

A psychosocial cancer phone center staffed by professional psychologists as an integral part of the standard process of care: Its utility during the course of illness

PAOLA ARNABOLDI, M.S.,¹ FRANCESCA N. LUPO, M.A.,¹ LUIGI SANTORO, M.S.,²
LUIGIA RUBIO, R.N.,³ ANGELA TENORE, M.A.,⁴ ILARIA SOLINAS, M.A.,⁴
FABRIZIO DELLE GROTTI, M.A.,⁴ VITO FERRI, M.A.,⁴ NICASIA TERESI, M.A.,⁴
STEFANO ZURRIDA, M.D., PH.D.,⁵ AND FLORENCE DIDIER, M.A.¹

¹Psycho-oncology Unit, European Institute of Oncology, Milan, Italy

²Epidemiology and Biostatistics Division, European Institute of Oncology, Milan, Italy

³Senology Division, European Institute of Oncology, Milan, Italy

⁴Gigi Ghirotti Psychosocial Cancer Phone Center, Gigi Ghirotti National Foundation, Rome, Italy

⁵Scientific Director's Office, European Institute of Oncology, and University School of Medicine, Milan, Italy

(RECEIVED January 10, 2010; ACCEPTED February 10, 2010)

ABSTRACT

Objective: Major cancer centers cannot ignore psychosocial patient needs that have a significant impact on the process of adjustment to cancer and on compliance to treatments. We introduced a new service, the Gigi Ghirotti Psychosocial Cancer Phone Center (GGPCPC), staffed by professional psychologists, for use by our patients and their relatives. This article investigates its feasibility as a support delivery vehicle for patients in their follow-up phase, and also investigates patients' sense of abandonment related to their care setting.

Method: A close collaboration was set up between GGPCPC psychologists and European Institute of Oncology (IEO) psychologists. Education and awareness sessions regarding the importance of such a source of psychological support were conducted by IEO psychologists with nurses, secretaries, and receptionists. IEO psychologists input monthly data, recorded on specific paper-tabs by GGPCPC psychologists for each call received by the phone center between March 2007 and March 2009, into a SPSS database.

Results: Four hundred and thirty individuals contacted the center mainly to receive psychological support during their treatment phase, when they visited IEO for treatment sessions. Multiple indicators suggest that this telephone support program was feasible and provided support to a broad range of cancer patients. Patients seemed to prefer it to face-to-face psychological support during their treatment-phase.

Significance of results: The GGPCPC was demonstrated to be an efficacious support and information delivery vehicle for patients and relatives during the illness course.

KEYWORDS: Psychosocial cancer phone center, Cancer help line, Psychosocial cancer patient needs, Cancer illness course, Professional psychologists

INTRODUCTION

Receiving a cancer diagnosis represents a major event in a person's life. In different ways, everyone has to cope with a number of issues specific to each phase of the illness: diagnosis, surgery and/or chemotherapy, radiation therapy, visits and follow-ups, progression,

Address correspondence and reprint requests to: Paola Arnaboldi, Unità di Psico-oncologia, Istituto Europeo di Oncologia, Via G. Ripamonti 435, 20141, Milano, Italia. E-mail: paola.arnaboldi@ieo.it

terminal phase, and death. The incidence of anxiety and depression is known to be high in those affected by cancer (Newell et al., 1999; Ford et al., 1995).

Partners (Hagedoorn et al., 2000; Nijboer et al., 2000) and children of patients (Welch et al., 1996) are also vulnerable to psychological distress and they often report unmet needs regarding information and psychological support. The need for psychological support is, therefore, very specific in the cancer population. The cancer patient differs markedly from the person who, experiencing psychological distress, consults a psychologist or other mental health professional for non-cancer-related reasons.

Cancer patients not infrequently state that they have never at any time in their lives thought about seeing a psychologist before they received a tumor diagnosis, and/or they are very upset to find themselves experiencing such emotional distress considering it as an obstacle to recovery. Nonetheless, in oncology, emotions and psychological aspects are important in the process of care, and not only from a subjective perspective.

For example, cancer being a chronic illness, patients and relatives build up a strong relationship of confidence in, and dependence upon, the health-care center in which they are undergoing treatment even when they live far away from the hospital and are referred to it only for visits and follow ups at the end of the active process of care.

Mindful of this, and considering the feeling of abandonment possibly experienced by patients and relatives once discharged from the European Institute of Oncology (IEO), we decided to launch a new service to be placed at the disposal of our patients and their relatives: the Gigi Ghirotti Psychosocial Cancer Phone Center (GGPCPC), a Help Line which, since 1999, has been providing psychosocial support and information to the cancer population nationwide, and which aims to meet some of the documented unmet needs of cancer patients (Iacovino et al., 1997). Evidence from the literature underlines the efficacy of such a means of delivering support and information to oncology patients and their relatives (Downe-Wamboldt et al., 2007; Jefford et al., 2005; Walsh & Schmidt, 2003; Aronson et al., 2000; Bucher et al., 1998; Gotay & Bottomley, 1998; Marcus et al., 1998; Poe & DeVore., 1996; Venn et al., 1996; Marcus et al., 1993; Mermelstein & Holland, 1992; Slevin et al., 1988).

Because at least one third of patients refuse psychological support when offered face-to-face interventions (Bottomley et al., 1996; Berglund et al., 1994), many cancer patients may appreciate having at their disposal a different approach, such as that provided by the telephone.

We hypothesized that primarily patients living at some distance from the IEO and Lombardy would

be referred to the GGPCPC, this being due to the physical distance from the primary care center, and that this very distance itself could possibly act as an additional source of psychological distress. Therefore we wanted to investigate whether or not a feeling of abandonment was experienced by our patients and their families.

At the same time, we believed that the service would have been more helpful for patients during their follow-up phase, when they had been discharged from the IEO and resumed their daily lives.

MATERIALS AND METHODS

The Gigi Ghirotti Psychosocial Cancer Phone Center

The GGPCPC is a free-of-charge program, established in 1999 by the Gigi Ghirotti National Foundation (www.fondazioneghirotti.it) to provide information and psychological support to cancer patients and their significant others nationwide. The GGPCPC addresses cancer-related issues across the entire illness continuum, from “at risk” and newly diagnosed patients through long-term survival and end-stage cancer. The GGPCPC differs from other cancer help lines worldwide in two main ways: it is staffed by professional psychologists-psychotherapists (Sandgren & McCaul, 2003; Marcus et al., 2002; Carlsson et al., 1996) and gives patients and relatives the possibility of consulting with the GGPCPC over time so that a unique psychological contact may develop into “telephone-support psychotherapy.” This means that, from the very first contact, individuals in greatest need can choose to start long-term telephone support with the same GGPCPC psychologist who becomes a point of reference from a psychological point of view, helping patients and relatives to cope with psychological issues throughout each and every phase of the illness.

The psychologists who staff the GGPCPC use a specific paper-slip on which they record each call. Caller demographic information is entered, as are issues discussed during the call. Identifying information is not requested. Ongoing supervision takes place, involving group meetings monitored by the GGPCPC clinical supervisor.

How IEO Patients and Relatives Can Access the Help Line: IEO Psychologists' Role

IEO patients and relatives can learn about the existence of the GGPCPC through a leaflet specifically created by IEO psychologists and distributed in special displays located throughout the hospital, in every ward.

IEO psychologists have also organized educational meetings, centered on GGPCPC's modus operandi and services offered, with nurses, receptionists, and secretaries considered as key figures in promoting the existence of the help line.

For the first 6 months the IEO psychologists met nurses, secretaries, and receptionists every 3 weeks in order to explore their feedback in being promoters of the GGPCPC.

Each month GGPCPC psychologists sent the paper slips relating to the calls received to the IEO Psycho-oncology Unit. An IEO psychologist was responsible for inputting such dates into an SPSS database for statistical analyses.

IEO psychologists also directly invited patients and relatives to refer to the GGPCPC, especially those living outside Milan and Lombardy, owing to the consequent logistical difficulties of arranging any long-term face-to-face psychological support provided by the IEO Psycho-oncology Unit Staff. This does not mean that IEO psychologists abandon the patient. In fact, it is often the case that IEO psychologists meet patients referred to GGPCPC during follow-up visits in order to assess the patient's psychological situation and their satisfaction with the service offered by the phone center. Furthermore, IEO and GGPCPC psychologists may initially collaborate in order to manage the transition from the end of the relationship with the IEO psychologist to the beginning of the support provided by the GGPCPC psychologist, to prevent any possible feeling of abandonment on the part of the patient.

Because we consider that one of the major features of a unit addressing psychosocial concerns in a major cancer center is to have its services readily accessible to anyone who might need them, integrating a Telephone Center into our daily activity expresses our awareness about the multi-faceted nature of a cancer patient's psychosocial situation.

Data Source

Data for this report are drawn from the SPSS database created specifically for this task. Mandatory data, recorded for each contact, include: contact type (e.g., mail, telephone, other), call date, caller type (e.g., diagnosed cancer patient, immediate family, friends and relatives), how the caller found out about the service, demographics of the caller (e.g., age range, gender, place of residence), topics discussed, presence of a feeling of abandonment by the IEO, critical event at the time of the call, actions taken for the contact, emotions of the caller, and the length of call. In this work only the data relating to the first contact of the caller with the GGPCPC are reported. The contacts originating from callers under-

going long-term psychological support are not considered.

Period of Evaluation

The active collaboration between the Gigi Ghirelli Foundation and the IEO Psycho-oncology Unit started in March 2007. Data for this report refer to the period between March 2007 and March 2009.

Statistical Analyses

Data from callers were included in all analyses. Each individual who contacted the GGPCPC was allocated to one of two groups on the basis of the type of intervention required (simple information vs. psychosocial support). Subject characteristics were reported as categorical variables, summarized as frequencies and percentages and compared by the univariate Pearson's χ^2 . We also assessed the univariate relation between each subject's characteristic and caller's feeling of being abandoned by IEO. To assess the relation between each potential predictor and outcome (caller's feeling of being abandoned by IEO), a multivariate model was computed using the logistic regression method (Hosmer & Lemeshow, 2000). A similar analysis was performed to assess the relation between each potential predictor and the illness phase (on treatment vs. other phases). All multivariate models included: region of residence (Lombardy vs. rest of Italy), primary pathology of the patient (breast vs. others), gender and age of the caller, degree of kindred with the patient (patient her/himself vs. others). *P*-values derived from the Wald's χ^2 test and all tests were two-sided. Statistical analyses were performed using the SAS statistical software (version 8.2 for Windows).

RESULTS

During the period of evaluation, a total of 430 IEO patients and relatives contacted the GGPCPC. Contacts coming from IEO patients and relatives represent almost 30% of the total of the annual help line callers. Fifty-seven percent of the IEO contacts were patients themselves, 43% were relatives and of those: patient's partner (15%), daughter or son (10%), or parents (4%) (Table 1). The majority of the callers were female (80%), 56% of the callers were married, and 43% of the callers were between 41 and 60 years of age. Referring to the sex distribution in the population of relatives and to the request for psychological support or for information and orientation, it emerged that the percentage of male callers increased when the caller was a relative (69%) and when the caller contacted the GGPCPC to request information (Figure 1).

Table 1. Information and psychological support need in the population as a function of demographic and clinical variables (N = 430 patients)

Characteristics	Need for information (n = 136) n (%)	Psychological support (n = 294) n (%)	All callers (n = 430) n (%)	p-value
Gender of the caller				
M	41 (30.2)	44 (15.0)	85 (19.8)	0.0009
F	94 (69.1)	249 (84.7)	343 (79.8)	
Unknown	1 (0.7)	1 (0.3)	2 (0.5)	
Patient's age (years)				
<40	17 (12.5)	57 (19.4)	74 (17.2)	0.0001
41–50	20 (14.7)	78 (26.5)	98 (22.8)	
51–60	23 (16.9)	63 (21.4)	86 (20.0)	
>60	27 (19.9)	43 (14.6)	70 (16.3)	
Unknown	49 (36.0)	53 (18.0)	102 (23.7)	
Marital status				
Single	8 (5.9)	33 (11.2)	41 (9.5)	<0.0001
Married	50 (36.8)	191 (65.0)	241 (56.0)	
Cohabitant	6 (4.4)	20 (6.8)	26 (6.0)	
Divorced	0 (-)	15 (5.1)	15 (3.5)	
Widowed	2 (1.5)	8 (2.7)	10 (2.3)	
Unknown	70 (51.5)	27 (9.2)	97 (22.6)	
Relationship with the patient				
Patient herself/himself	56 (41.2)	190 (64.6)	246 (57.2)	<0.0001
Partner	21 (15.4)	42 (14.3)	63 (14.7)	
Parents	3 (2.2)	14 (4.8)	17 (4.0)	
Brother/sister	11 (8.1)	13 (4.4)	24 (5.6)	
Daughter/son	17 (12.5)	27 (9.2)	44 (10.2)	
Others	28 (20.6)	8 (2.7)	36 (8.4)	
Geographic area				
Milan and Lombardy	56 (41.2)	127 (43.2)	183 (42.6)	0.75
Other Northern Regions	15 (11.0)	29 (9.9)	44 (10.2)	
Center	35 (25.7)	61 (20.7)	96 (22.3)	
South and Islands	29 (21.3)	75 (25.5)	104 (24.2)	
Unknown	1 (0.7)	2 (0.7)	3 (0.7)	
Site of tumor				
Breast	41 (30.1)	166 (56.5)	207 (48.1)	<0.0001
Head and Neck	7 (5.1)	18 (6.1)	25 (5.8)	
Lung	11 (8.1)	20 (6.8)	31 (7.2)	
Colorectal	15 (11.0)	15 (5.1)	30 (7.0)	
Genitourinary female	5 (3.7)	29 (9.9)	34 (7.9)	
Genitourinary male	7 (5.2)	8 (2.7)	15 (3.5)	
Hematologic	3 (2.2)	15 (5.1)	18 (4.2)	
Other sites	13 (9.6)	13 (4.4)	26 (6.0)	
NOS - Unknown	34 (24.9)	10 (3.4)	44 (10.2)	
Illness phase				
Prevention	1 (0.7)	0 (-)	1 (0.2)	<0.0001
Diagnosis	28 (20.6)	35 (11.9)	63 (14.6)	
Treatment	53 (39.0)	147 (50.0)	200 (46.5)	
Follow-up	26 (19.1)	96 (32.6)	122 (28.4)	
Terminally ill/died	15 (11.0)	14 (4.8)	29 (7.0)	
Unknown	13 (9.6)	2 (0.7)	15 (3.5)	

The most common cancer types among callers were breast cancer (48%), gynecological cancer (8%), lung cancer (7%), colorectal cancer (7%), and head and neck cancer (6%).

Forty-three percent of the callers were resident in Milan and Lombardy, 22% in Central Italy, 24% in Southern Italy and the Islands, and 10% in other Northern Regions (Table 1).

The majority of the contacts (47%) referred to the GGPCPC during the period of oncology treatment, 15% at the moment of first diagnosis and 28% during the follow-up period (Table 1). Sixty-eight percent contacted the GGPCPC in order to receive psychological support; 32% for information about cancer diagnosis, treatment, and management. In Table 1, we note that even though the majority of calls came from

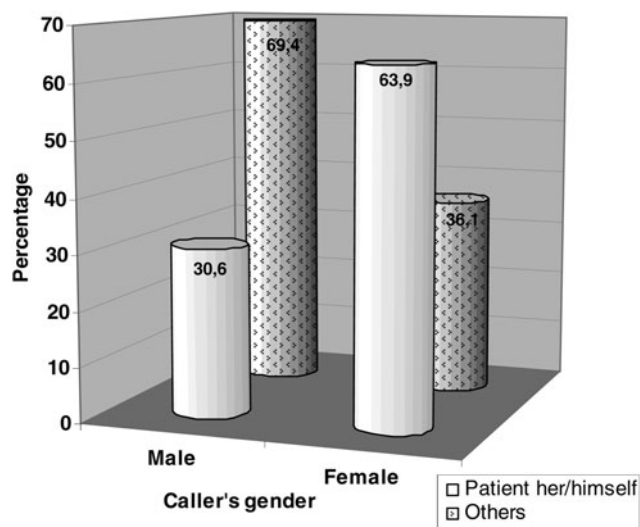


Fig. 1. Relationship between caller's gender and the condition of being the patient.

patients and relatives of patients during oncology treatment (chemotherapy or radiation therapy), the need for psychological support was at its maximum during the follow-up period: 79% of calls in this phase, in fact, were aimed at obtaining psychological support.

Regarding the length of intervention, the average call duration was 29 minutes (range, 5–87 minutes). The vast majority (69%) of callers found out about the GGPCPC as a result of the leaflets, which were distributed throughout the institute, 17% learned about it through the nurses and secretaries, and 11% learned about it from the IEO psychologists.

Twenty-one percent of the callers admitted to experiencing a feeling of abandonment by the hospital distress abandonment syndrome (DAS) and it is interesting to note that this psychological construct is not related either to sex, age, the stage of illness, the type of cancer, or to the distance from the hospital but only to the very condition of themselves being a patient (Table 2: $p < 0.0001$). Because the majority of calls (200/430; 46.5%) came from patients and relatives of patients in their oncological treatment phase, it was important to analyze this population further. Table 3 provides a comparison between those who contacted the GGPCPC during the patient's treatment phase and the other callers. Eighty-two percent of subjects calling during treatment were female, 62% were married, and 23% were <40 years old.

By comparing subjects on the basis of the illness phase, it emerged that in 65.5% of the cases (131/200) the treatment phase caller was the patient him/herself, whereas during other illness phases this was the case only for 50% of the calls. By a multivariate analysis this difference was found to

be statistically significant ($p = 0.0013$). Moreover, callers during the treatment phase were younger (≤ 40 yrs, $p = 0.003$), more likely to be married ($p = 0.056$) or divorced/widowed ($p = 0.047$), and affected by head and neck cancer ($p = 0.017$). Forty-three percent were resident in Milan and Lombardy. The others, coming from different Italian regions, were staying in Milan only in order to undergo their treatment. In an ideal situation, an evaluation of client satisfaction would be conducted. However, this would be extremely problematic since one of the characteristics and commitments of the GGPCPC is that of ensuring anonymity.

DISCUSSION

As with other help line evaluations in the published literature, we found that the majority of callers to the GGPCPC were women affected by breast cancer in their oncology treatment phase (Jefford et al., 2005; Carlsson et al., 1996; Venn et al., 1996; Slevin et al., 1988). This could be explained by the fact that the majority of the IEO patients are indeed women affected by breast cancer. Nonetheless, the fact that male callers were more numerous throughout the relatives population and also when the caller expressed the need for information and orientation, could be related to the possible tendency of women to ask for psychological support themselves when they are either patients or relatives, whereas men are more likely to express such a need when they are not patients themselves (Galdas et al., 2005; Angst et al., 2002; Harrison et al., 1995).

In order to further analyze the male sample contacting the GGPCPC and their need for psychological support, we are currently conducting an analysis of our database to ascertain whether male callers for information and orientation subsequently re-contact the service, expressing the need for psychological support, too. From this perspective, the "need for information" could be a pretext, which allows male patients to express their innermost feelings and emotions arising from their experience of the illness.

Our survey underlines that the majority of users of GGPCPC ask for psychological support (68%). This result differentiates our study from others present in the literature (Sandgren & McCaul, 2003; Marcus et al., 2002; Bottomley et al., 1996; Carlsson et al., 1996; Berglund et al., 1994) where it emerges that telephone cancer centers are more often used by the population to receive information and orientation about illness and treatments. This could be explained by the very nature of GGPCPC: unlike other cancer help lines, staffed by nurses (Sandgren & McCaul, 2003; Marcus et al., 2002; Carlsson et al., 1996), it

Table 2. Feeling of being abandoned by IEO (N = 430 patients)

Characteristics	No (n = 338) n (%)	Yes (n = 92) n (%)	All callers (N = 430) n (%)	p-value ^a	p-value (multiv) ^b		
Gender of the caller							
M	73 (21.6)	12 (13.0)	85 (19.8)	0.14	0.75		
F	263 (77.8)	80 (87.0)	343 (79.8)				
Unknown	2 (0.6)	0 (-)	2 (0.5)				
Patient's age (years)							
≤ 40	61 (18.0)	13 (14.1)	74 (17.2)	0.10	–		
41–50	70 (20.7)	28 (30.4)	98 (22.8)				
51–60	74 (21.9)	12 (13.0)	86 (20.0)				
> 60	57 (16.9)	13 (14.1)	70 (16.3)				
Unknown	76 (22.5)	26 (28.3)	102 (23.7)				
Marital Status							
Single	31 (9.2)	10 (10.9)	41 (9.5)	0.12	–		
Married	187 (55.3)	54 (58.7)	241 (56.0)				
Cohabitant	18 (5.3)	8 (8.7)	26 (6.0)				
Divorced	11 (3.3)	4 (4.4)	15 (3.5)				
Widowed	6 (1.8)	4 (4.4)	10 (2.3)				
Unknown	85 (25.2)	12 (13.0)	97 (22.6)				
Relationship with the patient							
Patient herself/himself	180 (53.3)	66 (71.7)	246 (57.2)	0.01	0.018 ^c		
Partner	50 (14.8)	13 (14.1)	63 (14.7)				
Parents	15 (4.4)	2 (2.2)	17 (4.0)				
Brother/sister	20 (5.9)	4 (4.4)	24 (5.6)				
Daughter/son	38 (11.2)	6 (6.5)	44 (10.2)				
Others	35 (10.4)	1 (1.1)	36 (8.4)				
Geographic Area							
Milan and Lombardy	145 (42.9)	38 (41.3)	183 (42.6)	0.35	0.95		
Other northern regions	33 (9.8)	11 (12.0)	44 (10.2)				
Center	78 (23.1)	18 (19.6)	96 (22.3)				
South and islands	81 (24.0)	23 (25.0)	104 (24.2)				
Unknown	1 (0.3)	2 (2.2)	3 (0.7)				
Site of Tumor							
Breast	152 (45.0)	55 (59.8)	207 (48.1)	0.049	0.41		
Genitourinary female	22 (6.5)	12 (13.0)	34 (7.9)				
Genitourinary male	13 (3.9)	2 (2.2)	15 (3.5)				
Lung	26 (7.7)	5 (5.4)	31 (7.2)				
Colorectal	27 (8.0)	3 (3.3)	30 (7.0)				
Head and Neck	21 (6.2)	4 (4.4)	25 (5.8)				
Hematologic	13 (3.9)	5 (5.4)	18 (4.2)				
Other sites	21 (6.2)	5 (5.4)	26 (6.0)				
NOS - Unknown	43 (12.8)	1 (1.1)	44 (10.2)				
Illness Phase							
Prevention	1 (0.3)	0 (-)	1 (0.2)			0.58	–
Diagnosis	52 (15.4)	11 (12.0)	63 (14.6)				
Treatment	153 (45.3)	47 (51.1)	200 (46.5)				
Follow-up	94 (27.8)	28 (30.4)	122 (28.4)				
Terminally ill / died	24 (7.1)	5 (5.4)	29 (7.0)				
Unknown	14 (4.1)	1 (1.1)	15 (3.5)				

^aPearson's χ^2 .

^bLogistic regression including: gender, age (decades), relationship with the patient (herself/himself vs. others), geographic area (Lombardy vs. rest of Italy), site of tumor (breast vs. others), illness phase.

^cThe probability of a feeling of being abandoned by IEO is nearly twice if the caller is the patient vs. someone else (OR = 2.0; 95% CI: 1.1–3.5; $p = 0.018$).

is staffed by clinical psychologists-psychotherapists and, in the leaflet that describes the services offered, psychological support is offered as the main feature of the service.

As shown by Arving et al. (2007) and Bottomley et al. (1996), it is not yet known who the most effective telephone counselors are. Arguably, professional psychologists represent the ideal figure to help

Table 3. Population on treatment: demographic and clinical characteristics (N = 430 patients)

Characteristics	Out of treatment (n = 230) n (%)	On treatment (n = 200) n (%)	All Callers (n = 430) n (%)	p-value ^a (univar)	p-value ^b (multiv)
Gender of the caller					
M	48 (20.9)	37 (18.5)	85 (19.8)	0.51	0.76
F	180 (78.3)	163 (81.5)	343 (79.8)		
Unknown	2 (0.9)	0 (-)	2 (0.5)		
Patient's age (years)					
>40	142 (61.7)	112 (56.0)	254 (59.1)	0.024	–
≤40	29 (12.6)	45 (22.5)	74 (17.2)		0.003
Unknown	59 (25.7)	43 (21.5)	102 (23.7)		0.46
Marital Status					
Single	24 (10.4)	17 (8.5)	41 (9.5)	0.02	–
Married	118 (51.3)	123 (61.5)	241 (56.0)		0.056
Cohabitant	16 (7.0)	10 (5.0)	26 (6.0)		0.71
Divorced-widowed	9 (3.9)	16 (8.0)	25 (5.8)		0.047
Unknown	63 (27.4)	34 (17.0)	97 (22.6)		0.84
Relationship with the patient					
Others	115 (50.0)	69 (34.5)	36 (8.4)	0.0012	–
Patient herself/himself	115 (50.0)	131 (65.5)	246 (57.2)		0.0013
Site of tumor					
Breast	101 (43.9)	106 (53.0)	207 (48.1)	0.025	–
Head & Neck	8 (3.5)	17 (8.5)	25 (5.8)		0.017
Lung	16 (7.0)	15 (7.5)	31 (7.2)		0.48
Colorectal	20 (8.7)	10 (5.0)	30 (7.0)		0.47
Genitourinary female	18 (7.8)	16 (8.0)	34 (7.9)		0.81
Other sites	37 (16.1)	22 (11.0)	59 (13.7)		0.41
NOS - Unknown	30 (13.0)	14 (7.0)	44 (10.2)		0.40

^aPearson's χ^2 .

^bLogistic regression including: gender, age, marital status, relationship with the patient, site of tumor.

patients and relatives to express their inner feelings and thoughts in respect to illness, and to represent the psychological meaning of cancer care. Unexpectedly, in our study, the majority of callers are patients in treatment at the IEO, and the geographic origin of the caller was not a significant factor in determining the caller's contacting the GGPCPC.

Initially, when we built up the collaboration with the GGPCPC, we hypothesized that the service would have been more useful for people discharged from IEO and living outside Milan and Lombardy: this, in part, is revealed to be the case, as 79.0% of follow-up phase callers contacted the GGPCPC asking for psychological support. However, it is also the case that 46.5% of the entire set of first-time contacts came from patients in treatment, and therefore in frequent contact with the hospital.

Probably, this is because of the methods we used to distribute the information about the existence of the GGPCPC: the leaflet is more readily available to those who often go to IEO for treatment sessions. A new and more extensive means whereby GGPCPC may be promoted, beyond simply displaying the leaflets, needs investigation. For example, we could ensure that the leaflet is distributed by nurses who discharge patients or by physicians who meet

patients during their outpatient visits. It would be useful too, as shown by Broadstock and Hill (1997) to educate IEO physicians and other health professionals, not only nurses, about how the GGPCPC works: if professionals endorse the service, this may increase the number of telephone referrals. This does not mean merely the clinicians' provision of a card promoting the help line but a more intense referral mechanism. Another important reflection related to patients' and relatives' needs for psychological support during the treatment period is that such individuals may benefit from free-of-charge psychological support by also referring to the IEO Psycho-oncology Unit, which guarantees face-to-face psychological interventions of various kinds to IEO patients and their relatives, such as individual psychological support and psychotherapy, couple support, group support, psycho-educational groups, relaxation-based groups, and group psychotherapy. In addition, some oncological patients may prefer a more private and anonymous service such as that offered by telephone consultation. Also, the side effects of treatment may render it difficult to participate in face-to-face psychological programs even when such a need is present. Furthermore, travel to a mental health professional or to a peer support group may

become impossible during treatment, and geographical distance from such resources can further intensify the patient's sense of isolation. This is a factor that warrants thorough investigation. Despite the evidence that the telephone can serve medical patients' psychosocial needs, there are few reports of telephone psychotherapy in the cancer population (Mermelstein & Holland, 1992).

To conclude, it could be hypothesized that the presence in each oncologic center of mental health personnel providing psychological support by telephone, is both useful and necessary, representing, as it does, a means of receiving psychological help that cancer patients and their relatives may well consider as a valid alternative to face-to-face interventions throughout the course of their illness.

ACKNOWLEDGMENTS

This study has been supported by grants from the Umberto Veronesi Foundation and the European Institute of Oncology Foundation. The authors thank William Russell-Edu for his assistance in reviewing the English text.

REFERENCES

- Angst, J., Gamma, A., Gastpar, M., et al. (2002). Gender differences in depression. Epidemiological findings from the European DEPRES I and II studies. *European Archives of Psychiatry and Clinical Neuroscience*, 252, 201–209.
- Aronson, J.K. (2000). *Use of Telephone in Psychotherapy*. New Jersey: Book-mart Press.
- Arving, C., Sjöden, P.O., Bergh, J., et al. (2007). Individual psychosocial support for breast cancer patients: A randomized study of nurse versus psychologist interventions and standard care. *Cancer Nursing*, 30, E10–9
- Berglund, G., Bolund, C., Gustafsson, U.L., et al. (1994). One year follow-up of the 'starting-again' group rehabilitation programme for cancer patients. *European Journal of Cancer*, 12, 1744–1741.
- Bottomley, A., Hunton, S., Roberts, G., et al. (1996). A pilot study of cognitive behavioural therapy social support group interventions with newly-diagnosed cancer patients. *Journal of Psychosocial Oncology*, 14, 65–81.
- Broadstock, M.J. & Hill, D. (1997). Evaluation and impact of promotion of a cancer helpline to cancer patients through their specialists. *Patient Education and Counseling*, 32, 141–146.
- Bucher, J.A., Houts, P.S., Glajchen, M., et al. (1998). Telephone counselling. In *Psycho-oncology*. Holland, J.C. (ed.), pp. 758–766. New York: Oxford University Press.
- Carlsson, M.E., Strang, P.M. & Lindblad, L. (1996). Telephone Help Line for Cancer counselling and cancer information. *Cancer Practice*, 4, 319–323.
- Downe-Wamboldt, B.L., Butler, L.J., Melanson, P.M., et al. (2007). The effects and expense of augmenting usual cancer clinic care with telephone problem-solving counselling. *Cancer Nursing*, 30, 441–453.
- Ford, S., Lewis, S. & Fallowfield, L. (1995). Psychological morbidity in newly referred patients with cancer. *Journal of Psychosomatic Research*, 39, 193–202.
- Galdas, P.M., Cheater, F. & Marshall, P. (2005). Men and health help-seeking behaviour: literature review. *Journal of Advanced Nursing*, 49, 616–623.
- Gotay, C.C. & Bottomley, A. (1998). Providing psychosocial support by telephone: What is its potential in cancer patients? *European Journal of Cancer Care*, 7, 225–231.
- Hagedoorn, M., Buunk, B.P., Kuijer, R.G., et al. (2000). Couples dealing with cancer: Role and gender differences regarding psychological distress and quality of life. *Psycho-oncology*, 9, 232–242.
- Harrison, J., Maguire, P. & Pitceathley, C. (1995). Confiding in a crisis: Gender differences in patterns of confiding among cancer patients. *Social Science and Medicine*, 41, 1255–1260.
- Hosmer, D.W. & Lemeshow, S. (2000). *Applied Logistic Regression*. New York: John Wiley & Sons.
- Iacovino, V. & Reesor, K. (1997). Literature on interventions to address cancer patients' psychosocial needs: What does it tell us? *Journal of Psychosocial Oncology*, 15, 47–71.
- Jefford, M., Black, C., Grogan, S., et al. (2005). Information and support needs of callers to the Cancer Helpline, The Cancer Council Victoria. *European Journal of Cancer Care*, 14, 113–123.
- Marcus, A.C., Cella, D., Sedlacek, S., et al. (1993). Psychosocial counselling of cancer patients by telephone: a brief note on patient acceptance of an outcall strategy. *Psycho-oncology*, 2, 209–214.
- Marcus, A.C., Garrett, K.M., Cella, D., et al. (1998). Telephone counselling for breast cancer patients after treatment: A description of a randomized clinical trial. *Psycho-oncology*, 7, 470–482.
- Marcus, A.C., Garrett, K.M., Kulchak-Rahm, A., et al. (2002). Telephone counselling in psychosocial oncology: A report from the Cancer Information and Counseling Line. *Patient Education and Counseling*, 46, 267–275.
- Mermelstein, H.T. & Holland, J.C. (1992). Psychotherapy by telephone. A therapeutic tool for cancer patients. *Psychosomatics*, 32, 407–412.
- Newell, S., Sanson-Fisher, R.W., Girgis, A., et al. (1999). The physical and psychosocial experiences of patients attending an outpatient medical oncology department: A cross-sectional study. *European Journal of Cancer Care* (England), 8, 73–82.
- Nijboer, C., Triemstra, M., Tempelaar, R., et al. (2000). Patterns of caregiver experiences among partners of cancer patients. *Gerontologist*, 40, 738–746.
- Poe, M.R. & DeVore, L.M. (1996). Using the telephone for cancer information. *Cancer Practice*, 4, 47–49.
- Sandgren, A.K. & McCaul, K.D. (2003). Short-term effects of telephone therapy for breast cancer patients. *Journal of Health Psychology*, 22, 310–315.
- Slevin, M.L., Terry, Y., Hallet, N., et al. (1988). BACUP - the first 2 years: evaluation of a national cancer information service. *British Medical Journal*, 297, 669–672.
- Venn, M.J., Darling, E., Dickens, C., et al. (1996). The experience and impact of contacting a Cancer Information Service. *European Journal of Cancer Care*, 28, 149–157.
- Walsh, S.M. & Schmidt, L.A. (2003). Telephone Support for Caregivers of Patients with Cancer. *Cancer Nursing*, 26, 448–453.
- Welch, A.S., Wadsworth, M.E. & Compas, B.E. (1996). Adjustment of children and adolescents to parental cancer. Parents' and children's perspectives. *Cancer*, 77, 1409–1418.