

RETURNING TO WORK AFTER A COMMON MENTAL HEALTH DISORDER: A NEW PREOCCUPATION FOR MENTAL HEALTH PROFESSIONALS?

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SUMMARY

Background: Since 2010, the Belgian mental healthcare system has been involved in a structural reform: the main objective of this reorganisation is to foster the reintegration in the community of patients suffering from a mental health disorder. In parallel, the role of mental health professionals has evolved these last years: from a strictly clinical role, to the preoccupation with the rehabilitation of social competencies such as enhancing patients' abilities to return to work. The aim of this paper is to explore, specifically for patients hospitalized for a common mental health disorder, the predictive variables of returning to work within 6 months after hospitalization (RTW6).

Subjects and methods: Our sample was extracted from routinely collected data during the patients' hospital stay (10 days) at the Psychosomatic Rehabilitation Day Centre of CHU Godinne. A sample of 134 patients participated in our study. Those patients were contacted 6 months after their hospitalization to assess resumption of work.

Results: We found that a patient's sociodemographic and socioeconomic variables, and depressive symptoms at the beginning of hospitalization were not predictive of return to work within 6 months (RTW6). On the other hand, duration of absence from work before hospitalization and the diagnosis of a major depression in particular were negatively associated with RTW6, whereas improvement of depressive symptoms during hospitalization stay was positively associated to RTW6.

Conclusion: Our study identified the diagnosis of major depression and the duration of absence from work before hospitalization as two important risk factors impeding a fast return to work for patients hospitalised for a common mental health disorder. As the preoccupation with patients' abilities to return to work is now on the agenda of mental health professionals, special support and supervision should be dedicated to the more vulnerable patients.

Key words: return to work - common mental health disorders - sick leave - at-risk patients - mental health professional - support return to work process

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INTRODUCTION

Since 2010, in line with the paradigm of deinstitutionalization, the Belgian health authorities have been engaged in a structural reform of the mental healthcare system. Indeed, Belgium has shifted from traditional, large psychiatric institutions (asylums) to a modern, inclusive care system: community-oriented mental health care (Hermans et al. 2012). To realize this, financial resources were reallocated from institutional care facilities to community mental health services. The purpose of this new approach is to emphasize patients' rehabilitation of social competencies, patients' empowerment and patients' reintegration in the community, by developing closer, suitable and affordable services for the population served.

The new challenge for mental health professionals is supporting patients with mental health illness with their full participation and integration in the community, thereby lessening social exclusion. One way to achieve this fundamental objective is to pay close attention on patients' work status. Patients currently on sick leave should be supported with their return to work (RTW).

According to the OECD, mental health at the workplace will become the priority challenge for the labour market (OECD 2012). Indeed, among the working population, common mental disorders (CMD) are significantly prevalent. For example, the prevalence of any depressive-, anxiety- or alcohol-related issue is around 9% in the European working population (Blank et al. 2008). Persons with CMD are likely to experience difficulties in meeting work demands due to impairment of their mental performance (i.e. concentrating); interpersonal skills (i.e. handling emotions) or difficulties to cope with work pressure (Lagerveld et al. 2010). These groups are particularly at risk of long-term sick leave and becoming unemployed and it is known that unemployment is considered to be a negative risk factor for health, social exclusion and poverty (Nivrozkhin & Gordo 2012, Gallie et al. 2003, Lund et al. 2011). The International Labour Organisation estimated the cost of sick leave due to mental illness around 3 to 4% of the gross domestic product of the European Union (Gabriel & Liimatainen, 2000). Therefore RTW after sick leave due to mental health disorders is now considered as a priority objective for both public health authorities and mental health professionals.

In this paper we will explore predictive variables of returning to work within 6 months (RTW6) for patients hospitalized for 10 days in a rehabilitation day centre for a common mental health disorder.

SUBJECTS AND METHODS

Our sample was extracted from a database of patients hospitalized for a period of 10 days in the Psychosomatic Rehabilitation Day Centre of CHU UCL Godinne between June 2014 and June 2016. 134 participants were included in the study. All were diagnosed with one common mental health disorder: major depression, anxiety disorder or alcohol use disorder. All are employed but are currently on sick leave for a maximal duration of 1 year before present hospitalization. Unemployed people, students and retired patients were excluded from our sample. Data such as sociodemographic and socioeconomic variables, previous hospitalization, diagnosis, and duration of absence from work before present hospitalization were collected through questionnaires at the beginning of the hospitalization (day1). Depressive symptoms assessed through Beck depression inventory (BDI) (Beck et al. 1988) were collected twice (day 1 and 10). Participants were contacted by phone 6 months after their hospitalization to assess effective return to work (RTW).

A logistic regression analysis was performed with IBM SPSS 24. Return to work within 6 months after hospitalization (RWT6) was our dependant variable. Predictor variables used in the model were: socio-demographic (age, gender, couple, and number of children) and socio-economic variables (studies, income, and home ownership); duration of absence from work before present hospitalization; diagnosis; depressive symptoms at the beginning of hospitalization and improvement of the depressive symptoms during hospitalization. This last variable was calculated by subtracting the patients' level of BDI obtained at the end of their hospitalization to their initial level of BDI, collected at the beginning of their stay.

Our study has been approved by the Ethics Committee of our institution and conforms to the provisions of the Declaration of Helsinki in 1995 (as revised in Edinburgh in 2000).

RESULTS

Population characteristics are described below in table 1.

One satisfactory model emerged from data: R² Nagelkerke =41.80 % and the Hosmer and Lemeshow test confirmed that the model adequately matched the data ($\chi^2=43.22$, $df=12$, $p<0.0001$). The classification accuracy was 70.20%. Some predictors included in our model were not significant to predict RTW6. Indeed, neither socio-demographic nor socio-economic variables were associated with RTW6. Nevertheless, the model

Table 1

Population characteristics (N=134)	mean	SD	%	range
Socio-demographics				
<i>age</i>	44.3	9.4		22-63
<i>male</i>			31.3	
<i>female</i>			68.7	
<i>single</i>			42.5	
<i>number of children</i>	1.13	1.2		0-5
Socio-economic status				
<i>higher education (≥ 3 years after high school)</i>			45.5	
<i>income (≤ 2,000€)</i>			45.2	
<i>home owner</i>			64.9	
Socio-professional category				
<i>worker</i>			19.8	
<i>employee</i>			55.0	
<i>self-employed person</i>			3.8	
<i>functionary</i>			21.4	
Socio-professional field				
<i>public administration</i>			21.5	
<i>health</i>			16.2	
<i>education</i>			15.4	
<i>other</i>			46.9	
Previous hospitalization				
<i>last year hospitalization for any mental illness before current hospitalization (yes)</i>			35.4	
Absence from work				
<i>time absence from work before current hospitalization (year)</i>	0.26	0.2		0-1
Diagnosis				
<i>depressive disorder</i>			41.8	
<i>anxiety disorder</i>			40.3	
<i>alcohol use disorder</i>			17.9	
Return to work (RTW)				
<i>RTW within 6 months after hospitalization (yes)</i>			71.6	
<i>delay to RTW (days)</i>	44.8	58.0		1-180

SD = standard deviation

shows that time of absence from work before present hospitalization, diagnosis, and BDI improvement were significant predictors of returning to work within 6 months (RTW6). When the duration of absence from work before hospitalization is longer, the likelihood to RTW6 significantly diminished ($B=-4.828$, $p<0.0001$). Regarding a psychiatric diagnosis, we found that in comparison with depressive patients, patients with an

anxiety disorder (OR=7.88, $p<0.001$) or alcohol use disorder (OR=3.14, $p<0.010$) are more likely to RTW6. Those results emphasised that a major depressive diagnosis can be considered as a negative risk factor of RTW6. Indeed, patients with a depressive disorder have respectively 7.8 and 3.1 times less chance to return to work within 6 months after their hospitalization in comparison with patients suffering from an anxiety disorder or an alcohol use disorder. A patient's initial depressive symptoms (BDI) were not predictive of RTW6 ($B=0.023$, $p=0.348$), while patients who showed an improvement of their depressive symptoms (BDI) during hospitalization were more likely to return to work within 6 months ($B=0.078$, $p=0.006$).

Parameters of the model are shown below in table 2.

Table 2

Return to work within 6 months after hospitalization for a common mental health disorder (RTW6)	B	SE	Wald	OR	95% CI for OR		
					lower	upper	p
Socio-demographics							
age	-0.016	0.03	0.33	0.98	0.93	1.04	0.57
female (base=male)	-0.235	0.60	0.15	0.79	0.24	2.55	0.69
couple (base=single)	0.187	0.72	0.07	1.20	0.29	4.90	0.79
number of children	-0.032	0.23	0.02	0.97	0.062	1.51	0.89
Socio-economic status							
studies ≥ 3 years after high school (base= <3 years after hi school)	0.490	0.55	0.79	1.63	0.55	4.81	0.37
income $>2,000\text{€}$ (base= $\leq 2,000\text{€}$)	0.650	0.74	0.77	1.91	0.45	8.18	0.38
non-homeowner (base= home ownership)	-0.214	0.61	0.12	0.87	0.24	2.65	0.72
Absence from work							
time absence from work before hospitalization	-4.828	1.38	12.19	0.008	0.001	0.12	0.0001
Diagnosis							
anxiety disorder	2.065	0.64	10.27	7.88	2.23	27.87	0.001
alcohol use disorder (base=depressive disorder)	1.144	0.76	2.29	3.14	0.71	13.81	0.010
BDI	0.023	0.03	0.88	1.02	0.98	1.08	0.348
BDI improvement during hospitalization	0.078	1.78	7.65	1.08	0.09	1.30	0.006

SE (standard error) -2LL = 107.934
 OR (odds ratio) $\chi^2 = 43.22$, $df=12$, $p<0.0001$
 CI (confidence interval) Nagelkerke $R^2 = 41.80\%$
 Hosmer & Lemeshow test: $p=0.191$
 Classification accuracy = 70.20%

DISCUSSION

Many persons experiencing CMD in the workplace will have to take sick leave. Some of them will need to be hospitalized to cope with their symptoms. The aim of this paper was to explore predictive variables of return to work within 6 months after hospitalization (RTW6) for a CMD. Our data reveal that socio-demographic and socio-economic variables were not predictive of RTW.

This should be considered with caution and could be due to our limited sample which impairs the statistical power of our analysis. Indeed, literature has shown that, variables such as: low social status, low level of education, marital status (widowed, divorced, single), older age and gender (female) are relevant risk factors preventing successful RTW (Blank et al., 2008). In clinical practice, some patients combine the different risk factors; this should be taken into account by mental health professionals when supporting a patient's RTW.

It was found that when time of absence from work before hospitalization is longer, the likelihood to return to work within 6 months after hospitalization significantly decreased. We first hypothesized that a former long-term sick leave is more likely to be related to a more severe mental illness. Consequently, this illness will impair the individual's functioning capacities over a longer period of time. A relation between severity of illness and long-term sick leave has already been observed in literature (Real et al. 2016, Brouwers et al. 2009). Regarding depressed patients, previous research shows that RTW chances decrease when patients are on sick leave for 3 months or more (Brouwers et al. 2006).

A second hypothesis could be that a longer absence from work may generate a fear of stigmatization, in particular from the workplace. Presence of mental health stigma at the workplace has been thoroughly described in literature (Brohan & Thornicroft, 2010). Patients' worries about being stigmatized could result in self-withdrawal or the development of fear-avoidance coping strategies which both exclude them from efficient social support and/or keep them from seeking adequate care (Bryngelson 2009, Stuart 2006). Moreover, it is important to assess a patient's beliefs of workplace implication in the development of their mental illness. Indeed, some patients consider that their work has either caused their illness or made it worse. Those patients will anticipate that their symptoms will become worse by returning to work (Jones et al. 2005). Therefore, after a long period away from work, re-establishing a positive and trusting relationship between patient and both colleagues and supervisor should be a priority.

Confusion and uncertainty about how and when to return to work are often mentioned by patients on prolonged sick leave. Indeed, coordination and communication between different stakeholders (i.e. healthcare providers such as a general practitioner, psychiatrist or psychologist; occupational medical doctor; insurance doctor; work supervisor; family) in the RTW process is rarely optimal (Buijset al. 2007). Stakeholders might have different views, sometimes resulting in opposing recommendations. This situation might slow down the RTW process.

For all patients, the level of depressive symptoms at the beginning of the stay was not identified as a predictive variable of RTW, independently of their psychiatric diagnosis. On the other hand, improvement of depressive symptoms during the stay did predict

RTW6. It is difficult to identify whether patients whose level of depressive symptoms improved during their stay were less severely sick or have more resilience resources. Nevertheless, when we try to predict RTW for common mental health disorders, the psychiatric diagnosis matters because it is strongly related to the moment of first RTW and the duration of sick leave (Flach et al. 2012). Our data show that patients with depression were less likely to go back to work within 6 months in comparison with patients suffering from another common mental health disorder (i.e. alcohol or anxiety disorder). Previous data confirmed that major depression is more likely to be associated with long-term sick leave, more persistent deficits and higher loss of productivity at the work place than other chronic medical conditions (Brouwers et al. 2006, Bültmann et al. 2006, OECD 2012).

Why does depressive disorder heavily impair the RTW process? Depressive symptoms, by essence, affect individual, relational and social dimensions of human functioning. Indeed, symptoms of depression disturb the affective (sadness, hopelessness), the cognitive (poor concentration and memory problems, difficulties making decisions), the motivational (loss of interest or pleasure), and, finally the behavioural (tiredness, lack of energy, sleep disturbances) dimensions of functioning. Depressive patients are more vulnerable to deterioration of their work participation (i.e. fulfilling one's role) and their work functioning (i.e. performance, as extra effort is required to remain productive) (Lagerveldt et al. 2010).

Moreover, in comparison with anxiety or alcohol disorders, major depression is particularly characterized by a decline of the individual's self-efficacy (Bradley & Roberts, 2004). A previous study has shown that individual RTW self-efficacy (i.e. feeling of confidence about own abilities to RTW) is a powerful predictor of a shorter duration until full RTW (Lagerveldt et al., 2016). Thus patients suffering from a depressive disorder require specific focus and support in regard to their RTW process and the development of their RTW self-efficacy beliefs.

Our study has some limits. Firstly regarding external validity, our limited sample impairs the statistical power of our analysis; therefore interpretation of our results should be taken with necessary caution. Secondly, regarding internal validity, several confounding factors were not controlled: a patient's medical and psychological follow-up after hospitalization; occupational stress, and presence of support for RTW at the workplace. Nevertheless, our study shows interesting data. The main strength of this research is the identification of at-risk patients of a more difficult RTW process (patients with a history of longer sick leave, depressive patients), in order to make mental health professionals aware that those patients need specific and tailored support when considering their RTW. Further studies should focus on how an optimal RTW intervention could be designed and implemented, particularly for

patients at risk of long sick leave. Researchers should better identify modifiable individual and workplace factors that impact an effective process of RTW to prevent long-term absenteeism.

CONCLUSION

Returning to work is a complex and multidimensional phenomenon. Therefore, beyond disorder characteristic several additional factors, including individual characteristics, workplace characteristics, and the political-legal context, should be considered due to their potential impact on the effective process of RTW. Our main goal should be to support the implementation of an adequate strategy for sustainable RTW, minimizing the duration of sick leave for patients suffering from common mental health disorders. Considering the individual suffering and economic burden associated with long-term sick leave both for employers and society, mental health professionals should pay particular attention to the RTW process, in particular for more vulnerable patients.

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Contribution of individual authors:

Brice Lepièce conceived the study, performed the statistical analysis, and drafted the manuscript.
Nicolas Zdanowicz participated in the design of the study and helped to draft the manuscript.
Christine Reynaert & Denis Jacques read and approved the final manuscript.

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