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Characteristics and Outcomes of Psychology Referrals in Palliative Care Department

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Abstract

Context: Psychologists can provide unique contributions to interdisciplinary palliative care. Despite research indicating high distress in palliative care cancer patients, little has been reported regarding the feasibility and practice of psychology in this setting.

Objectives: To review the integration of clinical psychology practice in a palliative care department at a major comprehensive cancer center.

Methods: Retrospective chart review of 1940 unique cancer patients (6451 total patient contacts) referred for psychology services provided by clinical psychologists in palliative care from 9/1/2013 to 2/29/2016.

Results: Psychologists provided services to 1644 in-patients (24% of palliative care in-patients) and 296 out-patients (19% of palliative care out-patients). The majority (85%) received services in the in-patient setting. Most patients were female (57%) and white (68%) with a variety of cancer diagnoses.

Adjustment disorders were the most prevalent in both settings with significant differences in other DSM-5 diagnoses by service location ($p < 0.0001$). Psychological assessment (86%) and supportive expressive counseling (79%) were the most frequent services provided in the initial consult. Duration of initial visit was significantly longer in out-patient (median=60 minutes) compared to in-patient setting (median=40 minutes) ($p < 0.0001$). No significant differences were noted between settings regarding the median number of counseling sessions per patient; however, the majority (70%) only received 1 or 2 sessions. Over time, total patient encounters increased in the in-patient setting ($p < 0.0001$), while session lengths in both settings significantly decreased ($p < 0.0001$).

Conclusions: Palliative care psychology services successfully integrated into an interdisciplinary palliative care department and rapidly grew in both in-patient and out-patient settings.

Introduction

Cancer patients experience significant psychological distress that fluctuates on a continuum of emotions including, sadness, fear, depression, anxiety, panic, isolation and can include existential and spiritual crisis through the course of one's cancer experience beginning with diagnosis to end of life.¹ Prevalence rates of distress varies due to differences in operational definitions of distress and other measurement and methodological issues.²⁻⁴ A recent large epidemiological study using a standardized clinical interview found the 4-week prevalence of mental disorders in cancer patients to be 31.8%, with the most prevalent being anxiety disorders (11.5%), mood disorders (6.5%), and adjustment disorders (11%).⁵ These results are comparable to a meta-analyses showing a combined prevalence of 32% in cancer patients during acute care.⁶ Rates are somewhat lower than those reported from a meta-analysis of 94 studies, 24 of which were in palliative care. Results for the palliative care meta-analysis indicated prevalence rates of 16.5% for depression, 15.4% for adjustment disorders, and 9.8% for anxiety disorders. In this meta-analysis, there were no significant differences between palliative care and non-palliative care settings, noting some combination of mood disorders to occur in 30-40% of patients.⁷

Importantly, psychological distress has been associated with greater physical symptom severity, suffering, and mortality^{8,9} with research indicating that psychological and adjustment issues contribute 64% of variance in predicting suffering levels.⁹ While some distress may be normal, particularly for those coping with advanced cancer, individuals with mild-to-moderate distress may have significant impairments in their day-to-day functioning and require psychological intervention, similar to those with diagnosable disorders.^{10,11} Early psychological intervention, similar to the push for early palliative care, may prevent "normal" adjustment from progressing to diagnosable disorders. For this reason, several national mandates have called for routine psychological distress screening and the integration of psychosocial care for all patients.¹²⁻¹⁴ As noted by Holland and colleagues,¹⁵ barriers to psychosocial

care, in general, include busy out-patient clinics; the need for rapid identification of distress in busy clinic settings; poor insurance reimbursement for mental health care; and the stigma of mental health issues.

Per the National Comprehensive Cancer Network (NCCN) Guidelines, palliative care is an interdisciplinary comprehensive approach to symptom management which includes the psychological, social, and spiritual care of patients and their families in an effort to maximize quality of life.¹⁶ At present, few interdisciplinary teams include psychologists,¹⁷ despite the potential for making a significant contribution to the patient's care. The integration of psychologists into the palliative care team may assist with overcoming some of the identified barriers to psychosocial care by having identified personnel to provide assessments, "freeing up" time for the healthcare team in busy out-patient clinics, and "normalizing" distress, by treating it as part of routine oncologic care. Five key skills psychologists may bring to the interdisciplinary team include knowledge in psychological assessment; evidenced-based psychological treatments for individuals, families and groups; education; research; and consultation, supervision and staff support.¹⁸ In fact, the American Psychological Association recognizes the important contribution psychology can make to palliative care in terms of training, research, clinical practice and policy and has advocated for psychologists to increase their presence in end of life care, defining the key competencies needed for the ethical and effective psychological practice.¹⁷

The purpose of this paper is to present the integration of psychologists into an interdisciplinary palliative care team at a comprehensive cancer center, describe the patients serviced and types of services provided, and discuss practice adaptations and areas for further research and service development.

Methods

Palliative care includes consult services in an out-patient supportive care center, "mobile team" care to patients admitted throughout the hospital who require symptom management, and services on

a 12-bed acute palliative care unit. Patients are first seen by members of the medical team and then referred to psychology services if needed. Consults for psychology services are either scheduled with a clinical psychologist in the out-patient center or seen within 24 hours of consult placement in the patient's in-patient room. The psychosocial team is comprised of 3 licensed doctoral level psychologists and 4 master's level counselors. Once a member of the psychosocial team conducts an initial evaluation, he/she provides follow-up communication with the consulting palliative care provider, primary team, and nursing staff, as indicated. Psychologists recommend to our palliative care specialists or our psychiatry colleagues to provide an evaluation for the possibility of psychotropic medication for patients experiencing clinically significant distress. Patients can receive follow-up psychological care in the out-patient center or ongoing care during their in-patient stay. Palliative care physicians, midlevel providers and psychologists also provide referrals to other psycho-oncology providers outside of the palliative care team. If during the medical and/or psychological consultation, major organic psychiatric disorders or patients with complex psychopharmacology are identified, an automatic referral is placed to the psychiatry team. Our team also consults with social work, case management, rehabilitation services, and chaplaincy, as needed, to ensure a multi-disciplinary approach to patient care. Communication remains ongoing during the course of the patient's psychological care. Data presented in this paper represents the practice of the 3 licensed psychologists, all of whom received doctoral training in psychology in APA approved doctoral programs and internships with specific training in health psychology/behavioral medicine. All providers are trained in evidence-based therapeutic approaches with a primary emphasis on cognitive-behavioral therapy techniques. Average time since receiving a doctoral degree is 17 years (range = 8 – 23 years).

Data was collected by conducting a retrospective medical chart review of patients seen by palliative care psychologists during the time period of 9/1/2013 through 2/29/2016. Eligibility criteria included at least 18 years of age, being provided services by the palliative care department and being

referred by a palliative care provider for supportive care psychology consultation. Our sample included 1940 unique patients, of which 1644 were from in-patient and 296 were from out-patient clinic. Demographic variables, including age, gender, and race as well as cancer diagnoses were collected. Clinical characteristics of psychological services were recorded such as session location, session length, DSM-5 diagnoses and psychological interventions provided. Data was entered into a password protected Microsoft Excel spreadsheet which was accessible only by those directly involved in this study, and deidentified for analyses. This study was approved by the University of Texas MD Anderson Cancer Center's Institutional Review Board.

Data was summarized using standard descriptive statistics such as median and inter quartile range (IQR) for continuous variables; and frequency and proportion for categorical variables. Association between categorical variables was examined by Chi-Squared test or Fisher's exact test when appropriate. Wilcoxon rank-sum test was used to examine the difference on continuous variables between the two service locations (in-patient compared to out-patient). Mixed model was used to examine the differential changes over time for duration of the consult visit between the two service locations, incorporating intra-patient correlation into the consideration when a patient could have multiple sessions. General linear model was applied to evaluate the change in the number of counseling visits per month between two service locations. Line chart was used to present the changes in the duration of the consult visit, as well as number of counseling visits over time, between the two service locations. All computations were carried out in SAS 9.3 (SAS Institute Inc., Cary, NC, USA).

Results

Table 1 summarizes the demographic and medical characteristics of those receiving services in both the in-patient and out-patient settings from the licensed doctoral level psychologists. The majority of the sample were in the in-patient setting (1644/1940, 85%). In both settings, the majority were female (56.7%) and white (67.6%), with a variety of cancer diagnoses.

Table 2 summarizes DSM-5 diagnoses and psychological interventions provided during the first consultation session with each patient. Adjustment disorders diagnoses were the most prevalent in both the clinic and in-patient settings (73% in both). Importantly, there were differences in other DSM-5 diagnoses by service location ($p < 0.0001$). Altered mental status or delirium occurred more frequently in the in-patient setting (5% vs none), referrals of which were for patients families during this difficult time. Similarly, the diagnosis of “psychological stress” reflects patients without a diagnosable disorder, but again reflects family distress resulting in referral to psychology services. Major axis I disorders occurred more frequently in the out-patient setting, reflecting the need for ongoing counseling and follow-up over time.

A variety of services were offered in the initial meeting with patients in both settings. Psychological assessment (86%) and supportive expressive counseling (79%) were the most frequent psychological services provided. Patients also received a variety of other services in the initial meeting which included the initiation of cognitive-behavioral therapy, family counseling including services with children, crisis and/or suicide management, relaxation skills, psychoeducation, and referral or coordination with ancillary services. A small number of patient required other psychological interventions in the initial meeting including communication skills, problem solving skills, strategies for managing food aversion, and sleep hygiene.

Table 3 demonstrates significant differences between the in-patient and out-patient settings in terms of time spent during the initial consult visit ($p < 0.0001$). Median length of the initial consult visit was 40 minutes in the in-patient setting and 60 minutes in the out-patient setting. Table 3 also indicates no significant differences between the in-patient and out-patient settings in terms of the median number of counseling sessions per patient ($p = .28$). While the median was 2 sessions per patient in both settings, as seen in Table 4, a larger proportion of patient received 3 or greater sessions in the out-patient setting,

as compared to the in-patient setting (106/296, 36% vs 480/1644, 29%, $p=.03$). Unfortunately, the majority of the patients overall only received 1 or 2 sessions (1354/1940, 70%).

Interestingly, as demonstrated in Figure 1a, psychology services realized a significant increase in total patient encounters over time in the in-patient setting compared to the out-patient setting (by general linear regression model with an interaction term between location and time, $p<0.0001$). On the other hand, we observed a significant decrease in time spent during the initial consult visit in both settings (by mixed model, $p<0.0001$) as demonstrated in Figure 2b.

Discussion

Although psychological care of patients and caregivers have been traditionally incorporated into the palliative care model, little has been reported in the literature regarding the integration of clinical psychologists as members of the multidisciplinary palliative care team.¹⁹ The purpose of this study was to contribute to the literature by providing descriptive data of integrating clinical psychology services into a palliative care multidisciplinary team. Palliative care psychology at a major comprehensive cancer center demonstrated a significant growth since its inception in September, 2013, which began with two licensed doctoral level psychologists, and at present, includes three licensed doctoral level psychologists and three master's level counselors. Our palliative care team realized a significant increase in psychology services provided by the 3 licensed psychologists during this 2 ½ year time frame studied, servicing 1644 unique in-patients (24% of palliative care in-patients) and 296 unique out-patients (19% of palliative care out-patients), underscoring the value placed by the interdisciplinary team of incorporating psychological care for those patients in need. The demographics and medical characteristics were comparable to those of palliative care patients serviced at our institution, though the gender of the psychology sample was slightly higher (56.7% in our sample compared to 49-50% in a recently published sample)²⁰ likely reflecting the fact that women are more likely to acknowledge distress. It should be underscored that the consultation to the psychology team is not intended to

eliminate the importance of psychosocial support from the medical palliative care specialists, but rather to support them in the care of particularly complex patients. Future research will determine the optimal rate of referral to psychology services and for whom this service is most beneficial.

The majority of referrals were appropriate reflecting the quality screening and assessment conducted by palliative care physicians and advanced practice providers prior to referral. For example, there were very few referral for patients with acute delirium although delirium is present in 30% of in-patient palliative care consults.²¹ Identifying appropriate candidates for psychological services by the palliative care medical team is a major advantage for our referral process. This multidisciplinary team approach allows dialogue between medical team members and psychologists affording varying perspectives on the patient's care, as well as providing support for team members, particularly for challenging and complex patients and families. One of the potential advantages of including doctoral level psychologists is the opportunity for a more in-depth focus on problems identified by the clinician. For example, when concerns of somatization are suspected, the interdisciplinary palliative care team can take a team approach. The medical providers can continue to provide symptom management while simultaneously allowing psychologists to conduct a thorough psychological assessment and provide evidenced based treatments for emotional distress; thus neither physical or emotional symptoms are neglected. Similarly, patients who inappropriately use opioids to manage psychological distress may be referred for psychology services so they can receive evidenced based treatment for their emotional distress that may be contributing to high pain expression and use of pain medications.

The majority of patients received 1-2 sessions in both the in-patient and out-patient settings, likely a function of the illness severity of the patient population. In the in-patient setting, it may be difficult to have more follow-up sessions due to abbreviated hospitalizations for most patients. These patients can be followed up in the out-patient setting to address more complex personal and family issues. In fact, the out-patient setting did have a much wider variance in range from single visit to more

than 30. However, these patients may be challenged in their ability to attend multiple sessions due to health factors making travel difficult or if their place of residence is not local. In both settings, many times, patients are referred to palliative care and shortly thereafter, enroll in hospice services where their care is transferred. Across both settings, results may reflect the need for earlier referral to both palliative care and psychology services. Early referral would allow for the provision of more sophisticated psychological counseling techniques including cognitive behavioral therapy (CBT), which is an empirically supported intervention for major mood or anxiety disorders and may prevent adjustment disorders from progressing to greater clinical distress. Certainly, more research is needed to determine the optimal number of sessions for maximizing outcomes in this specialized population. Further study should also examine the clinical/medical characteristics and the potential association between number of sessions and clinical variables such as performance status and days to death.

Our data indicate that CBT was provided in the initial visit to 20% of out-patients compared to 3% of in-patients, which may be a function of lengthier initial sessions in the out-patient (median 60 minutes) compared to the in-patient setting (median 40 minutes). Fortunately, our data indicate our psychologists were able to provide a variety of appropriate and efficacious interventions, guided by assessment and professional judgement, which at times could begin in the initial session, but sometimes had to be initiated in subsequent sessions. More research is necessary to further understand the optimal duration of psychology encounters, most efficacious therapeutic approach, and the total number of sessions to optimize therapeutic efficacy.

Longer sessions in the out-patient setting may be a result of environmental factors. The clinic setting is typically more controlled in that generally, a patient is scheduled for a specified time period, typically one hour, with the expectation of uninterrupted time. In contrast, in the in-patient setting, patients are experiencing more acute symptoms, undergoing tests and procedures, and also meeting with multiple other consult services. Despite these obstacles, we actually experienced an increase in in-

patient encounters, likely a function of marked growth in palliative care referrals from other departments, resulting in more referrals for our psychology services. Limited overall growth in the clinic setting is likely a function of logistical factors and resource limitations, such as limited number of clinic templates for scheduling, limited clinic space, and strategically allocating psychologists primarily to the in-patient setting where acute distress may be higher.

Regardless of setting, psychologists will need to make practice adaptations when working in the palliative care setting.²² Given the limited opportunities for multiple sessions or extended sessions, psychologists must build rapport quickly and as early as possible to promote an effective therapeutic alliance. Numerous studies have demonstrated an alliance-psychological treatment outcome relationship^{23,24} with the literature noting it may be just as important as the model of therapy employed.²³ Additionally, psychologists must recognize that long-term goals may not be achievable. The focus of psychological interventions may need to shift to what is possible, not necessarily what is ideal. Finally, psychologists must be flexible in the therapeutic technique used. Special consideration may need to be given based on the patient's physical condition, time or space limitations, limited time to build the therapeutic relationship and available resources to the patient.

Referrals to palliative care psychology continue to grow underscoring the value placed by the interdisciplinary team. This growth also mirrors the growth of palliative care at our institution which grew by 41% after changing the service name from "palliative care" to "supportive care" in November, 2007.²⁵ Since then, there has continued to be a consistent increase in total patient activity for both in-patient and out-patient settings with the interval from date of hospital new patient registration to referral significantly shorter in 2013-2014 (6.7 months) compared to 2006-2007 (14.8 months), as well as an increased interval between consultation and time of death (4.8 months to 7.9 months, respectively).²⁰ With continued growth in the palliative care service, consideration is being given to hiring a 4th licensed doctoral level psychologist. With increased need comes the need for psychologists

to receive the necessary training to practice in this specialized setting. Currently, there are limited training opportunities for psychologists wanting to pursue a career in palliative care;²⁶ however, the core curriculum required for this practice has been identified.²⁷ Given the infrastructure for our service, a future step may include a post-doctoral training program. Further, enhancing service delivery will require overcoming barriers that are unique to the palliative care population. Our new efforts at outreach using non-billable master's level providers and distance based approaches could also enhance access and types of services provided. Finally, there are a number of structured interventions whose preliminary findings appear promising and successful in supporting palliative care patients, including CALM,²⁸⁻³⁰ meaning-centered therapy,^{31, 32} and dignity therapy.^{33, 34} More research is necessary to determine if a very specific structured approach, such as these, or a highly personalized approach, as we utilize, is more effective.

There are some limitations to this study that are worth discussing. First, there is likely a referral bias for patients receiving palliative care psychology services at our institution. Patients are first referred to palliative care by a medical oncologist or surgeon. The palliative care medicine specialist then provides an in-depth level of screening prior to referral to psychology services. This is reflected by a low frequency of delirium or other conditions not appropriate for psychological intervention. Further, all patients seen by the palliative care team undergo regular screening with the ESAS, which includes items assessing depression, anxiety, and well-being. Responses can alert the palliative care specialist to make a referral when high scores are noted on one or more of these scales, even if the patient is not verbally endorsing distress during the palliative care consult. Future study may include further retrospective review of all palliative care patients to determine the frequency with referrals to psychology are made for those scoring above the established cut-off scores. A final limitation is that the growth of the palliative care psychology services program at our institution was a function of resources available. We utilized our psychologists primarily in the in-patient setting, anecdotally noting rates of acute distress to

be higher for patients and their families in this setting compared to those in the out-patient clinic. With additional resources, we could further enhance service delivery in our out-patient clinic. Other programs with more or less resources may find rates of adoption of psychology services different from ours.

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Table 1: Demographics

Variable	Levels	Total	Location of Service		p-value
			Clinic	In-patient	
All Patients		1940(100%)	296(100%)	1644(100%)	
Age Median (IQR*)		59 (48, 67)	59 (50.5, 67.5)	59 (47, 67)	0.04
Sex	Female	1100(56.7%)	169(57.1%)	931(56.6%)	0.88
Race	Asian	80(4.1%)	8(2.7%)	72(4.4%)	0.13
	Black	249(12.8%)	28(9.5%)	221(13.4%)	
	Hispanic	249(12.8%)	34(11.5%)	215(13.1%)	
	Other	50(2.6%)	8(2.7%)	42(2.6%)	
	White	1312(67.6%)	218(73.6%)	1094(66.5%)	
Cancer Type	Breast	178(9.2%)	47(15.9%)	131(8%)	
	GI	413(21.3%)	61(20.6%)	352(21.4%)	
	GU	196(10.1%)	17(5.7%)	179(10.9%)	
	GYN	228(11.8%)	29(9.8%)	199(12.1%)	
	Head & Neck	154(7.9%)	43(14.5%)	111(6.8%)	
	Hematological	255(13.1%)	11(3.7%)	244(14.8%)	
	NED	1(0.1%)	0	1(0.1%)	
	Other	157(8.1%)	18(6.1%)	139(8.5%)	
	Sarcoma	112(5.8%)	16(5.4%)	96(5.8%)	
	Thoracic	246(12.7%)	54(18.2%)	192(11.7%)	

*IQR – Inter-quartile range)

Table 2. Summary of Clinical Characteristics – Categorical

Variable	Levels	Total	Location of Service		p-value
			Clinic	In-patient	
DSM-5 Diagnosis	Unknown	2			
	Adjustment Disorder	1416(73.1%)	215(72.6%)	1201(73.1%)	<0.0001
	Altered Mental Status or Delirium	83(4.3%)	0	83(5.1%)	
	Anxiety Disorder	85(4.4%)	26(8.8%)	59(3.6%)	
	Depressive Disorder	92(4.7%)	42(14.2%)	50(3%)	
	Other or No Diagnosis	2(0.1%)	2(0.7%)	0	
Psychological Stress	260(13.4%)	11(3.7%)	249(15.2%)		
Session Focus *	Assessment	1664(85.8%)	286(96.6%)	1378(83.8%)	
	CBT	106(5.5%)	60(20.3%)	46(2.8%)	
	Children's Coping Focus	18(0.9%)	0	18(1.1%)	
	Communication Skills	1(0.1%)	0	1(0.1%)	
	Coping Strategies	10(0.5%)	0	10(0.6%)	
	Crisis and/or Suicide Management	11(0.6%)	3(1.0%)	8(0.5%)	
	Family Therapy/Caregivers	304(15.7%)	25(8.4%)	279(17.0%)	
	Food Aversion	1(0.1%)	0	1(0.1%)	
	Problem Solving	2(0.1%)	0	2(0.1%)	
	Psychoeducation	190(9.8%)	43(14.5%)	147(8.9%)	
	Referral or Coordination w/ Ancillary Services	10(0.5%)	3(1.0%)	7(0.4%)	
	Relaxation	32(1.6%)	10(3.4%)	22(1.3%)	
	Sleep Hygiene	1(0.1%)	1(0.3%)	0	
	Supportive Expressive Counseling	1537(79.2%)	232(78.4%)	1305(79.4%)	

*More than one intervention possible per patient encounter

Table 3. Summary of Clinical Characteristics – Continuous

Variable	Location of Service	N	Median	(IQR)	p-value
Counseling Time of 1 st Visit	All	1940	45	(30 , 60)	<0.0001
	In-patient	1644	40	(30 , 50)	
	Clinic	296	60	(45 , 60)	
Number of Counseling Visits	All	1940	2	(1 , 3)	0.28
	In-patient	1644	2	(1 , 3)	
	Clinic	296	2	(1 , 3)	

Table 4. Summary of Number of Sessions- Categorical

Covariate	Levels	Total	Location of Service		p-value*
			Clinic	In-patient	
Number of Counseling Visits	1-2	1354(70%)	190(64%)	1164(71%)	0.03
	3-5	426(22%)	70(24%)	356(22%)	
Visits	6-10	128(7%)	29(10%)	99(6%)	
	>10	32(2%)	7(2%)	25(2%)	

*chi-squared test comparing number of counseling visits ≥ 3 vs ≤ 2 between two settings.

Figure 1 Number and Duration of Visits Over Time

Figure 1a. Number of visits each month

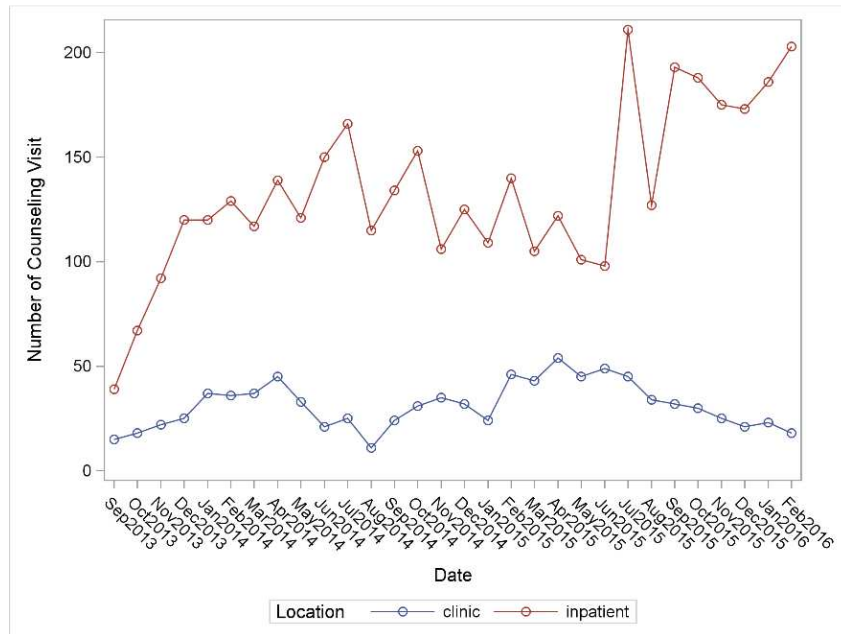


Figure 1b. Average duration of visits in each month

