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Psychiatric disorders and background characteristics of cancer patients' family members referred to psychiatric consultation service at National Cancer Center Hospitals in Japan

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ABSTRACT

Objective: Psychological distress of cancer patients' family members is treated by psychiatric consultation service for outpatients at National Cancer Center Hospitals in Japan. The purpose of this study was to identify psychiatric disorders and explore background characteristics of cancer patients' family members referred to psychiatric consultation service, so that we could better understand current utilization of this psychiatric consultation service for cancer patients' family members.

Methods: A retrospective descriptive study using clinical practice data obtained for 5 years (from January 2000 to December 2004) was conducted at two National Cancer Center Hospitals. We reviewed the psychiatric consultation database, computerized patient database of the National Cancer Center Hospitals, and medical charts of cancer patients' family members who were referred to psychiatry and their cancer patients.

Results: Out of a total of 4992 psychiatric consultations, 118 (2%) were for cancer patients' family members. The most common psychiatric disorders among cancer patients' family members were adjustment disorders ($n = 69$, 58%), followed by major depression ($n = 30$, 25%). Female ($n = 101$, 86%), spouse ($n = 87$, 74%), married ($n = 92$, 78%), and housewife ($n = 63$, 53%) were the most common background characteristics of the family members. Sixty-four percent of cancer patients ($n = 75$) were hospitalized at the time of their family members' referral and 34% of cancer patients ($n = 40$) had already received psychiatric consultation service and 55% of cancer patients ($n = 65$) had delivered bad news prior to their family members' referral.

Significance of the research: We found that very few family members were provided with psychiatric consultation service at two National Cancer Center Hospitals. Adjustment disorders are suggested to be the most common psychiatric disorders among cancer patients' family members.

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KEYWORDS: Psychiatric disorders, Background characteristics, Cancer patients', family members, Psychiatric consultation, Japan

INTRODUCTION

Cancer is recognized as a disease that influences all the family members (Rait & Lederberg, 1990; Saeki et al., 2000), and psychological distress of cancer patients' family members is considered to be equal to that of cancer patients themselves in Western countries (Kissane et al., 1994; Plumb & Holland, 1977). Previous studies using self-report questionnaires have reported that probable cases of clinical psychological distress were 20%–30% (Pitceathly & Maguire, 2003). The few studies using psychiatric interviews have found that approximately 10%–50% of family members experience some form of psychiatric morbidity (Sharan et al., 1999; Pitceathly & Maguire, 2003).

Psychological distress of cancer patients' family members is treated by psychiatric consultation service for outpatients at National Cancer Center Hospitals in Japan. We recently reported on psychiatric disorders among cancer patients' family members of the National Cancer Center Hospital East in Japan and showed that very few family members were provided with psychiatric consultation service (3% of total psychiatric consultations; Akechi et al., 2006). This result raises the possibility that psychological distress among family members may be underestimated; thus, the development of an efficient consultation service for cancer patients' family members is an urgent issue in Japan. Therefore, we need to examine the psychiatric consultation data of two National Cancer Center Hospitals to improve the institutional bias regarding psychiatric disorders and background characteristics in family members noted in our previous study (Akechi et al., 2006).

The clinical characteristics of cancer patients are important factors that influence the psychological distress of family members. For example, physical characteristics such as pain (Miaskowski et al., 1997), vomiting or delirium (Prigerson et al., 2003), and advanced disease status (Kurtz et al., 1994; Weitzner et al., 1999) were associated with psychological distress in family members. Furthermore, psychological distress in cancer patients was positively associated with psychological distress in caregivers in a recent meta-analysis (Hodges et al., 2005). Thus, the clinical characteristics of cancerpatients can be regarded as important information concerning the psychological states of family members. In particular, clinical characteristics of cancer patients including those both medical and psychological provide useful information for health care professionals because they can be used to determine the timing of family members' psychiatric consultations. Therefore, we examined two clinical characteristics of cancer patients as the background characteristics of family members: "patient had received psychiatric consultation service" and "patient had delivered bad news" prior to their family members' referrals.

The purpose of this study was to identify psychiatric disorders and explore background characteristics of cancer patients' family members referred to a psychiatric consultation service, so that we could better understand current utilization of this psychiatric consultation service for cancer patients' family members.

METHODS

Psychiatric Consultation Service at National Cancer Center Hospitals

As of January 2004, the National Cancer Center Hospital had 600 beds and staff members of the Psychiatry Service were one staff psychiatrist as outpatient clinician, one part-time adjunct psychiatrist, one part-time clinical psychologist, and one psychiatric clinical nurse specialist. The National Cancer Center Hospital East has 425 beds and staff members of the Psychiatry Service were two staff psychiatrists and three part-time psychiatrists as outpatient clinicians, one part-time adjunct psychiatrist, and one clinical psychologist.

Both Psychiatry Services provide two main services, one for outpatients and one for inpatients who were referred from physicians belonging to other divisions who are responsible for cancer patients. Psychological distress of cancer patients' family members is treated by psychiatric consultation service for outpatients at National Cancer Center Hospitals in Japan, and health care professionals pay attention to psychological distress of cancer patients' family members and recommend the use of the psychiatric consultation service, if necessary.

Furthermore, both Psychiatry Services share the psychiatric consultation database records, and information was input into the database by psychiatrists after they had conducted patient examinations. This computerized database (Akechi et al., 2001a) included demographic variables such as age, gender, marital status, and employment status as well as psychiatric diagnosis. The psychiatric disorders were diagnosed at the time of the family member's initial visit according to the *Diagnostic and Statistical*

Manual of Mental Disorders, 4th edition (DSM-IV). Each psychiatry division is independent; however, a case conference is held weekly to have consistency in psychiatric diagnosis and treatment.

Subjects and Procedure

First, we reviewed the psychiatric consultation database records of the Psychiatry Services of the National Cancer Center Hospital and the National Cancer Center Hospital East for the period from January 2000 to December 2004 to obtain characteristics of outpatients and background characteristics of family members who were referred to the Psychiatry Service. Family members were defined as first-degree relatives (spouse, parents, children, siblings) of cancer patients. Background characteristics of family members such as age, gender, marital status, employment status, and psychiatric diagnosis were obtained from psychiatric consultation database records.

Then, we examined family members' medical charts to identify other background characteristics such as their relationship to the cancer patient and history of psychiatric disorder.

Finally, we examined the overall computerized patient database of National Cancer Center Hospital and National Cancer Center Hospital East and the patients' medical charts to identify cancer patients whose family members had been referred to the Psychiatry Service. Thereafter, we reviewed the patients' medical charts to obtain clinical characteristics such as patient cancer site, patient setting, patient had received psychiatric consultation service prior to their family referrals (presence or absence, date, psychiatric disorders), and patient had delivered bad news prior to their family referrals (presence or absence, date, the type of information). Four types of bad news were categorized according to the main type of information given to the cancer patient: initial cancer diagnosis, treatment failure or disease progression, transition to palliative care, and poor prognosis or limited life expectancy.

Informed consent and the approval of our institutional review board were not obtained because this was a retrospective study using clinical practice data.

RESULTS

Characteristics of Patients Who Were Referred to a Psychiatric Consultation Service

Of a total of 4992 psychiatric consultation services, 1436 (29%) were for outpatients. Among psychiatric consultation services for outpatients, 1273 (26%) were for cancer patients, 118 (2%) were for family members, and 45 (1%) were for medical staff members at two National Cancer Center Hospitals. The proportion of family members who were referred to psychiatry as outpatients were 2% ($n = 56$) of the total of 3064 consultations at the National Cancer Center Hospital and 3% ($n = 62$) of the total of 1928 consultations at the National Cancer Center Hospital East.

Background Characteristics of Family Members Who Were Referred to a Psychiatric Consultation Service

We identified the most frequent background characteristics of the family members who were referred to each Psychiatry Service at two National Cancer Center Hospitals as shown in Table 1: female ($n = 101$, 86%), spouse ($n = 87$, 74%), married ($n = 92$, 78%), and housewife ($n = 63$, 53%).

Among background characteristics of family members, the most common patient cancer site was the lung ($n = 18$, 15%), followed by the stomach ($n = 12$, 10%). Many of the cancer patients were hospitalized at the time of their family members' referral ($n = 75$, 64%), and a few of them had died ($n = 9$, 8%).

Thirty-four percent ($n = 40$) had received psychiatric consultation service for cancer patients prior to their family members' referrals. The most common psychiatric disorder among cancer patients was adjustment disorders ($n = 13$, 11%), the second was major depression and no diagnosis ($n = 7$, 6%), and the third was delirium ($n = 6$, 5%) The period from patients' psychiatric consultation to family members' referrals ranged from 0 to 896 days (mean $\pm$ *SD*: 75 $\pm$ 149, median: 16).

Fifty-five percent of cancer patients ($n = 65$) had delivered bad news for patients prior to their family members' referrals. The types of bad news were initial cancer diagnosis ($n = 19$, 16%), treatment failure or disease progression ($n = 13$, 11%), transition to palliative care ($n = 9$, 8%), and poor prognosis or limited life expectancy ($n = 24$, 20%). The period from patients' delivery of bad news to family members' referrals ranged from 0 to 427 days (mean $\pm$ *SD*: 31 $\pm$ 63, median: 12).

Psychiatric Disorders of Family Members Who Were Referred to a Psychiatric Consultation Service

The most common psychiatric disorders among cancer patients' family members were adjustment disorders ($n = 69$, 58%: with anxiety, $n = 21$; with depressed mood, $n = 12$; with mixed anxiety and depressed mood, $n = 35$; and with mixed disturbance of emotions and conduct, $n = 1$), followed by major depression ($n = 30$, 25%) as shown in Table 2. The

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Table 1. *Background characteristics of family members who were referred to psychiatric consultation service*

	Total (n=118)		NCCH (n=56)		NCCHE (n=62)	
	n	(%)	n	(%)	n	(%)
Age (years)						
Mean ± SD	51 ± 13		49 ± 13		52 ± 13	
Range	20–79		26–74		20–79	
Gender						
Male	17	(14)	7	(13)	10	(16)
Female	101	(86)	49	(88)	52	(84)
Relationship to patient						
Spouse	87	(74)	34	(61)	53	(85)
Parent	16	(14)	12	(21)	4	(6)
Children	13	(11)	9	(16)	4	(6)
Sibling	2	(2)	1	(2)	1	(2)
Marital status						
Married	92	(78)	41	(73)	51	(82)
Unmarried	11	(9)	8	(14)	3	(5)
Divorced	1	(1)	1	(2)	0	0
Widowed	14	(12)	6	(11)	8	(13)
Employment status						
Full time	29	(25)	15	(27)	14	(23)
Part time	15	(13)	6	(11)	9	(15)
Housewife	63	(53)	29	(52)	34	(55)
Retired	5	(4)	1	(2)	4	(6)
History of any psychiatric disorder						
Presence	14	(12)	9	(16)	5	(8)
Absence	104	(88)	47	(84)	57	(92)
Patient cancer site						
Lung	18	(15)	6	(11)	12	(19)
Stomach	12	(10)	7	(13)	5	(8)
Colon	8	(7)	4	(7)	4	(6)
Esophagus	8	(7)	3	(5)	5	(8)
Breast	6	(5)	1	(2)	5	(8)
Head and neck	7	(6)	1	(2)	6	(10)
Leukemia	6	(5)	2	(4)	4	(6)
Others	41	(35)	28	(50)	13	(21)
Patient setting						
Inpatient	75	(64)	40	(71)	35	(56)
Outpatient	22	(19)	9	(16)	13	(21)
Deceased	9	(8)	3	(5)	6	(10)
Patient had received psychiatric consultation service						
Presence	40	(34)	25	(45)	15	(24)
Absence	66	(56)	27	(48)	39	(63)
Patient had delivered bad news						
Presence	65	(55)	44	(79)	21	(34)
Absence	41	(35)	8	(14)	33	(53)

Some percentages do not add up to 100% because of missing data. NCCH: National Cancer Center Hospital. NCCHE: National Cancer Center Hospital East.

National Cancer Center Hospital had a higher proportion of adjustment disorders (73% vs. 45%) and lower proportion of major depression (14% vs. 35%) than the National Cancer Center Hospital East.

Table 2. *Psychiatric disorders of family members who were referred to psychiatric consultation service*

	Total (n=118)		NCCH (n=56)		NCCHE (n=62)	
	n	(%)	n	(%)	n	(%)
Adjustment disorders	69	(58)	41	(73)	28	(45)
Major depression	30	(25)	8	(14)	22	(35)
No diagnosis	9	(8)	1	(2)	8	(13)
Others	10	(8)	6	(11)	4	(6)

NCCH: National Cancer Center Hospital. NCCHE: National Cancer Center Hospital East.

DISCUSSION

In this study, we found that very few family members were provided with psychiatric consultation service at two National Cancer Center Hospitals (2% of total psychiatric consultation services). Considering psychological distress of cancer patients' family members is equal to that of cancer patients, this result shows the possibility that psychological distress among family members may be underestimated or psychiatric consultation services for family members might not be working enough. A recent study using consecutive sampling in the United States showed only 15% of caregivers with psychiatric disorders accessed a mental health professional (Vanderwerker et al., 2005), though cancer patients' family members are considered as "second order patients" (Rait & Lederberg, 1990). In addition, Japanese cancer patients' family members often devote more time to their role as caregiver (Long & Long, 1982), so this feature of Japanese people may prohibit the utilization of psychiatric consultation services. Cancer center hospitals have the advantage of being able to provide psychiatric treatment for family members at the same hospital at which the cancer patient is being treated, so the dissemination of psychiatric consultation services for family members is desirable.

More than half of family members who were referred to psychiatric consultation services suffered from adjustment disorders in this study; adjustment disorders are suggested to be the most common psychiatric disorders among cancer patients' family members. Recent study in the United States indicated that a total of 13% of the caregivers of advanced cancer patient had met criteria for psychiatric disorder; however, this study did not assess adjustment disorders (Vanderwerker et al., 2005). A future study using consecutive sampling of cancer patients' family members is needed to identify the prevalence of psychiatric disorders, including adjustment disorders.

Women, spouses, and housewives were the relatively common background characteristics of the

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family members who were referred to psychiatric consultation services at both National Cancer Center Hospitals. A previous review study demonstrated that female primary caregivers had high levels of psychiatric morbidity attributable to caregiving: women spend more time on caregiving, report higher levels of caregiver burden and role strain, and are less likely to obtain informal support for caregiving (Yee & Schulz, 2000). Female spouses of cancer patients' may experience high level of psychological distress. However, the clinical setting for our psychiatric consultation service (during the daytime on weekdays) may have prevented male full-time workers from using this service.

Lung and stomach were the most common cancer sites among the patients; this result is consistent with the most common causes of death among men (Ministry of Health, Labour and Welfare, 2004), reflecting the high proportion of female spouses referred for psychiatric consultation in this study. Many of the patients whose family members were referred were hospitalized. Recent studies report that spousal hospitalization for cancer was associated with an increased risk of death among elderly people (Christakis & Allison, 2006), so careful attention to psychological distress and the appropriate recommendation for psychiatric consultation services for spousal caregivers of inpatients by health care professionals may be a strategy for early treatment of psychological distress among family members.

Among clinical characteristics of cancer patients whose family members were referred, 34% of the cancer patients had already received psychiatric consultation services because of psychological distress prior to their family members' referrals. The likelihood of a family member being recommended for outpatient consultation may increase if the cancer patient has already been referred for inpatient consultation, because such a situation increases the accessibility of the members of our psychiatric service to the family members. In addition, family members may be more likely to consult the psychiatric service on their own behalf if the cancer patient has already received consultation. Most family members did not know that psychiatric consultation service is available for cancer patients' family members as well as cancer patients when members of the Psychiatry Service recommend family members to consult, so dissemination of this information is also necessary. The proportions of psychiatric disorders among cancer patients whose family members were referred to psychiatric consultations were nearly equal to those for overall patient consultations (Akechi et al., 2001a), suggesting that no particular psychiatric disorder experienced by cancer patients leads to the need for psychiatric consultation service for family members.

In addition, 55% of the cancer patients had delivered bad news prior to their family member's referral and the types of bad news ranged from diagnosis to prognosis. Regardless of the content, having delivered bad news regarding cancer is a stressful life event for cancer patients, so this event might lead family members to psychological distress. Moreover, Japanese cultural background of delivering bad news and decision making after delivering bad news might be associated with family psychological distress: Information about cancer prognosis and treatment plans are usually given to the families before being given to the patient in Japan (Hattori et al., 1991; Ministry of Health and Welfare, 1994) and family opinions are accorded a larger role by a Japanese patient in decision making (Saeki et al., 2000). So further studies are needed to clarify the association between psychological distress of family members and these events: "patient had received psychiatric consultation service" and "patient had delivered bad news."

This study has several limitations. First, we were only able to examine families who used the psychiatric consultation service. So we could not discuss the association between family members' background characteristics and psychological distress because accessibility to this psychiatric consultation service may influence the results. Second, this study has some methodological limitations because of its retrospective study design: We could not identify all the cancer patients whose families were referred to psychiatric consultation service nor could we identify other characteristics such as actual triggers for family members' psychiatric consultations.

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