice single-response), who

is responsible for bringing QPLs to patients and their families (multiple-choice single-response), and in what situations respondents envision QPL to be useful (multiple-choice, multiple response). Participants were additionally asked to describe potential scenarios where QPL use might be useful and to identify barriers to QPL implementation through one multiple-choice and two optional open-ended questions. The detailed contents of the questionnaire can be seen in the resulting tables.

Qualitative data from the open-ended responses were analyzed using thematic analysis, following the approach outlined by Braun and Clarke (2006). Two researchers (EO and NN) independently coded the data and evaluated the results of the open-ended questions using a Step-by-Step Process of Thematic Analysis [25]. We identified themes through an inductive approach, allowing patterns of meaning to emerge directly from the participants' written responses. The research team then met to review and refine themes to reach consensus and ensure consistency and relevance to the study's aims (Table 1).

Table 1. In what Situations Question Prompt Lists (QPL) might be Useful and what Challenges Providers Face to Implementation – Integrated Table

Themes	Example Quote
Concrete examples of where QPL is useful	
QPL helps with clearing patients and their families' doubts and improve their understanding.	"QPL, especially in end stage patients or patients at the initial treatment of the disease, can help a lot both to the patient and the patient and the patient's family by paying attention to the many questions and concerns that are in their minds, and to the doctor who is on the path of treatment and support of patient better." (Medical oncologist, Iran, more than 20 patients / day)
QPL can be useful in managing symptoms and side effects.	"Change of treatment, follow up for adverse events" (Medical oncologist, Iran, more than 20 patients / day) "Self-care during the treatment" (Other physician, Mongolia, 5-10 patients / day) "Radiotherapy side effects managements" (Medical oncologist, Bangladesh, 15-20 patients / day)
QPL is useful when creating treatment plans at each phase (initial, during, end).	"It is useful in first visit to know the details about patients disease and outcome." (Clinical Oncologist, Bangladesh, 5-10 patients / day) "When asking regarding new medication, what may be the side effect. Why need the medication." (Other physician, Malaysia, less than 5 patients / day) "Planning for any surgery or proceedings for chemotherapy." (Nurse, Pakistan, less than 5 patients / day)
Challenges to implementing QPL Themes	
Lack of time to use QPL	"Examination time limit of doctors" (Other physician, Mongolia, more than 20 patients / day) "Lack of time in busy clinics" (Cancer Epidemiologist, Laos, 10-15 patients / day) "Time constraint" (Surgeon, China, more than 20 patients / day) "The time of consultation" (Internist, Indonesia, more than 20 patients / day) "As a new and useful clinical tool, we did not use it in Harbin, China. There maybe some challenges to initial use in the clinic here, like consulting time for surgeons and the uncertainty of the acceptance of the QPL by patients. We could like to try it in the future" (Other physician*, China, 15-20 patients / day)
Patient volume	"Some patients insist on frequent communication with the doctors, but this is not possible due to the large number of patients visiting each day" (Medical oncologist*, Japan, 10-15 patients / day) "Time availability as a lot of patients" (Other physician, Bangladesh, 10-15 patients / day)
Physician awareness	"QPL is a completely new concept in Bangladesh, especially in government hospitals, where physicians are currently unfamiliar with it" (Other physician, Bangladesh, 15-20 patients / day)
Patient education level (functional literacy and health education)	"Language barrier, illiterate patients and caregivers" (Nurse, Pakistan, Less than 5 patients / day) "Patient and caregivers' health education level" (Other physician, Mongolia, 5-10 patients / day)
Uncertainty of acceptance among patients	"There maybe some challenges to initial use in the clinic here, like consulting time for surgeons and the uncertainty of the acceptance of the QPL by patients." (Other physician*, China, 15-20 patients / day)
Different cancers need different QPLs	"The problem that exists is based on the type of disease and especially the type of cancer, the problems and treatment and prognosis of the patients will be different and accordingly they will have different questions and answers and we will need to design different questionnaires" (Medical oncologist*, Japan, 10-15 patients / day)
No standardized QPL	"One of the many challenges in this case is that the QPL(L) forms are not the same. I work in a cancer center, but there is no uniform questionnaire for patients in the field of examining the type of treatment, answering the questions of patients and their families." (Medical oncologist*, Japan, 10-15 patients / day)

Note. Some language was edited for clarity; *derived from the same respondents. The following questions were added to the survey after the first four participants responded, thus administered to 81 participants: Are there any concrete examples where QPL useful? (Free Comments)? Are there any challenges to use the QPL as a communication approach, if so, what might they be? (Free Comments).

Recruitment

The survey was disseminated through snowball sampling, tailored to the context of each country. The National Cancer Center Japan team distributed the finalized English survey to all 21 ANCCA member countries via email and introduced the survey at several monthly meetings of ANCCA representatives, aiming for a minimum of two respondents per country. Not all member countries were present at these meetings, but representatives from each ANCCA member country received the finalized English version via email with the request to send it to their colleagues. ANCCA representatives applied different strategies to reach participants in their country. For example, in Indonesia, the background and purpose of the survey were translated into Indonesian, and the survey link was distributed via WhatsApp, reflecting the most common method of professional communication in the country. Several questions were added after the first four participants answered the survey (Table 2). The following questions were added to the survey after the first four participants responded; “How often do patients bring Question Notes (ex: QPL) to physicians/healthcare providers?,” “Who is in charge of bringing the blank QPL to patients and families in your institute?,” “Are there any concrete examples where QPL useful?” (free comments), “Are there any challenges to use the QPL as a communication approach, if so, what might they be?” (free comments). The symbol, “***” in tables and figures denotes questions that were administered to 81 out of 85 respondents.

Results

A total of 85 participants from 18 countries completed the survey. Gender representation was relatively balanced (male: 56.5%, female: 43.5%). Most respondents were aged either 30-39 years or in their 40s. Medical oncologists and other physicians constituted the largest professional groups. Most responses were from Bangladesh (25.9%), Mongolia (10.6%), and Pakistan (10.6%). Over 70% of respondents were affiliated with cancer centers or cancer specialty hospitals, and 76.6% reported seeing more than 10 patients per day. Regarding patient behavior, 61.7% of respondents reported that patients “Sometimes” brought questions to consultations, while 22.2% reported that patients “Never” brought questions (Table 2).

Concerning awareness and use of QPLs, 84.7% of respondents reported being unaware of QPLs prior to participating in the survey. Among all respondents, 22.4% indicated that they had implemented QPLs in their clinical practice (Table 3). 68.2% of providers who had not implemented QPLs stated that they were somewhat willing or very willing to utilize QPLs in the future. Thirty-one respondents identified the existence of clinical guidelines as the greatest incentive for QPL implementation (Figure 1).

Regarding preferred communication styles, respondents favored approaches that emphasize sharing information, open and inclusive communication, and supportive counseling but there was some variation based on patient volume (Figure 2). Paternalistic styles

Table 2. Participants' Background Characteristics (N = 85)

Participants background	n	%
Gender		
Male	48	56.5
Female	37	43.5
Age		
20-29	1	1.2
30-39	30	35.3
40-49	29	34.1
50-59	16	18.8
60-69	6	7.1
70+	1	1.2
Prefer not to reply	2	2.4
Country		
Bangladesh	22	25.9
Bhutan	8	9.4
Brunei Darussalam	1	1.2
China	3	3.5
India	4	4.7
Indonesia	7	8.2
Iran	2	2.4
Japan	4	4.7
Korea	2	2.4
Laos	1	1.2
Malaysia	4	4.7
Mongolia	9	10.6
Nepal	2	2.4
Pakistan	9	10.6
Philippines	3	3.5
Singapore	2	2.4
Thailand	1	1.2
Others	1	1.2
Occupation		
Medical oncologist	39	45.9
Other physician	37	43.5
Nurse	5	5.9
Medical Social Worker (MSW)	1	1.2
Researcher	3	3.5
Workplace		
Cancer Center/Cancer Hospital/ Cancer Institute	61	71.8
General hospital	22	25.9
Clinic	1	1.2
Community center	1	1.2
Number of patient consultations per day		
More than 20 patients / day	36	42.4
15-20 patients / day	15	17.6
10-15 patients / day	14	16.5
5-10 patients / day	9	10.6
Less than 5 patients / day	5	5.9
Not applicable	6	7.1

Table 2. Continued

Participants background	n	%
How often patients bring their own questions**		
Always	3	3.7
Almost	10	12.4
Sometimes	50	61.7
Never	18	22.2

N, number of respondents; n, number of responses; %, percentage of responses indicating agreement with each category. The following question was added to the survey after the first four participants responded: How often do patients bring Question Notes (ex: QPL) to physicians/healthcare providers? ** denotes questions that were administered to 81 out of 85 respondents.

were the least common, with no responses indicating this preference among providers seeing 20 or fewer patients per day (Figure 2).

When considering the relationship between preferred communication style and willingness to implement QPLs (Figure 3), analysis revealed that providers who prefer “supportive and counseling,” “emphasis on sharing information,” or “open and inclusive” communication styles were more likely to report being “Very” or “Somewhat” willing to implement QPLs. Respondents who preferred a “paternalism” were less likely to report they were “Very” or “Somewhat” willing to implement QPLs (5 respondents).

Qualitative analysis of open-ended responses identified several key themes regarding QPL implementation (Table 1). Respondents indicated that QPLs were useful for “clearing patient doubts” and promoting “self-care,” emphasizing their potential to enhance patient engagement. Some respondents described QPLs as helpful in defining initial treatment strategies and adapting care plans over time. Identified barriers included provider awareness, particularly within government hospitals, as well as time constraints, including “examination time limits,” “busy clinics,” and “high patient volume”. Concerns regarding patient acceptance were also reported, particularly challenges associated with “illiterate patients and

Table 3. Participants' Usage and Awareness of Question Prompt Lists (QPL)

QPL related questionnaire items	n	%
Were you aware of the existence of the QPL before this survey?		
Yes	13	15.3
No	72	84.7
How willing to use the QPL in your clinical practice? (N=66, not currently using QPL in clinical practice)		
Very	19	28.8
Somewhat	26	39.4
Neutral	19	28.8
Uncertain	2	3
Do you utilize the QPL at clinical practice?		
Yes	19	22.4
No	66	77.6

N, number of respondents; n, number of responses; %, percentage of responses indicating agreement with each category; ** denotes questions that were administered to 81 out of 85 respondents. *The following questions were added to the survey after the first four participants responded: How often do patients bring Question Notes (ex: QPL) to physicians/healthcare providers? Who is in charge of bringing the blank QPL to patients and families in your institute? Are there any concrete examples where QPL useful? (Free Comments)? Are there any challenges to use the QPL as a communication approach, if so, what might they be? (Free Comments).

caregivers”. Additionally, several respondents emphasized the need for cancer site-specific adaptations of QPLs.

Discussion

We found a generally low level of awareness and underutilization of QPLs among healthcare providers in Asia. However, the majority of respondents reported they are somewhat willing or very willing to utilize QPL. This supports the need for strategies to facilitate clinical implementation.

QPLs are designed to empower patients by letting them lead a back-and-forth conversation with their providers,

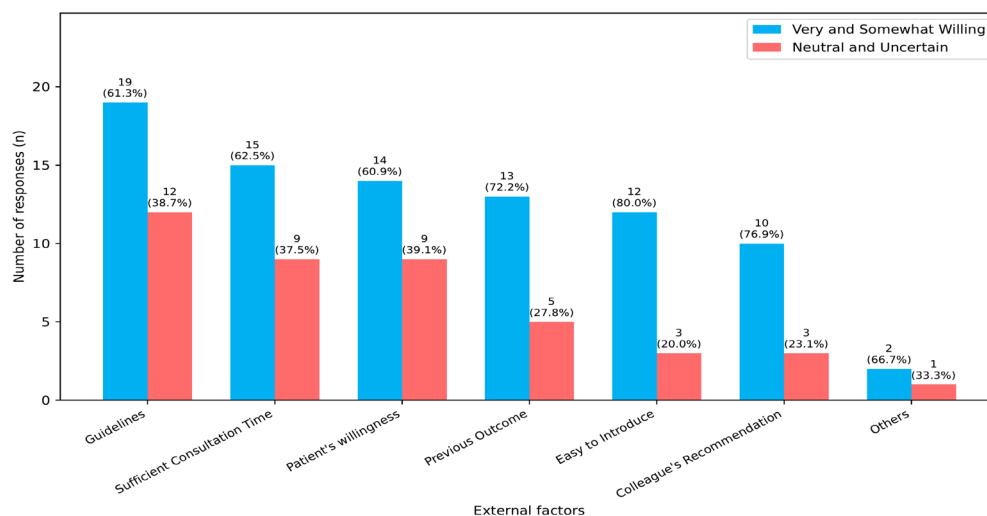


Figure 1. External Factors Motivating Future Adoption of Question Prompt Lists (QPL) by Reported Willingness to Adopt QPL (multiple responses allowed). N=66 respondents not currently using QPL in clinical practice.

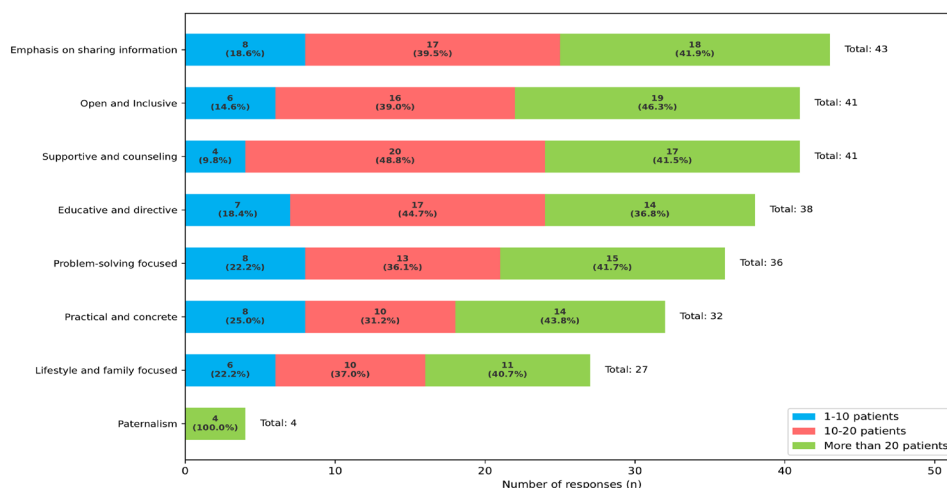


Figure 2. Participant's Favored Communication Styles by Number of Patients Seen Daily (multiple responses allowed)

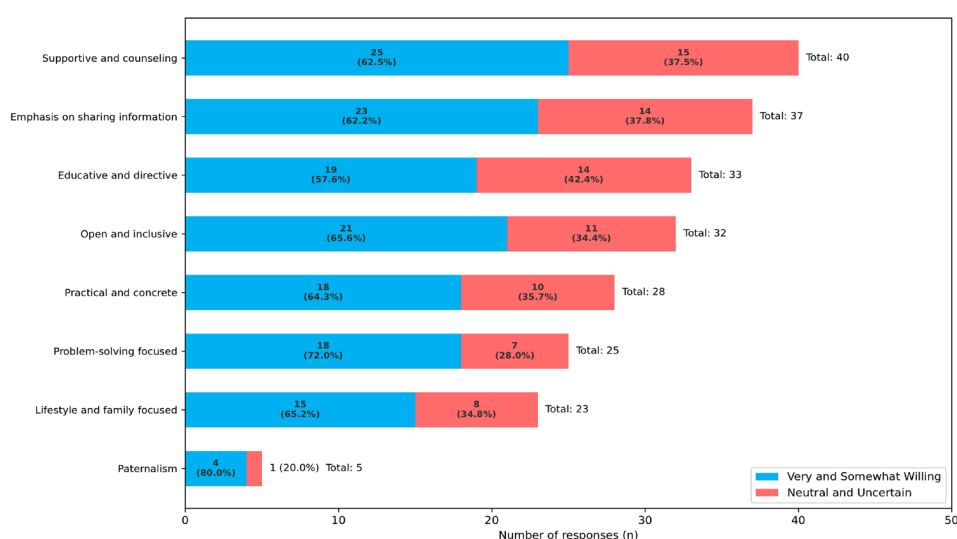


Figure 3. Participants' Preferred Communication Style by Willingness to Implement Question Prompt Lists (QPL) (multiple choices allowed)

a communication approach that appears to align with current attitudes towards patient-provider interaction in ANCCA countries (Figure 2). The presence of clear guidelines emerged as the most frequently cited external factor motivating the adoption of QPLs (Figure 1). These results indicate that developing and disseminating standardized guidelines may be critical to promoting QPL implementation in the region.

Although many respondents understood the potential benefits of QPLs, concerns regarding time constraints were frequently reported. Most respondents indicated that they see more than 10 patients per day, with many seeing over 20 patients, contributing to perceptions that they lack sufficient time to incorporate QPLs into their practice. There is a pervasive belief that using QPLs might prolong consultation times, especially during the initial phase of implementation. However, previous research has not consistently demonstrated that QPLs lengthen consultations [11, 26]. Some studies suggest that active QPL use may even shorten consultation time compared to standard care or passive QPL provision alone [9]. These

findings suggest the need for activities to raise awareness of QPLs amongst clinicians and to address misconceptions regarding time burden.

Our qualitative results provide additional insight into considerations for QPL implementation. Respondents referenced QPL is useful for “clearing patient doubts” and “self-care,” showing their perceptions are aligned with previous research that shows QPLs help improve patients’ psychological wellbeing. Providers perceive that QPLs could support communication during initial consultations and throughout the treatment trajectory, facilitating the establishment of treatment plans and enabling adjustment as needed. We must consider the impact of an overall smoother treatment experience on patients, particularly in contexts where patients have lower health literacy. Early use of QPLs may help patients and families better understand the condition, treatment plans, and risks from the outset, thereby strengthening empowerment and trust during their cancer care journey. Based on these results, further evidence is warranted regarding the effectiveness of QPLs in Asian healthcare

settings, along with the development of practice systems and standardized materials to support implementation.

Country-specific insights from this study provide additional guidance for implementation strategies. Bangladesh had the greatest number of respondents, but one respondent mentioned that “QPL is a completely new concept in Bangladesh, especially in government hospitals, where physicians are currently unfamiliar with it.” This indicates that awareness promotion of QPL amongst providers could be a strategic step forward.

In Bhutan, access to health services is an immense strength as health services are free under the Constitution of Bhutan [27], however QPL is a completely new concept and will be challenging to implement. Oncologists in Bhutan must see many patients and have little time to answer questions. Secondly, oncology patients have relatively low autonomy. Family members commonly make health care decisions on behalf of the patient and conceal diagnosis and treatment options. Consequently, using QPL will be out of patients’ control. Thus, it might be most appropriate to first raise awareness of QPL amongst clinicians, then move on to patients.

China has increased the number of cancer hospitals by around 30 percent since 2010 [28] and has one of the highest physician-patient ratios in Asia (see Appendix Table 3). One provider from China mentioned, “As a new and useful clinical tool, we did not use it in Harbin, China. There may be some challenges to initial use in the clinic here, like consulting time for surgeons and the uncertainty of the acceptance of the QPL by patients. We would like to try it in the future.” As China continues an upwards trajectory of improving cancer care access and quality, there is immense potential to improve awareness of QPL amongst providers and integrate QPL guidelines.

In Indonesia, religious beliefs and family support play a significant role in healthcare. On the positive side, these beliefs can enhance medical treatment by helping cancer patients feel stronger and supported. However, these same beliefs might make patients reluctant to discuss or accept treatments offered by doctors, as they believe that miracles will occur through their religious practices. If QPL could be expanded to encourage patients to ask questions that highlight the positive aspects of their religious beliefs, and family members could offer support in a constructive way, it would be beneficial for everyone involved.

In India, awareness of QPL is minimal. Structural constraints like providers seeing 100+ patients daily limit adoption. Studies demonstrating that QPL can improve consultation efficiency might promote adoption. National initiatives such as the Ayushman Bharat Digital Mission (ABDM) could help integrate QPLs into digital health platforms, promoting use and standardization [29]. QPLs translated into regional languages and cultures could clarify care for patients and families. QPLs involving caregivers are essential as family members drive decisions in many rural households. Additionally, practice in India can be paternalistic, so QPLs should be adapted to promote shared decision-making while respecting provider authority. A tiered implementation model urban, rural, private, public is key for scalability.

In Japan, while RCTs of QPL for cancer patients

have shown efficacy [16, 30], and QPL use is strongly recommended in clinical practice guidelines [17], QPL implementation and dissemination remain limited. This study identified potential barriers reported by four Japanese physicians, such as high patient volumes and the diversity of cancer types and treatments. Furthermore, the Japanese Society of Psycho-Oncology plans to conduct a survey to identify barriers and facilitators among healthcare professionals involved in cancer care nationwide. Research efforts are underway to develop strategies that promote clinical implementation.

In Malaysia, integration of Question Prompt Lists (QPLs) into clinical practice is hindered by a combination of educational, systemic, and cultural barriers [31, 32]. Limited training for healthcare providers results in low proficiency and confidence in using QPLs, particularly when addressing complex or sensitive topics like end-of-life care. This is compounded by the absence of standardized QPL content and usage across clinical settings, leading to inconsistent implementation. Cultural taboos surrounding sensitive health topics and a general tendency among patients to defer to medical authority figures also limit patient engagement. Additional barriers include language diversity, low health literacy, and time constraints in busy clinical settings [31, 33].

In Mongolia, approximately 30 percent of the population lives in rural areas or provinces [34]. Despite the high cancer mortality, the strengths of the country’s healthcare system provide optimal conditions for enhancing the accessibility of cancer care services. All districts within the capital and rural provinces offer specialized services, including certain cancer surgeries, chemotherapy, and palliative care, available on both an outpatient and inpatient basis. Early detection and cancer care services are fully covered by the National Health Insurance Fund. However, herders in rural areas face considerable challenges in accessing timely medical care service due to remoteness from healthcare centers, harsh weather conditions, and the difficulty of leaving their livestock for long periods. Therefore, it is crucial to incorporate specific questions into the QPL that fully address the unique lifestyle and cultural characteristics of herders.

In Nepal, although no studies have examined the use of QPLs, a study from both the general population in the Kathmandu Valley and a study including cancer patients found the majority of participants would prefer to be informed of a cancer diagnoses [35, 36]. Among Nepalese medical students, 54% prefer to inform the patient directly, while 40% prefer to tell the family [36]. Family members play a central role in decision-making, sometimes withholding information from patients to protect them from emotional distress. A study at B.P. Koirala Memorial Cancer Hospital emphasized the need for better communication in cancer care in Nepal [37]. These studies suggest a growing recognition of the importance of transparent communication in cancer. QPLs could help bridge the gap between patients, families, and providers, ultimately helping patients feel in control of their care journey.

In Pakistan, it is challenging to reach all cancer

patients as there are only 125 trained oncologists for a population of 240 million [38]. However, Pakistan is a leader advocating public-private partnerships (PPPs) and creative health interventions [39], with one option being telemedicine. 4G coverage in Pakistan covers nearly 80% of the country [40], and recent research has shown telemedicine to be a promising frontier in evaluating provider-patient communication and improving access to care for rural communities in Pakistan [41]. A small study suggested that medical students perceive technology as having the potential to enhance healthcare opportunities in Pakistan [42].

Singapore is currently in a unique position of chair-secretariat of ANCCA, has the highest doctor to patient ratio in the ANCCA region (See Supplementary Table 2), and already has experience conducting QPL randomized control trials. A randomized control trial from Singapore General Hospital and National Cancer Centre found that patients undergoing breast and abdominal surgeries who used QPL experienced a significant reduction in anxiety before and after surgery [23]. Although there are still research gaps in Singapore preventing implementation, these results and experience demonstrate the potential for QPL in the Singapore population and the capacity for further research.

This study has several limitations. Most respondents answered the survey in English, with exception of Indonesia. This may have excluded providers with limited English proficiency, potentially biasing the sample. Translation into Indonesian and dissemination via WhatsApp allowed for culturally and linguistically appropriate engagement with Indonesian participants. However, because comparable tailored recruitment approaches were not implemented in other countries, this may have affected cross-national representativeness. Future surveys should consider translation into local languages and distribution methods tailored to each country's communication habits, such as using Kakao-talk, WeChat, or WhatsApp. Additionally, this survey mainly captured clinicians' perspectives. Expanding future research to include other healthcare professionals, management staff, and medical trainees may yield a more comprehensive understanding of QPL perceptions and facilitate broader implementation strategies. Moreover, there remains a significant gap in understanding the impact of QPLs on providers themselves, as most existing studies focused primarily on patient outcomes. Systematic evaluation of QPL design, implementation strategies, and long-term effects on both patients and clinicians' experiences is needed to fully realize the potential of QPLs in improving patient-centered care [43]. In terms of analysis, the small sample size and uneven country distribution precluded inferential statistical analysis, and these findings should be interpreted as exploratory rather than generalizable. Future, adequately powered studies would benefit from more advanced analyses.

Despite these challenges, opportunities for QPL implementation in many ANCCA countries are substantial. While QPLs may be not appropriate for implementation in some countries, there is immense opportunity for collaboration between ANCCA countries to improve

patient care through methods tailored to local cultures. Potentially, through the establishment of a patient experience taskforce within the ANCCA network, countries could identify similarities with one another and identify opportunities for collaboration through said task force.

In the case of QPL implementation and next steps, pilot implementation has already been conducted in Japan, and workshops and training sessions are being planned to support the implementation of QPLs at the facility level. Pilot implementation performed by other national cancer centers could potentially inform future activities. Based on this plan, feasible next steps could include simple online educational materials for healthcare professionals, short, practical written guides explaining what a QPL is and how to introduce it in routine practice, and brief case examples from clinical settings. Future research should also consider the healthcare system context in which QPLs are introduced across Asian settings. While cultural norms such as respect for medical authority may shape patient participation, discussions with ANCCA providers highlighted that a major barrier may instead lie in structural constraints such as workforce shortages, high patient volumes, and limited consultation time. In many Asian cancer care settings, clinicians face substantial workload pressures and express concern that encouraging additional patient questions may not be feasible within already overburdened outpatient services. Global evidence indicates marked inequalities in the density and distribution of the oncology workforce, with shortages particularly pronounced in low- and middle-income regions [44,45]. Therefore, implementation strategies for QPLs in Asia should not only address cultural adaptation but also include practical system-level approaches such as brief clinician training, streamlined QPL formats, integration into team-based care, and pilot testing in high-volume clinics to ensure that patient empowerment tools do not inadvertently increase provider burden.

Tailoring QPL introduction to local cultural and medical contexts will be critical, and assessing awareness and willingness to use QPL at the regional level is an important first step. Training programs for healthcare providers and optimization of QPL formats whether digital or printed are necessary for successful integration into routine practice. Targeting future surveys to medical management staff or leaders might lead them to understand the benefits of QPL. This will make it easier to implement QPL within their healthcare system, rather than relying solely on recommendations from clinicians. Targeting medical trainees might also be beneficial, as they are often willing to try new approaches and will become the next generation of clinicians who understand the importance of provider-patient communication.

This study is the first to assess awareness and willingness to use QPLs across ANCCA member countries. Given the shared cultural, healthcare, and network structures within ANCCA, these findings offer important insights for the region. Although awareness of QPLs is currently limited, many providers are willing to adopt QPLs, particularly if structured guidelines are available. These results highlight the opportunity to

develop tailored, culturally sensitive implementation strategies for QPLs across Asia, aiming to enhance patient-provider communication and promote patient-centered care and empowerment across the region.

Author Contribution Statement

Emerald O'Brien: Writing - Original Draft, Formal analysis. Nobuo Nishimata: Writing - Original Draft, Formal analysis, Conceptualization. Kyoko Obama: Writing - Review & Editing, Conceptualization. Masako Okamura: Writing - Review & Editing, Conceptualization. Taichi Shimazu: Writing - Review & Editing, Conceptualization. Nozomu Kobayashi: Writing - Review & Editing. Qazi Mushtaq Hussain: Writing - Review & Editing. Namkha Dorji: Writing - Review & Editing. Kinley Tshering: Writing - Review & Editing. Yawei Zhang: Writing - Review & Editing. Kathryn Effendi: Writing - Review & Editing. Erdenekhuu Nansalma: Writing - Review & Editing. Uranchimeg Tsegmed: Writing - Review & Editing. Enkhee Luvsannamjil: Writing - Review & Editing. Aasim Yusuf: Writing - Review & Editing. William YK Hwang: Writing - Review & Editing. Supakorn Pitakarnku: Writing - Review & Editing. Sok King Ong: Writing - Review & Editing. Abhishek Shankar: Writing - Review & Editing. Siti Norbayah Yusof: Writing - Review & Editing. Navin Francis Susinadan: Writing - Review & Editing. Kishore Kumar Pradhananga: Writing - Review & Editing. Mohammad Biglari: Writing - Review & Editing. Sungbin Yim: Writing - Review & Editing. Yoon Jung Chang: Writing - Review & Editing. Champadeng Vongdala: Writing - Review & Editing. Clarito Jr. Cairo: Writing - Review & Editing. Tomohiro Matsuda: Writing - Review & Editing. Manami Inoue: Writing - Review & Editing. Shuhei Nomura: Writing - Review & Editing. Laureline Gatellier: Writing - Review & Editing, Conceptualization. Maiko Fujimori: Writing - Review & Editing, Conceptualization. Sarah K. Abe: Writing - Review & Editing, Conceptualization

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If it was approved by any scientific Body/ if it is part of an approved student thesis

This study was reviewed by the National Cancer Center Institutional Review Board and deemed exempt from formal ethical review (Notification No. 6000-099), as it used an anonymized dataset with no personally identifiable information.

How the ethical issue was handled (name the ethical committee that approved the research)

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Conflict of interest

The authors declare no conflicts of interest related to this study.

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