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Return-to-work support in cancer patients: which methodology? Retour au travail pour les patients atteints de cancer : quelle méthodologie? Catégorie d'article : article original

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Résumé :

Introduction : le retour au travail après un cancer est un déterminant de la qualité de vie des patients. Les objectifs étaient de décrire et évaluer les interventions réalisées dans un centre hospitalier universitaire français pour à aider les patients atteints de cancer dans leur retour au travail

Méthode : Un questionnaire a été adressé à 153 patients qui avaient bénéficié de l'accompagnement d'une consultation multidisciplinaire d'aide au retour au travail d'un centre hospitalier universitaire français.

Résultats : 121 patients ont complété le questionnaire. Le taux de retour au travail était de 50% 2 ans après le diagnostic de cancer. Il était significativement plus élevé pour les patients qui avaient accepté un suivi psychologique individuel orienté sur le retour au travail (p=0.04) et plus élevé mais non significativement pour les patients ayant effectué une visite de préreprise avec le médecin du travail durant l'arrêt de travail (p=0.08). La reconnaissance du statut de travailleur handicapé n'était pas associée à un taux de reprise plus élevé. La participation à un groupe de paroles concernait peu de patients et n'était pas non plus associée à un taux de retour plus élevé.

Discussion: le suivi psychologique individuel orienté sur le retour au travail et la consultation du médecin du travail durant l'arrêt de travail doivent être recommandés systématiquement aux patients atteints de cancer en vue de leur retour au travail. La reconnaissance du statut de travailleur handicapé est à conseiller au cas par cas, de même que la participation à un groupe de paroles.

Mots-clés: Retour au travail - Cancer – Consultation multidisciplinaire – Facteurs prédictifs.

Abstract

Introduction: Return to work after cancer is a determinant of patients quality of life. The aims were to describe return-to-work interventions applied in a French University Hospital and to assess its effectiveness in achieving a successful return to work.

Methods : A return-to-work questionnaire was sent to 153 patients who were accompanied by a multidisciplinary return-to-work after cancer consultation.

Results: 121 patients answered the return-to-work questionnaire. Analysis of the questionnaire found an overall rate of return to work of 50% towo years after the cancer diagnosis. The rate was significantly higher in patients who had received individual psychological support for returning to work (p=0.04) and higher, but not significantly, in patients who had a consultation with the company physician during their period of sick-leave (p=0.08). Participating in support groups and performing the required actions for the recognition of handicapped worker status were not factors associated with return to work.

Discussion: An individual psychological support for returning to work and a consultation with the company physician during the period of sick-leave should be systematically recommended for patients suffering from cancer. Participating in support groups and recognition of handicapped worker status should be recommended on a case-by-case basis.

Keywords: Return-to-work – Cancer – Multidisciplinary consultation – Resumption of work - Predictive factors.

Abbreviations:

PCS: Occupations and Socioprofessional Categories

DREES: Directorate of Research, Studies and Statistical Evaluation

CI: Confidence Interval

3336 words

Introduction

Early screening and medical treatment have increased the survival of cancer patients [1]. Nevertheless, these patients are often physically and psychologically scarred from the disease and the treatments [1-3]. These developments have led to considering cancer pathologies no longer as fatal diseases but as chronic illnesses [4]. Consequently, support has been developed with the aim of increasing the quality of life of cancer patients. Among the determinants of quality of life, return to work is an important element. Indeed, for cancer patients it means not only a source of income but also a victory over the illness and a return to a "normal" life [5-8]. Various studies have evidenced the difficulties encountered by cancer survivors when returning to work. For example, De Boer's meta-analysis showed that on average 34% of cancer patients were unemployed against 15% in the control group [1, 9]. This observation has led to actions in favor of the return to work of cancer patients as one of the priorities of public health care in France [1, 10]. Therefore, work-directed interventions for cancer patients have been developed. However, although the factors associated with return to work have been frequently studied (sociodemographic and professional factors or disease related factors etc), far less literature is available on support methodologies [1,11-15]. In fact, several studies underline the lack of consensus on the information to be given to patients concerning the return to work [1,16]. Moreover, previous studies concluded that it it is important to maintain research on return to work in a range of countries since social security systems, contractual sick pay schemes, employer incentivization to provide vocational rehabilitation and societal attitudes to return to work are different among different countries. [2] Hence, the objective of this study was to explore return-to-work

interventions applied in a French University Hospital and to evaluate its effectiveness in achieving a successful return to work.

Materials and Methods

This observational study included patients using the return-to-work platform of a French University Hospital between January 2010 and August 2013.

Multidisciplinary platform for return-to-work support

In 2007 and 2009, a multi-disciplinary return-to-work platform was tested at Rouen University Hospital, France. At the end of the 1-year trial period and after adjustments had been made to the proposed methodology the return-to-work platform was set up on a permanent basis. The objective of the platform is to help patients with cancer to return to work. The multi-disciplinary return-to-work platform is composed of an occupational physician, a social worker and a psychologist and is accessible to all persons with cancer who wish to prepare their return to work, no matter where they are being treated. The objective of the return-to-work platform is to provide patients with information and to make recommendations for their return to work.

Patients were informed of the possibility to use the return-to-work platform by flyers and posters in the waiting rooms of cancer treatment centers and by oncologists. The methodology of the platform was initially defined on the basis of scientific data available in 2009 on the return to work of patients with chronic diseases, most of the literature dealing with low back pain and return to work

Description of patient support

The strong complementarity and synergy between the occupational physician and the social worker justified their seeing the patient in tandem for the first consultation.

The recommendations made by the occupational physician were based on the possibilities of social support and, conversely, the social measures were based on the employee's working capacities. The proposed framework included assessment of the patient's emotional status and potential appropriate solutions or orientations for each case. The aim was to allow each patient to describe his/her occupational tasks, his/her pathology and to assist each patient in the elaboration of a return-to-work project. The occupational physician evaluated the patient's work ability and, based on occupational tasks, provided the patient with recommendations on optimal work accommodations, such as time-table and task–related accommodations. The occupational physician explained to the patient that the company physician would adjust these recommendations according to the context of the company. The patient was then informed and counseled on the steps to be taken. Approximate dates for performing the steps were determined by the occupational physician according to the patient's health evaluation. The recommended steps were the following:

- 1) Consultation during the sick-leave period with the company physician to prepare the patient's return to work, ; the company physician has detailed knowledge of the patient's occupational tasks and validates or amends the return-to-work project and communicates his/her recommendations for adjustment to the employer.
- 2) Request for the recognition of disability status. In France, this recognition is given by a special committee of physicians representing the National Health System. It entitles the employee and the employer to specific help with regard to accommodations in the work environment, funding possibilities for these accommodations and professional reconversion training. Of note, companies

and organizations with more than 20 employees have a general obligation to employ 6% of disabled people or are liable to fines.

- 3) Pre- and post- return-to-work psychological support: First of all, the role of the psychologist is explained to the patient at the beginning of the consultation. Then, the clinical interview is conducted to promote the verbalization of the patient while ensuring the confidentiality of exchange with the psychologist. Since personal life and professional issues are intertwined, illness being an intimate experience, it seemed necessary to provide a framework allowing for the expression of problems not only linked to the return to work but also to the "post-cancer" period in general. At the end of the consultation, the psychologist and the patient planned regular follow-up after having defined the work objectives and the frequency of the interviews. When the patient declined the offer of support, the psychologist informed him/her that it was possible to receive support later if he/she felt it necessary.
- 4) Participation in a support group run jointly by the psychologist and the occupational physician during 4 sessions of 1h30 each over a 4-month period. These sessions allowed patients to share their experiences of their disease and of their return to work, to fight a feeling of isolation and to initiate impulses of identification within the group [17].
- 5) Applying for therapeutic part-time working: this measure allows the patient to return to work gradually, over several weeks, starting by working half-time, without loss of income. Working time is then increased regularly until reaching the initial time worked before the disease. This requires a prescription by the general practitioner and the agreement of the employer and the company physician.

There was no obligation for the patient and the recommendations were aimed at helping him/her to make his/her own free choices so as to allow him/her to be the actor of his/her professional development.

In addition, some practical information was systematically given to the patient, "based on the patient's recurrent questions and observations from our support experience:

- Information on the notion of fatigue and lack of concentration often present when returning to work but which fade gradually;
- Information on the necessity of anticipating what to say to colleagues, to the employer and possible clients about one's illness, upon returning to work;
- Information on possible changes in relations with colleagues, employer and possible clients when returning to work, since they often do not know how to behave toward the employee whom they tend to consider as a sick person or a survivor rather than a worker;
- Information on the post-therapeutic void [18-19]:
- Information on the role of the company physician and the medical confidentiality by which he/she is bound.

A summary document with the plan of action and the different pieces of information was given to the patient at the end of the consultation. In addition, with the patient's agreement, a consultation report was sent to the treating physician: general practitioner, oncologist or company physician. The consultation was no substitute for any of the actors or existing schemes for job retention or return to work. It was intended to create links, support, guide and direct, as early as possible in the return to work process.

Evaluation of the results of patient support

The following data were collected during the first medical consultation: sociodemographic data (age, gender), professional data (educational level and qualifications, last occupation according to the Occupations and Socioprofessional Categories (PCS) 2003 classification, occupational status at the time of the diagnosis: yes/no, permanent work contract at the time of the consultation: yes/no and medical data on the disease (localization, evolution, treatment, sequellae and date of cancer diagnosis).

Then early 2013, a return-to-work questionnaire was sent to all patients who had used the return-to-work platform between 2010 and 2013, along with an information letter about the study and its non-binding nature, as well as a stamped and addressed reply envelope.

The questionnaire was built by the multidisciplinary team of the return-to-work platform and tested among the first patients during the trial period in 2007-2009. The main questions of the questionnaire were asked if the patient had returned to work (yes/no), the date of return to work if this was the case, and the implementation of the measures recommended during the first consultation (consultation with the company physician: yes/no, request for recognition of disability status: yes/no). In December 2013, the questionnaire was sent once more to those patients who had not answered or returned it.

Statistical analyses were carried out using the 11.0 version of the STATA software program (StataCorp, College Station, TX USA). First, bivariate analysis with the χ^2 test or the Fisher test, according to the numbers, was used to examine the factors associated with the return to work. Then, we used multivariate analysis by logistic

regression in order to check the independent effect of each variable. Factors studied were socio-demographic variables, occupational status at time of diagnosis (working or not, permanent work contract at time of diagnosis or not), localization of cancer (breast/other), treatment (surgery or not, chemotherapy or not, and radiotherapy or not), presence of symptoms such as tiredness, pain (yes/no), being in remission (yes/no), consultation with the multidisciplinary team of the return-to-work platform during the first year after diagnosis (yes/no), number of consultations with the occupational physician and the social worker of the platform (only one/ at least 2), psychological support (yes/no), participation in support group (yes/no), request for recognition of disability status (yes/no), consultation with the company physician during the sick-leave period (yes/no).

This study was part of a doctoral research project which was approved by the local ethics committee. (number 15-07-01-008).

Results

Overall, 153 questionnaires were sent, 121 of which were returned and analyzed (79%). The socio-demographic, medical and occupational characteristics of the patients who responded are presented in table 1. The characteristics were not significantly different from the initial test group. Median delay between cancer diagnosis and first consultation with the multidisciplinary team of the platform was 16 months. Thirty-four, 43 and 23% of patients consulted during the first year of diagnosis, the second year and after, respectively.

The rate of return to work was 66% [CI95% = 57-75]. The rate increased according to the length of time after diagnosis: from 7% at 6 months, to 13% at 12 months, 38% at 18 months and 50% at 24 months.

Most patients followed the recommendations made during the first consultation and few accepted participation in support groups (table 2). Recommendations concerning therapeutic part-time work are not detailed in table 2 since this measure differs from the others in that it could not be applied in cases where the patient had not returned to work. Therapeutic part-time work was advised to all salaried patients who had still a contract with an employer (n=60). Among these patients, 38 returned to work and for 30 patients this return to work was organized with a therapeutic part-time.

In the bivariate analysis, the factors significantly associated with return to work were: having a job at the time of the diagnosis (OR=3.3, CI95%=[1.0-11.3]), having a permanent work contract at the time of the diagnosis (OR=5.0, CI95%=[2.0-12.6]), being in remission (OR=5, CI95%=[1.2-20]), and having a consultation with the company physician during the sick-leave period (OR=4.6, CI95%=[1.5-16.3]) (table 3).

In the multivariate analysis, the factors significantly associated with return to work were: having a permanent work contract at the time of the diagnosis (OR=4.7, CI95%=[1.4-16], p=0.01), being in remission (OR=5, CI95%=[1.2-25], p=0.03), and having received individual psychological support (OR=2.7, CI95%=[1.0-6.9], p=0.04). Having a consultation with the company physician was close to the level of significance (p=0.08), OR=2.9, CI95% [0.9-9.2] (table 3).

Discussion

We found a 50% rate of return to work two years after the diagnosis of cancer. Patients who had individual psychological support for returning to work and a consultation with the company physician during their sick-leave period were more likely to return to work than patients who did not. However, patients who performed the required actions for the recognition of handicapped worker status and patients who participated in a support group were not more likely to return to work than patients who did not.

The rates of return to work were: 7% at 6 months, 13% at 12 months, 38% at 18 months and 50% at 24 months. In comparison, Mehnert, in a review of the literature observed higher rates of return to work of: 40% at 6 months, 62% at 12 months, 73% at 18 months and 89% at 24 months [20]. These rates varied depending on the countries. It is interesting to examine the average French data [21]. The DREES study, conducted in France in 2006, showed that 67% of the patients who had a job at the time of the diagnosis returned to work two years after [22].

The rate of return to work of our sample is lower than the data in the literature. However, comparison is difficult. Our sample cannot be compared with the general population as it included more women, more so-called "execution" job categories, more patients with sequelae and more patients with progressive cancer. These factors are traditionally associated with lower rates of return to work [7,22]. Moreover, 66% of our patients did not use the return-to-work platform until one year after the diagnosis. Those patients who contacted the platform were probably individuals for whom returning to work was more complex. As in the literature, we evaluated the findings from the consultation in relation to the rate of return to work[15]. Nevertheless, during the study it seemed to us that this criterion should be viewed with caution. Indeed, in certain cases, the return to work may happen only for

financial reasons leading the patient to a "forced" return potentially jeopardizing his/her health. Furthermore, 12% of patients had progressive cancer. Even if the return to work could not be effective because of temporary aggravation of the disease, the implementation of job adjustments, temporary support and hope of "returning to a normal life" were important for those patients. These elements can not be documented by merely studying the return-to-work rate. It would have been interesting to examine the findings from the consultation using other indicators, such as the quality of life, for example. The rate of return to work was significantly higher in patients who had had individual psychological support. Individual support takes into account a patient's specific needs that can vary from one patient to another. As Wells explains, the meaning of work, the role it plays in the person's identity and its financial impact are all patient-specific [24]. "A person-centred approach supporting the achievement of survivors' work-related goals rather than return to work" is therefore recommended [24]. Moreover, just like the announcement of the diagnosis, the news that the patient is in remission is a difficult moment: the patient does not immediately become a healthy person with the announcement of remission. The disease and the sequelae need to be "digested" [23]. Patients often return to work during remission; psychological support often deals with this aspect. These considerations certainly explain why psychological support was identified as a factor improving return to work.

Participating in support groups was not significantly associated with returning to work. As a matter of fact, few patients accepted participation in support groups. Yet, these groups allow patients to fight a sense of isolation and to create identification within the group [17]. Consequently, a more detailed assessment of the patients for whom these groups could be beneficial is recommended but this measure should not be

implemented systematically for all patients. The rate of return to work was higher in patients having seen the company physician during their sick-leave period. The company physician has access to the company and can make recommendations to the employer for adjustments in working conditions. The earlier these recommendations are made, the more time the employer has to think them over and to find solutions. Obtaining the recognition of handicapped worker status in order to fund adjustments of workstations does not seem to influence the return to work, whereas it is a specific measure which would promote return to work. The limiting factor for return to work is probably the discussion about job adjustments rather than their actual funding. What is more, the term "recognition of handicapped worker status" has a psychological impact on the patient: even if the main objective is to obtain funding for job adjustments, the patient acquires a different status to his/her colleagues and is recognized as "ill". All in all, meeting the occupational physician during the sick-leave period is largely recommended whereas the request for recognition of handicapped worker status should be proposed on a case-by-case basis. Of note, only 44% of patients consulted the company physician. This measure must be reinforced with a particular explanation of the role of the company physician and the medical secrecy by which he/she is bound.

Our study has several strengths. First, the number of patients included and the level of participation were significant (153 patients, return rate of the questionnaire 79%) which allowed for analysis of statistical data. This high level of response might be explained by the fact that the patients themselves requested a consultation with the multidisciplinary team of the return-to-work platform and by the relationship of trust established during the interviews. Second, the one-year test period before the

beginning of the study allowed us to adjust the methodology and to improve the type and content of the information to be delivered to patients. To our knowledge, there is no current framework for the delivery of such information to patients. Furthermore, it has been shown that the information delivered to the patient by health professionals is often imprecise and heterogeneous [15].

Nethertheless, our study also has several limitations. Regarding internal validity, patients included were patients who decided to use the return-to-work platform and thus were voluntary patients, which could bias our sample. The majority of patients (66%) did not use the platform until one year after the diagnosis, whereas, according to Menhert, 62% of patients had usually returned to work or had continued to work during the year after cancer diagnosis. This confirms that the patients included in our study probably had specific characteristics and difficulty returning to work. This may explain the low rates of return to work that we found in our study. However, ourreturnto-work platform is probably interesting mostly for these specific patients. Therefore it is interesting to have the results of this specific population. Moreover, as these types of consultations should not be mandatory, the sample studied seems to be representative of the potential population of such a platform. Therefore, only return to work rate was studied. Other criteria should be developed to better describe the return-to-work process and the positive impact for the patient. It would also have been interesting to follow patients over a longer period of time to assess the rate of return to work after 3 or 5 years but this was not the objective of the present study.

Regarding external validity, this study was conducted between 2008 and 2013, at a time when there was no rehabilitation program for patients with cancer in Normandy. It would be interesting in the future to evaluate our return-to-work platform in a new context of cancer rehabilitation programs that are currently being set up.

In conclusion, patients who use a return-to-work platform are probably those who have difficulty returning to work. Individual psychological support during the return-to-work process and meeting the company physician during the sick-leave period should be systematically recommended. The request for recognition of handicapped worker status should be proposed on a case-by-case basis. Participating in support groups need future studies to assess impact on return to work. Future studies are needed for the long-term assessment of return-to-work platforms for the benefit of cancer patients.

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Conflit d'intérêt : aucun

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Table 1: Socio-demographic. medical and occupational characteristics of patients

Characteristics		Population
		% (N=121)
Gender:		
-	male	18
-	female	82
Age:		
-	< 45 years	45
-	\geq 45 years	55
Localiz	ation of cancer:	
-	breast	65
-	hematopoietic system	12
-	digestive system	6
-	skin	5
-	Ear Nose Throat	4
-	respiratory system	2
-	central nervous system	2
-	genitals	2
-	thyroid	2
Cancer	progression at time of consultation	
-	remission	71
-	healing	17
-	progression	12
Educati	ional level and qualifications	
-	no qualification	17
-	professional qualification	42
-	baccalaureate	13
-	high school qualification. university	28
	qualification	
Occupa	tional status at time of diagnosis	
-	without work	12
-	fixed-term contract	16
-	permanent contract	70
-	self-employed	2
Socio-p	professional category (cf: PCS-2003)	
-	farmers	0
-	artisans. shop keepers. business leaders	3
-	managers	8

- intermediate professionals	10
- office employees	56
- workers	10
- other	13

Table 2: Recommendations of physician implemented by patient

	% of achievement
Consultation with company physician	44
Recognition of handicapped worker status	61
Individual psychological support	71
Support group	17

Table 3: Predictive factors of return to work

Factor		Rate	Bivariate analysis		Multivariate analysis	
		return to work (%)	Р	OR*	Р	OR*
Candan	Female (82%)	69	0.09	2.3 [0.8-6.5]	0.7	1.4 [0.3-6.5]
Gender	Male (18%)	50				
Age	< 45 years (45%)	68	0.71	1.2 [0.5-2.7]	-	-
50	≥ 45 years (55%)	64				
Educational level and	< High School qualification (59%)	61	0.23	1.7 [0.7-4.2]	-	-
qualifications	> High School qualification (41%)	73				
Family status	Single (34%)	71	0.53	0.7 [0.3-1.8]	-	-
	Couple (66%)	63				
Occupational status	Working (88%)	70	0.03	3.3 [1.0-11.3]	0.63	0.7 [1.2-3.1]
at time of diagnosis	Not working (12%)	41				
Permanent contract at time of	Yes (70%)	77	0.001	5.0 [2.0-12.6]	0.01	4.7 [1.4-16.0]
diagnosis	No (30%)	41				
Localization of cancer	Breast (65%)	72	0.07	2.1 [0.9-5.0]	0.92	0.9 [0.2-3.7]
	Other(35%)	55				
Surgery	Yes (88%)	65	0.77	0.8 [0.1-2.9]	-	-
	No (12%)	71				
Chemotherapy	Yes (80%)	61	0.13	0.4 [0.1-1.2]	0.96	1.0 [0.6-1.7]
	No (20%)	78				
Radiotherapy	Yes (78%)	65	0.83	0.9 [0.3-2.2]	-	-
	No (22%)	68				
Symptoms (asthenia. pain. etc.)	Yes (92%)	64	0.16	0.2 [0.1-1.5]	0.11	0.2 [0.02-1.5]
	No (8%)	90				
Being in remission	Yes (88%)	/1	0.01	5 [1.2-20]	0.03	5 [1.2-25]
	No (12%)	33				
Consultation during the first year	Yes (34%)	63	0.69	0.8 [0.3-2.0]	-	-

after diagnosis	No (66%)	68				
Number of consultations with the	Only one (61%)	62	0.16	1.9 [0.7-4.9]	0.81	1.1 [0.4-3.1]
social worker	At least 2 (39%)	75				
Psychological support	Yes(71%)	74	0.09 2.	2.0 [0.9-4.7]	0.04	2.7 [1.0-6.9]
	No (39%)	59				
Participation in support group	Yes(17%)	75	0.4	1.6 [0.5-6.0]	-	-
	No (93%)	65				
Performing the required actions for the recognition of	Yes (61%)	64	0.7	0.8 [0.3-2.0]	-	-
handicapped worker status	No (39%)	68				
Consultation with company physician during the sick-leave	Yes (44%)	86	0.001	4.6 [1.5-16.3]	0.08	2.9 [0.9-9.2]
period	No (66%)	58				

OR: Odds ratio