

Availability of Psychiatric Consultation-liaison Services as an Integral Component of Palliative Care Programs at Japanese Cancer Hospitals

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Objective: Collaboration between psychiatry and palliative medicine has the potential to enhance the quality of medical practice. The integration between palliative care and psychiatry has been attempted only in discrete medical settings and is not yet firmly established as an institution. Our objective was to determine the availability and degree of integration between psychiatric consultation-liaison services and palliative care in Japan.

Methods: A survey questionnaire was mailed to consultation-liaison psychiatrists at 375 government-designated cancer hospitals regarding their consultation-liaison services.

Results: A total of 375 survey questionnaires were sent to consultation-liaison psychiatrists, with a response rate of 64.8%. Designated cancer hospitals with approved palliative care teams were significantly more likely to have a consultation-liaison psychiatrist in the palliative care team than those in non-approved palliative care teams [80/80 (100%) versus 110/153 (73%); $P = 0.008$]. Approved palliative care teams had double the number of referrals, conducted rounds more frequently and held conferences more frequently. Psychiatrists of the approved palliative care teams spent more of their time on palliative care consultations, adhered more closely to consultation processes and contributed more actively to the integration of developmental perspectives in treatment plans.

Conclusions: In Japan, most designated cancer hospitals with approved palliative care teams were more likely to integrate psychiatric consultation-liaison services into their palliative care programs. Systematic strategies for integration between palliative care and consultation-liaison psychiatry would contribute to the provision of appropriate psychosocial care for cancer patients and families at all stages.

Key words: psycho-oncology – palliative care team – consultation-liaison psychiatry – cancer – palliative medicine

INTRODUCTION

Although remarkable progress has been made in cancer treatment, most patients with advanced cancer eventually face complex physical, psychiatric and social problems related to their disease, treatment or comorbidities (1,2). It is strongly recommended that palliative care services should be provided earlier in the cancer trajectory (3,4). General services provided by hospitals cannot always manage these problems effectively. Many international organizations support early incorporation of palliative care in oncology practice (4,5) and hospital-based palliative care programs have rapidly expanded over the past decade (6,7). Palliative care teams now play a key role in the management of symptoms, psychosocial support, assistance with decision-making and care coordination across providers (7–12).

Research shows that psychological distress in the form of depression and other mental health problems is associated with increased morbidity and mortality and decreased functional status (13,14). Approximately 29–43% of patients with cancer (all types, all stages) fulfill the diagnostic criteria for psychiatric disorder (14,15). A number of studies have suggested that psychosocial care services contribute to improving patients' quality of life (16–20). However, cancer patients report that many health-care providers still do not consider psychosocial support as an integral component of quality cancer care and may fail to recognize, adequately treat or provide a referral to the required services for depression and distress in cancer patients (9,21,22). The reasons for under-recognition are the failure of clinicians to inquire about psychosocial problems because of inadequate education and training (including inadequate clinical practice guidelines) in these issues, a lack of awareness of available services to address these needs (23) or a lack of knowledge about how to integrate the attention to psychosocial health needs into their practice (15). The program which could address cross-system problems and coordinate benefits is needed.

One of the solutions for poor coordination is to improve networking and collaboration between systems; integration between psychiatry and palliative care programs.

Integration is defined as the search to connect the health-care system with other service systems in order to improve outcomes (24).

Integration is classified into three different levels: linkage, coordination and full integration. First, 'linkage' promotes the relationships between systems that serve the whole populations without having to rely on outside systems for special relationships. Linkage begins with screening to identify emergent needs. When more serious conditions are identified, health professionals know where it is appropriate in other systems to send people and how to ensure that they get there. Second, coordination requires structures and managers to coordinate benefits and care across systems. Coordination is more structured than linkage, but systems are operated independently of one

another. Third, full integration creates new programs where resources from multiple systems are pooled. The fully integrated system gets control over several resources to define new benefits directly.

There are a number of barriers to collaboration between psychiatry and palliative care program, such as the misinterpretation that psychiatry is excessively medicalized, that psychiatric treatment is too difficult to practice in daily oncological settings and that patients refuse referral for psychiatric treatment (25–27). The previous survey noted that 45% of hospices in the UK have no access to psychological and psychiatric services and also revealed a large discrepancy in provision compared with the recommendations made in recent guidelines (28). The linkage between palliative care and psychiatry has been attempted only in discrete medical settings and is not yet firmly established as an institution.

Given the substantial prevalence rates and the management challenges presented by many of the patients, collaboration between psychiatry and palliative medicine has the potential to enhance the quality of medical practice, education and research. One of the solutions for promoting integration between the two fields in practice is to promote a full integrated care model, which involves with resources directly.

In Japan, the Cancer Control Act was approved in 2006, and prefectural and local cancer hospitals were designated by the government (29). The designated cancer hospitals were required to provide a hospital-based palliative care team, with a palliative care specialist, a consultation-liaison psychiatrist and a certified advanced nurse practitioner as core members.

In addition, national medical insurance covers the services provided by qualified palliative care teams that fulfill the necessary conditions: palliative care teams must be interdisciplinary teams composed of full-time core members with a palliative care specialist, a consultation-liaison psychiatrist, a certified advanced nurse practitioner and hospital pharmacists. The approval of palliative care teams by the insurance plan encourages the dissemination of palliative care service in practice (11).

To date, there have been few reports on the activities of consultation-liaison psychiatrists on palliative care teams. The current state of availability of psychiatric consultation-liaison services in palliative care settings and the degree of integration between psychiatry and palliative care services are not known. Many cancer hospitals state that they provide psychosocial support with palliative care; however, the structure, processes and outcomes of their support programs remain unclear. The purpose of our survey was to determine the availability and the degree of integration of psychiatric consultation-liaison services and palliative care programs in Japanese designated cancer hospitals. In addition, a comparison was made between the cancer hospitals with approved palliative care teams and those with non-approved palliative care teams.

PATIENTS AND METHODS

CONTENTS OF SURVEY

Survey questions were drawn up after a review of pertinent literature. A panel of experts including consultation-liaison psychiatrists, psychosomatic physicians, psychologists, nurses and palliative care specialists reviewed and revised the survey before distribution (4,19,30,31). Survey questions were generated based on the tripartite division of quality assessment and monitoring: structure, processes and outcomes to evaluate the clinical aspects of consultation-liaison psychiatry in palliative medicine (32). The questionnaire consisted of multiple-choice, Likert-scale and fill-in questions.

The questionnaire focused on six areas, which included hospital characteristics, professional backgrounds, clinical activities, availabilities, processes of practice and educational activities. Specific attention was paid to consultation processes: assessing physical and psychosocial symptoms, assessing decision-making capacities, assisting with decision-making regarding treatment, establishing the goals of care, interacting frequently with physicians and staff, coordinating care across providers and providing appropriate follow-up.

SUBJECTS

CANCER HOSPITALS

The designated cancer hospitals in Japan were identified from the database of the Center for Cancer Control and Information Services at the National Cancer Center and the list published by the Office for Cancer Control, Health Services Bureau, Ministry of Health, Labour and Welfare.

We obtained a list of 375 government-designated cancer hospitals, which provide services to ~25% of the cancer patients in Japan. At 90 of the designated cancer hospitals, the palliative care teams were approved for national medical insurance. We surveyed all government-designated cancer hospitals.

We identified the consultation-liaison psychiatrists (in some centers, psychosomatic physicians on behalf of psychiatrists) of 375 government-designated cancer hospitals from the database of the Center for Cancer Control and Information Services at the National Cancer Center and verified those who were core members of the palliative care teams through personal telephone contact with the cancer care support center of each institution.

SURVEY PROCESS

Survey questionnaires were sent to the 375 government-designated cancer hospitals, asking the team psychiatrists and psychosomatic physicians about their programs and clinical activities. The initial invitation was included with the mail survey. Recipients were given 6 weeks to complete the questionnaire anonymously and return it by mail. A reminder

letter was sent to non-respondents at 6 and 12 weeks. Data collection was performed between November 2009 and February 2010.

STATISTICAL ANALYSIS

We summarized the availability and the characteristics of psychiatric consultation-liaison services involved with the palliative care teams by using standard descriptive statistics, including medians, interquartile ranges (IQRs), proportions and frequencies, together with 95% confidence intervals where appropriate. Differences in services provided between the approved and non-approved palliative care teams were evaluated using Fisher exact tests for categorical variables. The Mann–Whitney test was used for non-parametric continuous variables. $P < 0.05$ was considered statistically significant. SPSS version 17.0 software (SPSS Inc., Chicago, IL) was used for statistical analyses.

RESULTS

Of the 375 questionnaires that were mailed, 243 were returned (response rate = 64.8%). Of these, 10 were excluded due to missing data for the primary end points. Thus, 233 responses were finally analyzed (effective response rate = 62.1%). Psychiatrists and psychosomatic physicians of the approved palliative care teams were more likely to respond compared with those of the non-approved palliative care teams (88.8 versus 53.7%).

CHARACTERISTICS OF CONSULTATION-LIAISON PSYCHIATRISTS AND PSYCHOSOMATIC PHYSICIANS AT DESIGNATED CANCER HOSPITALS

Table 1 shows the background characteristics of consultation-liaison psychiatrists and psychosomatic physicians, infrastructure for psychiatry and palliative care, and structure of palliative care teams at designated cancer hospitals. The years of clinical experience of psychiatrists at cancer hospitals with approved palliative care teams was shorter than those with non-approved palliative care teams [16.3 versus 18.8 (years); $P < 0.02$]. On the other hand, the rate of psychiatrists of approved palliative care teams taken part in the government-certified palliative care workshop was higher than that of non-approved palliative care teams (90 versus 77%; $P < 0.02$).

Compared with the cancer hospitals with non-approved palliative care teams, those with approved palliative care teams were significantly more likely to have full-time psychiatrists and psychiatric outpatient services. All cancer hospitals with approved palliative care teams involved psychiatric consultation-liaison services. On the other hand, the rate of integration of services was only 73% at cancer hospitals with non-approved palliative care teams.

The number of inpatient beds was higher at cancer hospitals with approved palliative care teams compared with those

Table 1. Characteristics of consultation-liaison psychiatrists and psychosomatic physicians at designated cancer hospitals

	Cancer hospitals with approved palliative care teams (n = 80)	Cancer hospitals with non-approved palliative care teams (n = 153)	P-value
Professional background of psychiatrists and psychosomatic physicians on palliative care team			
Clinical experience (years)	16.3 (± 6.9)	18.8 (± 8.0)	0.02
Clinical experience in cancer care (years)	7.9 (± 6.8)	7.0 (± 6.5)	0.33
Registration of government-certified palliative care workshop, n (%)	72 (90%)	117 (77%)	0.02
Psychiatrist on palliative care team, n (%)			
Involvement of psychiatric consultation service in palliative care team	80 (100)	110 (73)	<0.001
Full time	19 (24)	11 (7)	
≥50% of protected time	30 (38)	22 (14)	
Hospital, n (%)			
Cancer center	8 (10)	20 (13)	0.49
University hospital	32 (40)	21 (14)	0.002
Number of inpatients beds	702	590	<0.001
Number of inpatients with cancer in 2007	3723	2573	<0.001
Inpatients with cancer (%) in 2008	30.1	24.7	0.043
Infrastructure of hospital, n (%)			
Palliative care units, institution-operated hospice	16 (20)	33 (22)	0.87
Psychiatric ward	44 (55)	54 (35)	0.005
Outpatient clinic	71 (89)	109 (71)	0.003
Consultation-liaison service	76 (95)	134 (88)	0.10
Psychiatrists, median	4	1	<0.001
>5	35 (44)	30 (20)	
2–4	23 (29)	43 (28)	
1	19 (24)	34 (22)	
Palliative care team			
Palliative care physician			
Full-time equivalent positions, median (IQR)	1 (1–3)	1 (0–2)	0.008
Physicians with ≥50% of protected time, median	2	2	0.23
Nurses	1	1	0.83
Pharmacists, median	1	1	0.65

with non-approved palliative care teams. Psychiatric consultation-liaison services and psychiatric outpatient clinics were common in both cancer hospitals with approved palliative care teams and those with non-approved palliative care teams. Only 20% of cancer hospitals offered palliative care units or institution-operated hospices.

INVOLVEMENT OF PSYCHIATRIC CONSULTATION-LIAISON SERVICES IN PALLIATIVE CARE PROGRAMS

Table 2 provides an overview of the involvement of psychiatric consultation-liaison services in palliative care teams. Compared with the cancer hospitals with non-approved palliative care teams, the approved palliative care teams

provided twice as many referrals (25 versus 12; *P* < 0.001), conducted rounds with all team members more frequently and held conferences more frequently. Similarly, psychiatrists of approved palliative care teams participated in team rounds and conferences more frequently. On the other hand, only half the consultation-liaison psychiatrists typically attended the rounds of the palliative care teams.

AVAILABILITY OF PSYCHIATRIC SERVICES IN PALLIATIVE CARE PROGRAMS

Table 3 provides information about the structure and processes of psychiatric consultation-liaison services in palliative care programs. Psychiatric consultation-liaison services

Table 2. Involvement of psychiatric consultation-liaison services in palliative care programs

	Cancer hospitals with approved palliative care teams (<i>n</i> = 80)	Cancer hospitals with non-approved palliative care teams (<i>n</i> = 153)	<i>P</i> -value
Palliative care consultation services			
Availability days per week median (IQR)	5 (3–5)	3 (1–5)	<0.001
Number of referrals (per 2 months)	25	12	<0.001
Frequency of rounds with all team members, <i>n</i> (%)			
>1/week	33 (41)	35 (23)	0.001
1/week	42 (53)	88 (59)	
1–3/month	0 (0)	2 (1)	
None	5 (6)	13 (9)	
Frequency of conferences with all team members, <i>n</i> (%)			
>1/week	13 (16)	11 (7)	0.008
1/week	60 (75)	109 (73)	
1–3/month	2 (3)	22 (15)	
None	5 (6)	5 (3)	
Contributions to palliative care team, <i>n</i> (%)			
Participating in team rounds			
≥80%	42 (53)	62 (41)	0.003
≥40 and <80%	21 (26)	26 (17)	
<40%	17 (21)	64 (42)	
Participating in team conferences			
≥80%	61 (76)	97 (63)	0.02
≥40 and <80%	7 (9)	27 (18)	
<40%	12 (15)	28 (18)	

involved with palliative care teams provided not only inpatient consultations, but also outpatient clinics and family support. Generally, psychiatrists of approved palliative care teams served more patients, followed up more frequently and responded more readily to referrals compared with psychiatrists on non-approved palliative care teams.

Regarding the total time spent for consultations and follow-up, psychiatrists at cancer hospitals with approved palliative care teams committed more of their time to palliative care consultations compared with psychiatrists at cancer hospitals with non-approved palliative care teams. However, the time devoted to palliative care consultations remained at about 12 h/week at cancer hospitals with approved palliative care teams, which had full-time psychiatrists as core members.

ATTITUDES AND PRACTICES OF PSYCHIATRISTS

Table 4 reveals information about the practice of consultation-liaison psychiatric services involved with palliative care teams provided by consultation-liaison psychiatrists. Table 4 shows the number of hospitals where psychiatric consultation-liaison services adhered to the

consultation practices. In both cancer hospitals with approved palliative care teams and those with non-approved palliative care teams, the adherence rates are various by subjects. The adherence rate was high in assessing psychiatric symptoms directly (99% in cancer hospitals with approved palliative care team and 97% in those with non-approved palliative care teams) and assessing prognostic expectations. On the other hands, the adherence rate was low in educating the nursing and support staff regarding aspects of patient management and care planning (29% in cancer hospitals with approved palliative care team and 18% in those with non-approved palliative care teams). The rate of adherence between cancer hospitals with approved palliative care teams and those with non-approved palliative care teams differed in 16 of the 25 measures. For psychiatric assessment, the adherence rate was high (assessing and managing psychiatric symptoms directly, 99 versus 94%). On the other hand, the adherence rate varied for physical assessment (prognostic expectations, pain, activities of daily life), social assessment (financial, family problems, place of care) and coordination (discussing management with the physician directly, educating the staff regarding aspects of patient management).

Table 3. Availability of psychiatric services in palliative care programs

	Cancer hospitals with approved palliative care teams (<i>n</i> = 80)	Cancer hospitals with non-approved palliative care teams (<i>n</i> = 153)	<i>P</i> -value
Psychiatric service provided by palliative care teams, <i>n</i> (%)			
Inpatient	80 (100)	153 (100)	>0.99
Outpatient	67 (84)	109 (71)	0.04
Family	57 (71)	88 (58)	0.04
Bereaved family	30 (38)	38 (25)	0.043
Availability (inpatient)			
Response time to a request, <i>n</i> (%)			
Within 24 h	60 (75)	77 (51)	<0.001
Within 2–3 days	17 (21)	37 (24)	
Within 1 week	3 (4)	37 (24)	
Responding to an urgent request during business hours	76 (95)	118 (78)	0.001
Responding to an urgent request after office hours, <i>n</i> (%)			
Corresponding directly	19 (24)	33 (22)	0.043
By substitution	46 (58)	70 (46)	
Unsupported	15 (19)	47 (31)	
Emergency care			
Corresponding directly	23 (29)	32 (22)	0.31
By substitution	45 (56)	81 (54)	
Unsupported	11 (14)	34 (23)	
Number of referrals/2 weeks, median (IQR)	5.5 (4–10)	4 (2–8)	0.001
Number of rounds for follow-up/week	2 (1–3)	1 (1–2)	<0.001
Days from referral to discharge, median (IQR)			
1–7 days	12 (17)	36 (27)	0.26
>1–4 weeks	46 (67)	77 (58)	
>1–3 months	10 (15)	17 (13)	
>3 months	1 (1)	1 (1)	
Percentage of patients who died during intervention	30 (10–50)	50 (20–66.25)	0.040
Total time spent on consultation and follow-up (min/week)	741 (555–927)	516 (393–638)	0.002
Availability (outpatient), <i>n</i> (%)			
Response time to a request			
Within 24 h	26 (37)	39 (33)	0.45
Within 2–3 days	18 (26)	22 (19)	
Within 1 week	25 (36)	56 (48)	
Responding to an urgent request during business hours	64 (92)	90 (77)	0.016
Responding to an urgent request after office hours			
Corresponding directly	12 (17)	24 (21)	0.85
By substitution	33 (47)	52 (44)	
Unsupported	25 (36)	41 (35)	

DISCUSSION

Our survey provides information on the availability of psychiatric consultation-liaison services involved with palliative care programs in Japanese cancer hospitals. Compared with

cancer hospitals with non-approved palliative care teams, those with approved palliative care teams were more likely to integrate psychiatric consultation-liaison services for cancer patients into their palliative care programs. Psychiatrists assessed cancer patients from various

Table 4. Attitudes and practices of psychiatrists

	Cancer hospitals with approved palliative care teams, <i>n</i> (%) (<i>n</i> = 80)	Cancer hospitals with non-approved palliative care teams, <i>n</i> (%) (<i>n</i> = 153)	<i>P</i> -value
Asking the requesting physician directly how you can best help them			
≥80%	56 (70)	90 (59)	0.07
≥40 and <80	19 (24)	43 (29)	
<40%	5 (6)	20 (13)	
Anticipating potential problems			
≥80%	64 (80)	110 (72)	0.16
≥40 and <80%	13 (16)	31 (20)	
<40%	3 (4)	12 (8)	
Assessing and managing psychiatric symptoms directly			
≥80%	79 (99)	144 (94)	0.10
≥40 and <80%	1 (1)	8 (5)	
<40%	0 (0)	1 (1)	
Reviewing medical records			
≥80%	78 (98)	135 (88)	0.02
≥40 and <80%	1 (1)	15 (10)	
<40%	1 (1)	3 (2)	
Assessing prognostic expectations			
≥80%	74 (93)	124 (81)	0.02
≥40 and <80%	6 (7)	23 (15)	
<40%	0 (0)	6 (4)	
Assessing pain			
≥80%	66 (83)	106 (69)	0.02
≥40 and <80%	10 (13)	25 (16)	
<40%	4 (5)	22 (15)	
Assessing physical symptoms			
≥80%	67 (84)	103 (67)	0.004
≥40 and <80%	9 (11)	21 (14)	
<40%	4 (5)	29 (19)	
Assessing activities of daily life			
≥80%	57 (71)	90 (59)	0.04
≥40 and <80%	14 (18)	30 (20)	
<40%	9 (11)	33 (21)	
Assisting the primary care provider in communicating bad news			
≥80%	71 (89)	129 (85)	0.33
≥40 and <80%	7 (9)	15 (10)	
<40%	2 (2)	9 (5)	
Assessing financial resources			
≥80%	37 (46)	54 (35)	0.01
≥40 and <80%	28 (35)	43 (28)	
<40%	15 (19)	56 (37)	
Referrals to hospice, home care and other placements			
≥80%	47 (59)	63 (41)	0.01
≥40 and <80%	15 (19)	39 (26)	
<40%	18 (23)	51 (33)	

Continued

Table 4. *Continued*

	Cancer hospitals with approved palliative care teams, <i>n</i> (%) (<i>n</i> = 80)	Cancer hospitals with non-approved palliative care teams, <i>n</i> (%) (<i>n</i> = 153)	<i>P</i> -value
Assessing needs in term of discharge support			
≥80%	42 (53)	59 (39)	0.01
≥40 and <80%	21 (26)	35 (23)	
<40%	17 (21)	59 (39)	
Assessing doctor–patient relationship			
≥80%	48 (60)	78 (51)	0.13
≥40 and <80%	17 (21)	33 (22)	
<40%	15 (19)	42 (27)	
Assessing family problems			
≥80%	56 (70)	85 (56)	0.02
≥40 and <80%	18 (23)	45 (29)	
<40%	6 (7)	23 (15)	
Eliciting the patient’s understanding and opinions about the disease and its treatment			
≥80%	65 (81)	106 (69)	0.043
≥40 and <80%	9 (11)	24 (16)	
<40%	6 (8)	23 (15)	
Eliciting the family’s understanding and opinions about the disease and its treatment			
≥80%	50 (63)	74 (48)	0.03
≥40 and <80%	20 (25)	47 (31)	
<40%	10 (12)	32 (21)	
Making notations on medical charts			
≥80%	76 (95)	147 (96)	0.68
≥40 and <80%	2 (3)	5 (3)	
<40%	2 (3)	1 (1)	
Planning psychiatric treatment with other team members			
≥80%	64 (80)	109 (72)	0.048
≥40 and <80%	14 (18)	31 (21)	
<40%	2 (3)	11 (7)	
Discussing patient management with the physician directly			
≥80%	58 (73)	81 (53)	0.004
≥40 and <80%	16 (20)	50 (33)	
<40%	6 (7)	22 (14)	
Recommending psychiatric pharmacotherapy			
≥80%	60 (75)	114 (75)	0.85
≥40 and <80%	19 (24)	33 (22)	
<40%	1 (1)	6 (4)	
Implementing medical intervention with permission from the primary team			
≥80%	58 (73)	102 (67)	0.51
≥40 and <80%	7 (9)	22 (15)	
<40%	15 (19)	28 (18)	
Implementing psychotherapeutic intervention with permission from the primary team			
≥80%	67 (84)	109 (72)	0.03
≥40 and <80%	11 (14)	30 (20)	
<40%	2 (3)	13 (9)	

Continued

Table 4. *Continued*

	Cancer hospitals with approved palliative care teams, <i>n</i> (%) (<i>n</i> = 80)	Cancer hospitals with non-approved palliative care teams, <i>n</i> (%) (<i>n</i> = 153)	<i>P</i> -value
Participating in patient care, with other team members			
≥80%	72 (90)	118 (77)	0.01
≥40 and <80%	8 (10)	29 (19)	
<40%	0 (0)	6 (4)	
Educating the nursing and support staff regarding aspects of patient management and care plan			
≥80%	23 (29)	27 (18)	<0.001
≥40 and <80%	32 (40)	36 (23)	
<40%	25 (31)	89 (59)	
Coordinating a family meeting to discuss further plans for care			
≥80%	23 (29)	39 (26)	0.40
≥40 and <80%	46 (58)	85 (56)	
<40%	11 (14)	28 (18)	

perspectives with physicians, provided direct patient care, educated team members on the mental health domains and had a highly interdisciplinary approach to their work. Although there remains some variability in the infrastructure and delivery of psychosocial care in cancer settings, our results suggest that the integration model as psychiatric consultation-liaison services involved in palliative care teams is gaining acceptance in palliative care settings.

Although many institutions have developed elaborate support programs for a variety of symptoms, psychiatric symptoms and psychological problems of patients with cancer are still unrecognized, resulting in their not being offered access to the needed services (16,19,20,33). The National Comprehensive Cancer Network guidelines recommend screening for distress, which broadly defines emotional disturbances; however, only half the NCCN member institutions in the USA conducted screening to identify distressed patients (34). In palliative care programs, only half the National Cancer Institute cancer centers assessed and managed psychiatric disorders (4). Although various linkage programs, including screening programs and referrals, have been used in attempt to improve the continuity, the optimal system remains uncertain.

The full integration model aims to facilitate deinstitutionalization of dual assessment and pursues the best continuity and coordination for the complex needs (35). The full integration needs specialized types of interventions, expedited access to each other and close collaboration between professionals.

The involvement of psychiatric services in palliative care programs offers an advantage over conventional support programs in the detection and management of psychiatric disorders and psychosocial problems. First, psychiatrists provide medical care together with the palliative care teams, and a formalized mechanism for providing psychiatric services in

the usual palliative care programs prevents the failure to connect individuals with the referred providers and gain the patients' acceptance of the referral (22,36,37). Second, psychiatrists assess the mental status and evaluate the decision-making capacity of patients, which contributes to enhanced quality of life for patients and families faced with life-threatening illness. Third, palliative care teams often face difficult settings and conflicting ethical issues. Psychiatrists can recognize and mitigate staff stress and address burnout.

Our survey revealed that cancer hospitals with certified palliative care teams offered integrated services between palliative care and consultation-liaison psychiatry; psychiatrists saw cancer patients with the palliative care teams directly, assessed cancer patients in a comprehensive manner and made the coordination process more effective with other staff members.

Although all of the cancer hospitals reported the provision of psychiatric consultation services, some barriers remain at the level of interaction among different clinicians serving the same patient. In our study, 75% of consultation-liaison psychiatrists on certified palliative care teams were ready to respond to urgent requests (within 24 h). About 30% of consultations were urgent requests (20). Many programs provided inpatient services. However, on an outpatient basis, only 40% of cancer hospitals were prepared for referral to consultation on the same day. Most cancer treatment has shifted from inpatient to ambulatory care settings (38) and the structure and processes must be modified accordingly.

On the other hand, a number of barriers to collaboration remain unresolved. The primary problems with attempts to integrate are structural and financial barriers. The integration requires the palliative care teams to expand their knowledge, perspectives and interest. The integrated palliative care teams have to deal with the needs of various patients appropriately, and it takes time to learn about the capabilities of

the other systems, to decide how to work together and to communicate. They often feel 'consultation fatigue'. Also, the integration requires any of various staff to be involved at the clinical management. The cost of support staff can be overwhelming. For this reason, the approval of palliative care teams for national health insurance coverage encourages and facilitates the provision of psychiatric consultation-liaison services in palliative care programs under today's economic circumstances (25).

Most psychiatrists on palliative care teams see patients for direct consultation, assess their condition from various aspects and educate staff members regarding mental health problems. However, the quality and actual frequency of supportive care at each hospital varies. Psychiatrists are actively engaged in providing psychiatric care as well as coordination among physicians, nursing staff and the palliative care teams. On the other hand, educational activities are low in general. The key component to achieve the goal of full integration is the development of common clinical information systems. In previous studies, integrating information system is effective to facilitate communication between professionals (35). For approved palliative care teams, developing the information systems shared in the teams, such as clinical assessment tools, protocols about psychiatric treatment and education programs are needed. Also, for non-approved palliative care teams, establishment of a close contact and improving links between programs might be realistic strategies, rather than building up the full integration by constraint.

Our study had several limitations. First, the responses from our survey could be biased, because they were based on self-assessment and recalled information. Secondly, the response rate of the cancer hospitals with non-approved palliative care teams was low, possibly because low-activity institutions may be reluctant to participate in this type of survey. This may result in an overestimation of psychiatric consultation-liaison services and palliative care programs in cancer hospitals with non-approved palliative care teams. Third, the gold standard of psychosocial support has not yet been obtained. Although the questionnaire was generated based on a literature review and an expert panel, it has not been validated. The sphere of action of consultation-liaison psychiatry is complex, and it is difficult to identify new measurements for assessing the quality of the programs. It was recently suggested that the patients' subjective well-being and the medical team's difficulty in helping patients might be used to measure the effectiveness of consultation-liaison psychiatry. Further research is needed to improve the measurements applied to the consultation-liaison processes. Fourth, some results of this survey may reflect the impact from differences in country of practice and education.

In conclusion, these results suggest that the integration model between psychiatric consultation-liaison services and palliative care services holds some promise as an acceptable model for improving supportive care for patients with cancer. Although most designated cancer hospitals have a

psychiatric consultation-liaison service, significant gaps remain in the delivery of care. Additional research is needed to establish the level of synergistic effect between the psychiatric service and the palliative medicine.

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Conflict of interest statement

None declared.

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