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The Association of Sources of Support, Types of Support and Satisfaction with Support Received on Perceived Stress and Quality of Life of Cancer Patients

Iván Ruiz-Rodríguez[1], Isabel Hombrados-Mendieta, PhD[1], Anabel Melguizo-Garín[1], and Mª José Martos-Méndez, PhD[1]

Abstract

Introduction: The aim of the present study is to carry out a multidimensional analysis of the relationship of social support with quality of life and the stress perceived by cancer patients. **Methods:** The participants were 200 patients with cancer. Data was gathered on sociodemographic characteristics, health, quality of life, social support and perceived stress. **Results:** Frequency of and satisfaction with different sources and types of support are related positively with improvement of quality of life and negatively with perceived stress. The emotional support from the partner and the emotional and informational support from the family are significant predictors of quality of life. Emotional support from the family reduces patients' perceived stress. Satisfaction with emotional support from the partner and with the informational support from friends and family increases quality of life. Satisfaction with emotional support from the family and with informational support from friends decreases patients' perceived stress. Instrumental support and support provided by health professionals are not good predictors of quality of life and perceived stress. Satisfaction with the support received is more significantly related with quality of life and stress than the frequency with which the sources provide support. **Conclusions:** These results have important practical implications to improve cancer patients' quality of life and reduce their perceived stress through social support. Designing intervention strategies to improve satisfaction with the support provided to patients by their closest networks results in a global benefit for the patient's quality of life.

Keywords

quality of life, social support, perceived stress, cancer, oncology

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Introduction

Cancer is currently one of the leading causes of human death. In 2018 it was responsible for 9.6 million deaths, the second cause of death globally,[1] just after cardiovascular diseases. In Europe it was responsible for 20% of all deaths, with more than 3 million new cases and 1.7 million deaths every year.[2] In Spain, cancer was the second cause of death in 2017, circulatory system diseases being the first cause.[3]

It is one of the most greatly feared diseases. There are numerous doubts, fears, and erroneous beliefs that magnify this fear, with cancer considered to be synonymous with death and pain. It can end up becoming a chronic disease that forces the person and their family members to go through a significant number of stressful events and situations.[4,5] It can also lead to a deterioration of personal, social, work and family life during large intervals of time, placing the patient's quality of life at extreme risk.[6]

Quality of Life

Quality of life is a multidimensional concept applied to aspects of life which are most severely affected by disease, defined as the degree to which the physical, functional, social, or emotional well-being expected by the patient is

[1]University of Málaga, Spain

Corresponding Author:
Iván Ruiz-Rodríguez, Department of Social Psychology. Faculty of Psychology. University of Malaga, Campus Universitario de Teatinos s/n., Malaga, Andalusia 29071, Spain.
Email: ivan_dlr@uma.es

affected by the medical treatment or process.[7] The reduction of quality of life of cancer patients is a very well-known phenomenon.[8]

It is possible to identify 3 main reasons justifying the importance of evaluating the quality of life of cancer patients:[9] (1) Comparing the possible secondary effects helps to determine the global benefits for the patient's quality of life. (2) It leads to an improvement in global patient care, providing more detailed information on the symptoms and the subjective perspective of the patient regarding the impact of the disease and the treatment on their lives, revealing symptoms that the patient does not wish to express in order to not disappoint their doctor or family members. (3) Quality of life may become a prognostic factor of the treatment, given that initial lower scores of quality of life may be related with a negative evolution of the tumor. The different professionals that work and interact with patients highlight the importance of evaluation and improvement of quality of life as part of the care offered to patients. This view is shared by many cancer patients, who consider quality of life to be as important as longevity.[9]

Perceived Stress

Patients with cancer have to deal with multiple potential sources of stress in all phases of the medical process.[10] Stress appears in high levels with the diagnosis, an unexpected and traumatic circumstance that generates uncertainty regarding the patient's future.[11] Nonetheless, many difficulties arise during treatment and recovery as well.[12,13] The patient's evaluation of stress and capacity to manage stress appears to be associated with their quality of life.[14] Subjective perceptions regarding the impact of the disease on their own life and fear about the future are more strongly associated with the symptoms of stress related with cancer than the actual objective characteristics of the disease.[15]

Social Support

On many occasions, the support needs of the patient are not met if the support network is not duly prepared.[16] Social support is an interactive concept; an interpersonal transaction of assistance between the sources of support and the person receiving the assistance, which may involve emotions, material assistance and information and which arises in a specific context. This support is provided by the community, social networks and trusted, intimate relationships in everyday and crisis situations throughout one's life.[17] Most authors identify 3 types of social support:[18,19] emotional (a feeling of being loved and able to trust in someone); instrumental (availability of tangible direct assistance); and informational (provision of advice and guidance).[20] The 3 types of support have positive effects on health[21] although there is a certain degree of consensus that emotional support is more important for well-being.[22] However, each type of support has a specific function, given that satisfaction with support is largely determined by the needs of the person.[23]

The sources of support also play an important role. Thoits[24] suggested that the amount of social support is not the only relevant aspect; rather, the source of the support is crucial for a positive perception of social support. Supporting relationships can protect people from the stress associated with traumatic life experiences, and patients tend to identify family and friends as the main sources of support.[25,26] There are studies that analyse other sources of support,[27] however, the majority of these studies do not incorporate other potential sources of support such as health professionals. The results of the studies made vary as to which specific types or sources of support are more closely associated with positive effects on quality of life.[21,22,25] The social support needs of cancer patients vary at each stage of the disease in terms of both the type of support needed and the source of that support.

Other studies highlight that the support provided to cancer patients is sometimes perceived by the patient as being of little use.[18] The patient's desires also come into play in relation to the social support they need. As also occurs with people free of disease, cancer patients with a high desire for social support who do not receive this desired support experience higher levels of stress.[28]

The frequency of the support received and satisfaction with the support is rarely analysed.[29] However, investigations have revealed differences between the amount of support and satisfaction with it.[30] Although social support is a multidimensional construct, generally the majority of studies do not make any distinction between the dimensions of support, such as the different types of support, the sources providing it and the frequency and satisfaction with such support.[31]

Although most studies confirm the positive relation between social support and quality of life[32] and the decrease of cancer patients' stress, there is a lack of studies that carry out a multidimensional analysis of social support. Such analysis will allow identification of the sources and types of support that more frequently relate to quality of life of patients and the effect of frequency and satisfaction with social support received on patients' quality of life and stress throughout the disease.

The Current Study

The aim of this study is to analyse the perception of social support, quality of life and perceived stress of cancer patients. More specifically, it aims to determine whether the perception of social support is negatively related with perceived stress and improves the quality of life of cancer patients. An important contribution made by this study is that it performs a multidimensional analysis of social support, including the most common sources of patient support (family, friends, partners, and health professionals); the type of support provided by each source (emotional,

instrumental, and informational) and differentiation between the frequency of and satisfaction with the support.

The majority of studies of social support with cancer patients lack this type of analysis.[33] However, the multidimensional approach of this study allows us to determine the type of support and the sources of support that are most closely related with the quality of life and perceived stress of cancer patients. The distinction between the frequency of the support received and satisfaction with the support allows us to determine whether both dimensions of the support are related with quality of life and patient stress. This analysis allows us to develop more specific intervention strategies.

The hypotheses of the study are the following: (1) Social support is positively related with quality of life and negatively related with the perceived stress of cancer patients; (2) Regarding the types of support, emotional support is the most important for quality of life and perceived stress, also assessing the effect of informational and instrumental support on quality of life and perceived stress of cancer patients; (3) Regarding the sources of support, the closest support networks (partner, family members, and friends) are more positively related with the quality of life and perceived stress of the patients, also assessing the role played by health professionals in terms of quality of life and perceived stress; (4) In relation to the dimensions of frequency and satisfaction, satisfaction with the support received is more positively related with quality of life and perceived stress than the frequency of support.

Methods

Participants and Procedure

The study was carried out at associations and the hospital where participants received treatment. There were a total of 200 cancer patients who participated. Patients suffered from different types of cancer and were at different stages of the disease. Patients came from different associations and received treatment at the Hospital Costa del Sol (Marbella). Inclusion criteria were patients with different types of cancer, over 18 and who are currently receiving treatment or are at the medical examination stage. Exclusion criteria were the following: former cancer patients who had concluded the examination or follow-up stage and young patients with cancer under age 18.

The questionnaire was available on a website so patients who were in different cities could participate. In order to carry out interviews in person with patients who were at the Hospital, the study had to be approved by the Hospital Ethical Committee. Interviews with patients were carried out once they finished the consultation with the doctors. Before starting the interview, patients were informed about the purpose of the research (those participants who were outside the city were informed on the website), guaranteeing confidentiality and anonymity of their participation through an informed consent form.

The Ethical Committee of the University of Malaga, as well as the Hospital Costa del Sol's concluded that the study met methodological ethical and legal criteria for its implementation (Reference number: CEUMA-58-2016-H).

Instruments

Sociodemographic and health questionnaire. The following sociodemographic and health data were collected: marital status, level of studies, employment status, type of cancer, moment of illness, hormone therapy treatment, chemotherapy treatment, radiotherapy treatment, and surgical treatment.

Quality of life questionnaire (EORTC-QLQ C-30-European organization for research and treatment of cancer).[34,35] Questionnaire adapted to the Spanish population assessing different aspects of quality of life, as informed by the cancer patients themselves. It consisted of 28 items with a Likert scale of 1 to 4, from "Not at all" to "Very much" and 2 items with a Likert scale of 1 to 7, from "Very poor" to "Excellent."

The questionnaire has 5 functional scales (physical, role, emotional, cognitive, and social), 3 symptom scales (fatigue, pain, nausea, or vomiting) and a global health status scale (evaluation of the patient's health and general quality of life).

The scores are evaluated on a scale of 0 to 100. A high score for the global health status and the functional scales signifies a high quality of life. Meanwhile, a high score for the symptom scales represents a low quality of life. Reliability and validity results show that QLQ-C30[35] is a reliable and valid questionnaire when applied to a Spanish sample. It also provides the level of detail needed by the clinician to assess the impact the different forms of treatment can have on the areas of quality of life. The scale has a reliability according to Cronbach's alpha of $\alpha = .86$.

Questionnaire on the frequency of and satisfaction with social support (QFSSS).[36] This questionnaire measures social support from a multidimensional perspective, distinguishing the types of support (emotional, instrumental, and informational) provided by each of the sources of support. The sources of support assessed were support received from family, partner, friends, and health professionals. This questionnaire also differs depending on the frequency of and satisfaction with the support received.

For each source and type of support, the frequency of and satisfaction with the support received is evaluated. The total number of items is 24, measuring the frequency of emotional, instrumental and informational support, as well as satisfaction with the emotional, instrumental and informational support provided by each source (family, friends, partner, and health professionals). (ie, "Please indicate the frequency of emotional support provided by your partner.") The questionnaire uses a Likert scale of 1 to 5 points for both the frequency of social support received (1 = Rarely and 5 = Always) and for satisfaction with the support

(1 = Dissatisfied and 5 = Very satisfied). The questionnaire[36] shows high reliability and validity, thus confirming the QFSSS as a versatile instrument that is appropriate for the multidimensional assessment of social support, and it has been widely used with cancer patients before. The reliability of the complete scale according to Cronbach's Alpha is $\alpha = .96$

Perceived stress scale (PSS).[37,38] Version adapted to the Spanish population. It consists of 14 items with a Likert scale of 0 to 4 (0 = Never; 1 = Hardly ever; 2 = Sometimes; 3 = Often; 4 = Very often).

This scale provides a single measure, which assesses the degree to which the life situations over the last month are evaluated as being stressful. Its items evaluate the degree to which the patients consider their life to be unpredictable, uncontrollable and overloaded. A higher score corresponds to a higher level of perceived stress. The Spanish version[38] showed appropriate reliability and validity, thus making it a precise instrument to assess perceived stress both in clinical and research contexts. Internal consistency of the instrument is $\alpha = .83$.

Statistical Analysis

The data analysis was carried out with IBM SPSS version 23. Descriptive statistics were used to analyse the sociodemographic and health variables of the participants. Pearson's correlation coefficient was applied to determine the relationship between social support (distinguishing between frequency of and satisfaction with the support received, the types of emotional, instrumental and informational support and the sources of support whether family, partner, friends, or health professionals) and the dimensions of quality of life (global health status, functioning area, and symptom area) and perceived stress. In order to examine the possible predictors of the dimensions of quality of life and perceived stress, a multiple linear regression analysis was performed. Dependent variables in such regression analyses were global health status, functioning area, symptom area and perceived stress. Independent variables were frequency of emotional support, frequency of instrumental support and frequency of informational support provided by each source (family, friends, partner, and health professionals); and satisfaction with emotional, instrumental and informational support provided by each source.

Results

Descriptive Analysis and Relationship between Variables

The descriptive statistics of the participants are displayed in Table 1. There were a total of 200 cancer patients who participated, with ages between 22 and 88. The total age average was 50.55 (DT = 13.05). 147 patients were women (73.5%) and 53 men (26.5%).

The correlation coefficients are shown in Table 2. Regarding the frequency of support, the global health status was significantly associated with the frequency of any type of support provided by family, friends and health professionals and with the emotional and informational support provided by partners. The functioning area was significantly associated with the frequency of any type of support provided by family, friends and health professionals and with the emotional support provided by partners. The symptom area and perceived stress were significantly associated with a lower frequency of any type of support provided from any source.

Regarding satisfaction with the support received, the global health status and the functioning area were significantly associated with greater satisfaction with any type of support provided by any source of support, and the symptom area and the perceived stress were significantly associated with lower satisfaction with any type of support provided from any source of support.

Predictive Models of Quality of Life and Perceived Stress

Frequency of social support. Table 3 shows the results of the multiple regression analysis using the perception of frequency of social support variables as predictors. The multiple regression analysis revealed significant models for each dimension of quality of life. For the global health status model ($F = 11.49$, $P = .001$, $R^2 = .06$), the frequency of emotional support from family was the significant predictor ($\beta = .23$, $P = .001$). In the functioning area model ($F = 11.81$, $P = .001$, $R^2 = .06$), the frequency of informational support by family was the significant predictor ($\beta = .24$, $P = .001$). In the symptom area model ($F = 19.21$, $P = .001$, $R^2 = .06$), the frequency of emotional support by partners was the significant predictor ($\beta = .25$, $P = .001$). In addition, the multiple regression analysis revealed a significant model for perceived stress ($F = 25.14$, $P < .001$, $R^2 = .11$) where the frequency of emotional support by family was the sole significant predictor ($\beta = -.34$, $P < .001$). The rest of the variables of frequency of support were non-significant ($P < .05$).

Satisfaction with social support. Table 4 shows the results of the multiple regression analysis using the satisfaction with social support received variables as predictors. The multiple regression analysis revealed significant models for each dimension of quality of life. In the global health status model ($F = 8.66$, $P < .001$, $R^2 = .09$), the significant predictors were satisfaction with the emotional support of partners ($\beta = .18$, $P = .032$) and satisfaction with the informational support of friends ($\beta = .19$, $P = .024$). In the functioning area model

Table 1. Participant Sociodemographic and Medical Information (n = 200).

Sociodemographics		Medical information	
Variable	n (%)	Variable	n (%)
Age		Type of cancer	
22–30 years	10 (5.1)	Thyroid	63 (32.1)
31–40 years	40 (20.2)	Breast	56 (28.6)
41–50 years	43 (21.7)	Larynx	18 (9.2)
51–60 years	63 (31.8)	Bowel	14 (7.1)
61–70 years	28 (14.1)	Ovary	13 (6.6)
71–80 years	12 (6.1)	Lung	6 (3.1)
81–88 years	2 (1.0)	Other	26 (13.3)
Marital status		Moment of illness	
Single	32 (16.0)	Under treatment	82 (41.0)
Married	128 (64.0)	Under review	118 (59.0)
Divorced/separated	15 (7.5)		
Widowed	9 (4.5)		
De facto partner	16 (8.0)		
Level of studies		Hormone therapy treatment	
University/higher studies completed	71 (35.5)	Yes	42 (21.1)
Currently university/higher studies	7 (3.5)	No	157 (78.9)
Baccalaureate/vocational training	55 (27.5)		
Compulsory education/primary	56 (28.0)		
None of the above	11 (5.5)		
Sex		Chemotherapy treatment	
Female	147 (73.5)	Yes	116 (58.3)
Male	53 (26.5)	No	83 (41.7)
Employment status		Radiotherapy treatment	
Civil servant	22 (11.0)	Yes	113 (56.8)
Active, self-employed	12 (6.0)	No	86 (43.2)
Active, employee	43 (21.5)		
Student	2 (1.0)		
Unemployed	27 (13.5)		
Domestic worker	16 (8.0)		
Retired	49 (24.5)		
On sick leave	29 (14.5)		
		Surgical treatment	
		Yes	174 (87.4)
		No	25 (12.6)

($F=9.67$, $P<.001$, $R^2=.10$) the significant predictors were satisfaction with the informational support of family (β=.16, $P=.050$) and satisfaction with the emotional support of partners (β=.22, $P=.008$). In the symptom area model ($F=19.21$, $P=.001$, $R^2=.10$) satisfaction with emotional support of the partner was the significant predictor (β=.32, $P=.001$). As in the previous case, the multiple regression analysis revealed a significant model for perceived stress ($F=26.23$, $P<.001$, $R^2=.21$), where the significant predictors were satisfaction with the emotional support of family (β=*.25,* $P=.001$) and satisfaction with the informational support of friends (β=.27, $P=.001$). The rest of the variables of satisfaction with support received were insignificant ($P<.05$).

Discussion

This study proposes an analysis of the role of the different sources and types of support provided on the quality of life of cancer patients. It also analyzes whether it is more the satisfaction with support than its frequency that most positively influences quality of life and stress.

The important relation found between social support and quality of life and perceived stress reinforces the relevance of studying social support on cancer patients. Results obtained are in line with the buffering hypothesis, according to which social support plays a protective role against the negative effect of stress in the presence of stressful factors.[39,40] Strengthening social support systems can help avoid harmful

Table 2. Correlations of Quality of Life and Perceived Stress with Support Received.

Frequency of support received					Satisfaction with support received				
FREQ	GHS	FA	SA	PE	SATIS	GHS	FA	SA	PE
Family					Family				
Emo	.23**	.22**	−.20**	−.34**	Emo	.30**	.31**	−.24**	−.40**
Instru	.17**	.18**	−.17**	−.24**	Instru	.24**	.23**	−.19**	−.33**
Infor	.20**	.14**	−.22**	−.29**	Info	.23**	.27**	−.23**	−.35**
Partner					Partner				
Emo	.21**	.21**	−.25**	−.26**	Emo	.26**	.29**	−.32**	−.35**
Instru	.12	.11	−.19**	−.18*	Instru	.17*	.17*	−.22**	−.28**
Info	.13*	.10	−.13*	−.19**	Info	.21**	.20**	−.21**	−.25**
Friends					Friends				
Emo	.23**	.19**	−.14*	−.25**	Emo	.26**	.23**	−.19**	−.37**
Instru	.21**	.21**	−.21**	−.27**	Instru	.21**	.21**	−.17**	−.38**
Info	.21**	.22**	−.16*	−.30**	Info	.27**	.23**	−.19**	−.41**
HePro					HePro				
Emo	.23**	.21**	−.18**	−.26**	Emo	.20**	.20**	−.17**	−.26**
Instru	.18**	.13*	−.14*	−.16*	Instru	.25**	.23**	−.21**	−.24**
Infor	.20**	.17**	−.15*	−.21**	Info	.22**	.22**	−.21**	−.26**

Abbreviations: FREQ, frequency of social support received; SATIS, satisfaction with the social support received; Emo, emotional support; instru, instrumental support; info, informational support; GHS, global health status; FA, functioning area; SA, symptom area; PE, perceived stress; HePro, health professionals

*$P < .05$.

**$P < .01$.

Table 3. Multiple Linear Regression Models of the Frequency of Social Support Received for the Dimensions of Quality of Life and Perceived Stress.

Outcome	Variable	ß	*T*	*P*	*F*-value	*R* square	*P*
Global health status	FEmoFa				11.49	.06	.001
		.23	3.39	.001			
Functioning area	FInfFa				11.81	.06	.001
		.24	3.44	.001			
Symptom area	FEmoPa				10.99	.06	.001
		−.25	−3.32	.001			
Perceived stress	FEmoFa				25.14	.11	.000
		−.34	−5.01	.000			

Abbreviations: FEmoFa, frequency of emotional support by family; FInfFa, frequency of informational support by family; FEmoPa, frequency of emotional support by partners.

effects on health, which would lead to an improvement of patients' quality of life during their expected survival period,[41] and a reduction of stress, thus leading to an improvement of their quality of life.[42]

Emotional support showed the highest impact on quality of life and perceived stress, followed by informational support. Given the fact that patients' social networks are reduced during the disease process, these results are of great interest as they demonstrate the importance of emotional support. Other studies highlight the relevance of this type of support when it comes to improving patients' quality of life after the diagnosis.[43,44] More specifically, the emotional support provided by the family and the partner can alleviate the anxiety linked to the disease, even if patients perceive low instrumental support. In line with these results, other studies have also shown that instrumental support is the least related to quality of life.[45] However, these results are in contrast with the fact that having routine help is very important for cancer patients, for example, to have someone with whom to go to medical appointments or someone to help with household chores.[21] It would be necessary to delve into this matter to better understand cancer patients' needs for instrumental support and to better prepare their close support networks so they can provide the support

Table 4. Multiple Linear Regression Models of the Satisfaction with Social Support Received for the Dimensions of Quality of Life and Perceived Stress.

Outcome	Variable	ß	*T*	*P*	*F*-value	*R* square	*P*
Global health status					8.66	.09	.000
	SEmoPa	.18	2.16	.032			
	SInfFr	.19	2.27	.024			
Functioning area					9.67	.10	.000
	SInfFa	.16	1.98	.050			
	SEmoPa	.22	2.69	.008			
Symptom area					19.21	.10	.000
	SEmoPa	−.32	−4.38	.000			
Perceived stress					26.23	.21	.000
	SEmoFa	−.25	−3.34	.001			
	SInfFr	−.27	−3.50	.001			

Abbreviations: SEmoPa, satisfaction with the emotional support of partners; SInfFr, satisfaction with the informational support of friends; SInfFa, satisfaction with the informational support of family; SEmoFa, satisfaction with the emotional support of family.

patients need. Sometimes, patients' networks want to provide support but don't know how.[46]

Informational support has proven to be remarkably important. However, studies that analyse this type of support are scarce. Some interventions with cancer patients support groups have shown the importance of participating in such groups for patients, since they allow patients to obtain information on the disease, specific treatments, or counseling. Informational support allows patients to learn more about their disease and its treatment, thus giving them a sense of control over the disease.[47]

Regarding the sources of support, close support networks, such as partners, family, and friends relate more positively to patients' quality of life and perceived stress. Support provided by the partner is an important source for cancer patients, as highlighted by several studies.[45,48] In fact, satisfaction with emotional support from the partner is the dimension most greatly related to quality of life. However, support provided by this source did not lead to a reduction of perceived stress. A possible explanation is that most participants in the study are women and a constant feature in family health care is that carers are usually women. Women who suffer from cancer experience more difficulties to satisfy their needs and therefore suffer higher stress.[49] Some studies on women with cancer have shown that women look to other women for support in order to reduce their stress and health problems, instead of their partners'.[21] These results highlight the importance of identifying patients who do not have this type of social support available to guide their support networks and develop appropriate support programs.

Results related to support provided by family are in line with those studies that show family is a main source of support for cancer patients.[25,50] These results are relevant because family members constitute patients' closest support networks. Family members can assume the role of additional listeners during medical visits, thus helping to satisfy the needs for information that patients might have.[50] Furthermore, support provided by family members is a key reference point for stress management in cancer patients. Some studies have proved that the higher the patients' perception of family support, the higher the levels of stress management.[51]

Support provided by friends has also proved to be a main source of support, as shown by previous literature.[25,48] Results from the present study prove the important role of satisfaction with informational support from friends. This is an interesting result, since friends provide additional support and are important sources of support because they have shared interests with patients, they provide information when patients need it, they act as confidants, they give advice and offer opportunities to share information.[52] Friendships can satisfy patients' needs to talk, receive advice or share information in specific circumstances, which helps reduce stress levels related to the disease and improve their quality of life.

Support provided by health professionals is scarcely related to patients' quality of life and perceived stress. A possible explanation is that when patients enter the review stage or are discharged, their contact with health professionals is reduced. However, as shown by some studies,[53] support from health professionals, when present, plays an important role during patients' adaptation process. This result is of considerable importance since it calls for the creation of specific intervention strategies to optimize patients' support networks during the entire disease process. It is also necessary to analyse patients' needs regarding health professionals in each stage of the disease.

Results also show that satisfaction with support received is a better predictor of quality of life and perceived stress than the frequency of it. When comparing this result with that previous research,[28] the lack of social support only relates to emotional distress when patients need more support than they receive, and when they are not entirely

satisfied with the support received. This result confirms that the frequency of support does not always relate to satisfaction with support received. Nevertheless, the availability of support is key for the treatment of health problems, since patients who don't receive enough social support from health professionals show less ability to handle problems linked to the disease and tend to have worse quality of life.[48] These results lead us to wonder if support resources provided to patients really satisfy their needs since, as shown by previous literature,[54] satisfaction is mainly determined by the correlation between the need for specific types of support and what support networks provide. These results are backed by previous studies that indicate that there should be a coherent relation between support received, patients' valuation of their social networks and satisfaction with resources derived from it.[30]

The present study highlights the importance of including frequency and satisfaction with support received within interventions aimed at reducing cancer patients' stress and improving their quality of life. Studying these 2 variables would help to know more specifically the support provided by each network and to make appropriate decisions to orientate intervention with social networks.

The conclusions of the study are also of interest from a theoretical point of view. Traditionally, there have been 2 theoretical approaches on social support: the functional approach, which focuses on the buffering features of social support on stress and satisfaction with support; and the structural approach, which focuses mainly on the quantitative features, the size of networks or the frequency of contact.[31] Results from the present study are in line with the functional approach, since satisfaction and quality of support explain patients' quality of life better, as opposed to the frequency of support. When facing difficult situations, such as health problems, perceiving support is useful and positive when it contributes to reducing stress.

The present study contributes to the study of social support from a multidimensional approach by analysing both sources of support (partner, family, friends, and health professionals) and types of support (emotional, instrumental, and informational). Each type and source of support has proved to have a specific function. Thanks to this type of analysis, we can have a more detailed view on the functional feature of social support. This aspect is included in the Specificity Theory from Cohen and Mckay[55] who suggest that social support is more effective the more specific it is for the problem that requires a response.

Study Limitations

It would be convenient for future studies to increase the number of participants and the number of male patients, given that in this study women's associations were the ones most interested in participating, and as a result the number of male participants was inferior. Future studies could also the effects of social support taking into account the type of cancer and the degree of the disease. It would be interesting to include other potential sources of support such as associations or other patients. Finally, it is also necessary to carry out a more in-depth analysis of the support needed by patients from health professionals.

Clinical Implications

It is essential to study the psychological aspects of cancer patients, given that although it is important to increase their longevity, it is equally important to ensure that it involves the least possible deterioration in their daily functioning and their perceived quality of life.[56,57] Based on an analysis of the specific support needs of patients, more effective intervention strategies could be designed to determine the global benefits for the quality of life of patients, especially from sources of support in the medical world which have rarely been studied. It is important to prepare all sources of support so they can provide patients with quality support. Often, sources of support are available and ready to provide such help but do not know how. It is particularly important to train health professionals so the patient-professional relationship can improve and increase patients' perception of support, since such a source is key and will accompany patients throughout the disease.

Conclusions

In general, the perception of social support had a positive effect on patients and the multidimensional analysis of this support has allowed us to distinguish the types and sources of support that are most strongly related with quality of life and those that decrease patient stress.

There is a certain degree of consensus that emotional support is the most important type of support for a large number of problems, but each type of support undoubtedly has a specific function. Informational support, especially from family and friends, is a good predictor of the quality of life of the patient. These data are very interesting because they show how patients receive different types of support depending on the source analysed, with each source playing a different role in the provision of the support.

The inclusion of health professionals as a source of support constitutes a new element given that in most studies the role they play as a support figure is not usually analysed.

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ORCID iD

Iván Ruiz-Rodríguez https://orcid.org/0000-0003-3726-2197

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