

ORIGINAL PAPER

Laurence Borrás · Sylvia Mohr · Maria Boucherie · Sophie Dupont-Willemin · François Ferrero
Philippe Huguelet

Patients with schizophrenia and their finances: how they spend their money

Received: 14 May 2007 / Accepted: 3 September 2007 / Published online: 27 September 2007

Abstract *Introduction* Although most patients with schizophrenia rely on state financial support, little is known about their expenses and how they use the money at their discretion. However, the ability to budget is a predictive factor in rehabilitation. An assessment of financial management skills could make it possible to develop more appropriate psycho-social assistance. *Method* Fifty-seven outpatients with schizophrenia treated in the public sector in Geneva, Switzerland took part in the study. Psychosocial, diagnostic, neurocognitive and symptomatological measures were collected. Data were gathered on patients' incomes and quality of life. A prospective analysis of their expenses during a 1-month period was also performed. *Results* Median income was 4,125 Swiss francs per month (i.e., 3,372 US dollars). After paying fixed expenses (which were handled with or without the assistance of a representative payee), a mean of 400 Swiss francs remained at their disposal to use as they wished. Seventy-two percent of this money was devoted to the use of psychoactive substances (e.g., cigarettes, alcohol, cannabis) or various drinks in coffee houses, and 28% on leisure activities (trips, sports and other recreational activities). Eighty-four percent of patients would have liked to have more money for leisure activities. The study was well-accepted and led to modification of the treatment plan in 84% of cases. *Conclusion* Most of the discretionary money patients received was used for buying sub-

stances with addictive properties; this may hinder the practice of activities favouring recovery. Thus, it appears essential to guide patients in the management of their budgets.

Key words schizophrenia – expenses – payee – disability – social security

Introduction

The pervasive impact of schizophrenia across perceptual, cognitive and behavioural domains makes it difficult for patients to manage their money. The consequences of their impaired financial management skills are often devastating. Malnutrition, substance abuse and even hospitalisation have been attributed to patients' inability or unwillingness to use funds wisely [7]. Financial management is a fundamental, instrumental activity of daily life that comprises substantial knowledge and a wide range of adjustment skills [17, 18].

However, patients' ability to manage their budgets has received very little attention in the literature. This is surprising insofar as financial management skills involve core issues of personal autonomy in adults and are good predictors of successful rehabilitation in long-stay patients [22].

Schizophrenia patients with comorbid substance abuse spend nearly half of their total income on illegal drugs. Psychiatric symptoms and hospital admissions have been shown to be phase-linked with receipt of monthly disability checks [8, 25, 27]. Through drug abuse and dependence, many patients may cyclically dissipate state and other financial resources that were intended for their support and that of their families [25].

Such chronic misuse of funds has led to calls over the past decade for more effective money manage-

L. Borrás, M.D. · S. Mohr, Ph.D. · M. Boucherie, M.A.
S. Dupont-Willemin, M.D. · F. Ferrero, M.D.
P. Huguelet, M.D. (✉)
Division of adult psychiatry, Dept. of Psychiatry
University Hospital of Geneva
36, rue du 31 Décembre
1207 Geneva, Switzerland
Tel.: +41-22/382-3103
Fax: +41-22/382-3105
E-Mail: philippe.huguelet@hcuge.ch

ment approaches in this population, such as assignment of mandatory representative payees [25]. Further research has indicated that representative payee arrangements are associated with reduced symptomatology, greater treatment participation and fewer days in hospital [16, 26].

Problems with financial capacity in schizophrenia also impact family members and relationships. Money mismanagement by persons with schizophrenia may result in substantial tension within the family. Parents often try to provide financial assistance to patients by giving them money or intervening in their budget management [6]. For all these reasons, financial management skills are often a central issue in the assessment, treatment, and rehabilitation of patients with schizophrenia and need to be investigated.

Issues of financial capacity frequently emerge in clinical practice when dealing with the population suffering from psychosis. The first part of our study [12], which investigates the incomes of outpatients with schizophrenia followed in Geneva's outpatient facilities, highlights the fact that psychiatric care and social and financial aids are meeting patients' needs in terms of financial and housing support. In the present article, we describe how patients use their money. The specific financial needs and concerns of these patients will be highlighted according to the results.

Methodology

■ Study design and procedure

Fifty-seven patients between 18 and 65 years of age, meeting the ICD-10 criteria [21] and followed in one of Geneva's public outpatient facilities for a diagnosis of schizophrenia were included in the study. Patients were excluded if their clinical condition prevented them from participating in the interviews. Included patients were predominantly male (75.4%) and single (77.2%), with an average age of 43 (SD10). Half of them were without professional training and without any professional activity (50.9 and 52.6% respectively) and 45.6% were working in sheltered workshops. Only one person had remunerated work. The majority of these patients (87.7%) were receiving disability benefits and 42.1% had a representative payee. A quarter of them (21%) were consumers of toxic substances (cannabis use for 10.5%, alcohol for 8.8% and cannabis-alcohol for 1.8%). Sixty-eight percent were tobacco users. Fifty-three percent were living in supported housing, 26% alone and 21% with their families. Among the 57 subjects, the mean income was 4,125 Swiss francs per month (i.e., 3,372 US \$), depending on their housing options. Patients living in supported housing received more money (median 5,390 Swiss francs) than patients living alone (median 3,000 Swiss francs) or with their families (median 1,750 Swiss francs). Seventy percent of them were not satisfied with their income [12].

This study was approved by the ethical committee of the University Hospital of Geneva. Subjects participated only after receiving detailed information about the study and signing a written consent document. Two of the authors (LB and SDW) solicited all successive eligible patients in their care to participate in the study. At that point, five patients refused to participate in the study: two because of a lack of motivation and three in the context of paranoid delusion.

Demographic data were collected during the first interview. The PANNS (Positive and Negative Syndrome Scale) [13] and the CGI (Clinical Global Impression) [10] were administered. Psychosocial

adaptation was evaluated by the WHOQOL (World Health Organization Quality Of Life) [15], the QFS (Questionnaire of Social Functioning) [30] and the MRSS (Morningside Rehabilitation Status Scale) [1]. Neuropsychological performances were also evaluated with an estimation of the premorbid IQ [20] and executive functions with the key search test and the zoo map of the Behavioural Assessment of Dysexecutive Syndrome (BADS) [29].

Data were also gathered on patients' incomes and incompressible expenses during this first meeting. They were asked about their income from professional salary; housing pensions; disability or accident benefits; welfare; gifts; personal savings; possible loans or alimony. Incompressible expenses included the rent, various bills (i.e., electricity, telephone), taxes, health insurance, medical expenses as well as possible alimony. When a patient shared a financial arrangement (usually with a spouse), the expenses for the couple were divided evenly. When applicable, the representative payee was also interviewed about the income, the incompressible expenses and the amount of discretionary money the patient received.

Patients' discretionary expenses were evaluated at meetings held at least once a week over a period of 4 weeks, the frequency of these meetings depending on the level of functioning of the patient. Between these meetings, the patient had to complete an expense diary which included food, cigarettes, alcohol and illegal drugs, housing, transportation, clothes, household items, leisure activities, restaurants, consumption at cafés and possibly loans and gifts. Occasional major expenses, such as vacations, were estimated for the past year and the cost spread out over an appropriate period.

Open-ended questions were used to measure satisfaction with their financial situation, money management skills, the type and frequency of leisure activities as well as their satisfaction with these activities.

At the end of the study, patient satisfaction with the study was evaluated with a semi-structured questionnaire examining the degree of embarrassment due to the intimacy of the subject, the frequency with which the subject of financial management had been brought up during previous meetings with caregivers, the desire to pursue the investigation with their caregivers, awareness of budget management problems, motivation to save money and their experiences with the representative payee. The patients' clinicians were also asked to complete a structured auto-questionnaire evaluating the impact of this study on their patients' treatment.

■ Statistical analyses

Data were analysed using the Statistical Package for the Social Sciences, version 11 (SPSS, Inc., Chicago, 2001). Distribution-free univariate statistics were used for comparison of the variable distributions between groups (chi-square, Wilcoxon rank test, Kruskal-Wallis test). A cluster analysis using the centroid method with square euclidian distances was performed to classify patients according to their psycho-social adaptation (as defined by the QFS [30], the MRSS [1], the GAS of the DSM-IV [2] and their quality of life (as defined by WHOQOL [15])).

Results

The results presented here concern income management and the type of expenses according to patients' socio-demographic and clinical characteristics. Table 1 describes the types of fixed expenses for the 57 patients. Data were organised by dividing subjects into three logical categories according to the type of expenses, which often depends on the housing option. For the 30 patients living in supported housing, 86% of the mean monthly income was allocated to pay their board (including rent and food) and 4% to

Table 1 Type of fix expenses

		Supp. housing <i>n</i> = 30 CHF	Alone <i>n</i> = 15 CHF	Family <i>n</i> = 12 CHF	Total <i>n</i> = 57
Total income	Mean (SD)	5,258 (707)	3,276 (1,057)	1,703 (1,160)	3,866 (1,728)
	Median	5,390	3,000	1,750	4,125
Board (incl.rent and food)	Mean (SD)	4,634 (672)			
	Median	4,990			
Rent (incl. charges)	Mean (SD)		986 (464)	903 (367)	968 (438)
	Median		950	982	950
Food	Mean (SD)		580 (216)	458 (406)	531 (305)
	Median		580	499	580
Taxes	Mean (SD)	2 (1)	12 (22)	4 (2)	4 (12)
	Median	1	3	3	2
Health insurance	Mean (SD)	370 (27)	393 (53)	354 (104)	388 (39)
	Median	400	400	400	400
Medical expenses	Mean (SD)	188 (117)	218 (135)	130 (58)	187 (117)
	Median	250	250	120	200
Total discretionary money	Mean (SD)	304 (214)	566 (352)	374 (260)	430 (273)
	Median	299	454	400	396

health insurance. In addition to these expenses, the mean monthly cost of psychiatric treatment services, as calculated by patients' payees, was 4%. For the patients living alone, 30% of their income was allocated to pay the rent, 18% to pay for food, 12% to pay for health insurance and 7% for psychiatric treatment. One of the fifteen patients living alone was paying alimony equivalent to 2% of his monthly income. For the patients living with their families, 28% of their income was allocated to pay the rent, 25% to pay for food, 21% to pay for health insurance and 13% for psychiatric treatment.

Table 2 describes how patients disposed of their discretionary money.

Patients' discretionary money appeared to be between 300 and 500 Swiss francs per month, with patients living in supported housing receiving slightly less. This sum was not correlated to the presence of a representative payee. Twenty-eight percent of this money was spent on leisure activities (trips, sports and other recreational activities), 39% on toxic substances (cigarettes, alcohol, cannabis) and 33% on various drinks in coffee houses.

The way patients spent this money appears to be independent of their clinical and socio-demographic characteristics (including neuropsychological measures). The only relevant, significant characteristic linked to greater spending on alcohol and cannabis was an earlier age at the first hospitalisation.

Table 3 describes the patients according to a classification into three groups produced by a cluster analysis according to their psycho-social adaptation and their quality of life. Cluster 1 (39%) grouped patients with a lower social functioning, but higher subjective quality of life. Cluster 2 (36%) grouped patients with a lower social functioning and a poor subjective quality of life. Cluster 3 (25%) grouped

patients with a better social functioning but a poor subjective quality of life. An equally low level of social functioning was observed in Group 1 and Group 2 (Wilcoxon rank tests with *p* value > 10 for all social functioning measures). An equally low level of subjective quality of life was observed in Group 2 and Group 3 (Wilcoxon rank tests with *p* value > 10 for all quality of life measures). Group 3 displayed fewer positive, negative and general symptoms than the other groups and made a better clinical impression. The level of subjective quality of life for Groups 2 and 3 was comparable to that found among outpatients with psychosis in Australia [11]. On the other hand, despite the symptoms and social disabilities of patients in Group 1, their subjective quality of life tended to reach the level of the general population, except for social relationships [19]. The three groups were equivalent for premorbid intelligence and executive functioning as measured by the NART [20] and the BADS [29], age at onset, and number and duration of psychiatric hospitalisations. Patients with lower social functioning and poorer quality of life (Group 2) engaged in leisure activities less often than other patients and spent significantly less money on their leisure activities.

This study was accepted by the vast majority of patients. Thirteen percent of patients reported feeling very embarrassed by the subject; 33% felt somewhat embarrassed and 55% were not embarrassed at all or very little. Only 7% of patients reported evaluations of their financial management skills in the therapeutic setting before their participation in the study, but in these cases, it had almost always been the patients or their families who had broached the subject. Clinicians reported that in-depth discussions of financial issues during patient interviews strengthened the relation with their patient in 77% of cases.

Table 2 Type of purchases with discretionary money

	M (SD)	Supported housing <i>n</i> = 30		Alone <i>n</i> = 15		Family <i>n</i> = 12		Total <i>n</i> = 57	
			% of discretionary money		% of discretionary money		% of discretionary money		% of discretionary money
Total discretionary money ^a	Median 299	304 (214)		566 (352)		374 (260)		430 (273)	
Leisure activities ^b	M (SD) 67 (15)	22%	181 (16)	32%	142 (44)	38%	120 (34)	28%	
Toxic substances (cigarettes, alcohol, cannabis) ^c	M (SD) 143 (47)	47%	203 (75)	36%	90 (27)	24%	168 (57)	39%	
Various drinks in coffee houses ^d	M (SD) 97 (31)	32%	181 (56)	32%	142 (45)	38%	141 (44)	33%	

^aK-W = 3.20, df 2, *p* 0.20

^bK-W = 3.48, df 2, *p* 0.18

^cK-W = 4.02, df 2, *p* 0.13

^dK-W = 0.61, df 2, *p* 0.74

A quarter of patients said that this study had made them aware of the difficulty of managing their money, 30% of a need for further assistance, 54% of their lack of leisure activities, 49% of their isolation due to their limited activities, 44% of cognitive difficulties that possibly led to problems in money management, 61% of the advantages of having a representative payee and 25% of a renewed motivation to save money.

In five cases, family members, who found out about the study through the patient, contacted the clinician to speak about the desperation they felt due to the patients' problems with money management and the resulting tensions. Each of these families requested help.

This study allowed caregivers to adjust the treatment of 84% of the patients (rehabilitation groups, requests for representative payees, family therapies, detailed social evaluations). It also made it possible to identify previously undetected cognitive disorders linked to difficulty in managing money in 30% of patients, previously undiagnosed medical problems in 19% of patients (pathological gambling, alcohol dependence, cannabis consumption), social problems in 18% of patients (i.e., debt) and to establish a therapeutic relationship with the family in 8% of cases.

Discussion

All outpatients suffering from chronic psychotic disorders followed in Geneva's facilities received an income sufficient to meet their fixed costs and leave them with a mean of 400 Swiss francs of discretionary money. Their fixed expenses were properly handled, reflecting the fact that representative payees had been assigned when necessary. Family, social or educative support may have also helped in some situations.

However, this situation did not have much impact on the way patients use their discretionary money. Our results seem to show that patients primarily used their money in domains not directly linked to their recovery. Indeed, 72% of this money was spent on

toxic substances (cigarettes, alcohol, cannabis and various drinks in coffee houses) and 28% on leisure activities (trips, sports and other recreational activities). Almost all patients reported some dissatisfaction with the amount of discretionary money they received, complaining of the fact that their leisure activities were restricted.

The patients described in this Geneva study received an amount of discretionary money greater than usual in other countries, as this income depends on the financial and healthcare systems. Discretionary funds that remain after basic needs have been covered are limited—usually less than 100 dollars in North Carolina [4], in Belgium or in France. Unfortunately, a large part of this money was devoted to the use of substances with psychotropic properties. The use of money for such a purpose has been highlighted in the literature. In certain states in the US, a third of patients' global income has been shown to be devoted to cigarette consumption [28]. For patients with dual diagnoses, namely schizophrenia and substance abuse, Shaner et al. [27] highlighted that more than half of their total revenue was spent on these toxic substances. Moreover, a clear temporal connection between receipt of government entitlement checks and substance abuse relapse, psychotic symptoms, and hospitalisation was demonstrated [27].

Our study seems to indicate that what patients spend their money on is independent of their clinical and socio-demographic characteristics. This contradicts the literature which highlights certain risk factors of poor financial management such as a low intellectual level, cognitive disorders, substance abuse [14] or the absence of a representative payee [24]. The absence of a link between what their money is spent on and risk factors may be due to the fact that this population sample was clinically stabilized and benefited from a sophisticated medico-psycho-social setting. This hypothesis is illustrated by the fact that the majority of patients characterized by severe symptomatology and poor psycho-social adaptation are placed in supported housing; those with less severe symptomatology and better psycho-social adap-

Table 3 Expenses and activities for classification in three clusters according to patients' psycho-social adaptation and quality of life $n = 57$ patients

			Group 1 $n = 22$ (39%)	Group 2 $n = 21$ (36%)	Group 3 $n = 14$ (25%)	Statistics		
						ANOVA F	df	p
Quality of life								
Item 1 "Quality of life"	Mean (SD)		4.1 (0.6)	2.8 (0.9)	3.2 (0.7)	13.63	54	0.00
Item 2 "health"	Mean (SD)		4.3 (0.6)	2.6 (0.8)	3.2 (1)	22.25	54	0.00
I. Physical	Mean (SD)		74 (10)	60 (16)	59 (13)	10.62	54	0.00
II. Psychological	Mean (SD)		76 (14)	51 (11)	55 (12)	27.02	54	0.00
III. Social relationships	Mean (SD)		64 (24)	42 (17)	47 (20)	9.96	54	0.00
IV. Environment	Mean (SD)		72 (15)	61 (11)	55 (19)	6.91	54	0.00
GAS	Mean (SD)		45 (7)	44 (8)	55 (6)	14.17	54	0.00
MRSS								
I. Dependence	Mean (SD)		4.6 (.6)	4.3 (.8)	3.8 (1)	5.12	54	0.01
II. Inactivity	Mean (SD)		5.1 (0.7)	4.5 (.9)	3.4 (0.8)	14.36	54	0.00
III. Social isolation	Mean (SD)		4.5 (0.9)	4.4 (.9)	2.6 (0.9)	17.04	54	0.00
IV. Current symptoms	Mean (SD)		4.7 (.8)	4.5 (.8)	3.4 (.7)	16.65	54	0.00
QFS								
Frequency of activities	Mean (SD)		25 (6)	22 (6)	29 (6)	5.22	2	0.07
Satisfaction	Mean (SD)		22 (9)	21 (6)	29 (7)	7.41	2	0.03
Total	Mean (SD)		46 (14)	43 (11)	57 (13)	7.30	2	0.03
PANSS						K-W		
Positive	Mean (SD)		24 (9)	19 (7)	16 (5)	9.04	2	0.01
Negative	Mean (SD)		28 (7)	27 (7)	18 (5)	21.37	2	0.00
General	Mean (SD)		45 (9)	44 (14)	33 (7)	11.98	2	0.00
Total	Mean (SD)		96 (22)	90 (23)	67 (16)	16.19	2	0.00
Clinical global impression	Mean (SD)		3.8 (0.4)	3.9 (0.3)	2.9 (.5)	35.62	2	0.00
Discretionary money:	Mean (SD)		479 (312)	353 (220)	482 (265)	2.92	2	0.23
Toxic substances (cigarettes, alcohol, cannabis)	Mean (SD)		200 (168)	137 (162)	180 (130)	1.42	2	0.49
Various drinks in coffee houses	Mean (SD)		134 (136)	129 (184)	135 (107)	1.42	2	0.49
Leisure activities	Mean (SD)		144 (165)	67 (82)	162 (195)	5.95	2	0.05
Frequency of leisure activities:								
Cinema, theatre, concert	Never		27%	62%	43%			
	Occasionally		23%	29%	21%			
	Each month		23%	10%	29%			
	Each week		27%	0%	7%	8.12	2	0.02
Sports or walks	Never		59%	76%	29%			
	Occasionally		0%	10%	7%			
	Each month		9%	5%	14%			
	Each week		32%	10%	50%	7.54	2	0.02
Classes, shelter, artistic activities	Never		64%	67%	50%			
	Occasionally		0%	10%	0%			
	Each month		9%	10%	7%			
	Each week		27%	14%	43%	7.54	2	0.02
Coffee houses and/or restaurants	Never		18%	5%	0%			
	Occasionally		14%	29%	7%			
	Each month		18%	29%	36%			
	Each week		50%	38%	57%	7.54	2	0.02

tation live with their families or alone. Additionally, the patients living in supported housing were more likely to have a representative payee than patients living with their families or alone. For a majority of the patients living with their families, financial planning was handled by the family members.

For individuals with low levels of social functioning, a high level of subjective quality of life was associated with frequent leisure activities. Moreover, patients with lower psycho-social functioning and poor quality of life tend to spend less money on their leisure activities. These results highlight the fact that even patients with poor psycho-social adaptation may possibly improve their quality of life through leisure activities. Surprisingly, patients with a high level of social functioning tend to have a negative perception

of their quality of life (Group 3). These patients also have fewer symptoms. This inverse correlation could perhaps be due to an increased awareness of their condition.

The study shows that the difficulties in financial management encountered by patients had an impact on family members and relationships. In five cases, the parents gave a lower rating to the patient's money management skills than the patient did. This could be explained by the fact that when the patients had no money left, they often solicited financial support from their parents. This could represent a heavy burden, especially for parents who have retired. This kind of situation also creates strong negative tension between family members, as a study of Foldemo et al. (2004) also demonstrated [6]. Moreover, financial depen-

dence on family has been associated in the literature with more violent threats and acts, often directed toward the financially responsible parent, especially the mother [5, 9].

The financial management assessment was well-received by the patients in the study. However, this subject was very rarely brought up in their usual socio-medical setting. This evaluation renewed awareness in patients of the good and bad ways of spending money, of their need for help in managing money, of their lack of leisure activities, of their social isolation, of their motivation to save and of the benefits of a representative payee for 61% of patients who had one. The in-depth discussion of the topic of financial management during patient interviews made it possible to strengthen the therapeutic alliance in 77% of cases. The interviews also led to the detection of previously unknown psychiatric disorders such as pathological gambling, alcohol dependence or cannabis abuse. The therapeutic setting was adjusted in the majority of cases through a global social overview, with the establishment of a rehabilitation group leading to improved handling of money, enhanced problem resolution and increased leisure activities. Clinical investigators (who were also patients' psychiatrists) could also establish a privileged relationship with families experiencing difficulty with the patients' money management and identify other unknown social problems. These qualitative observations correspond to the results of Ries et al. [23], who demonstrated that a relatively simple weekly contingency scheme (evaluation of money management, evaluation of substance abuse and of treatment follow-through) applied to disability benefits could improve money management ratings and decrease the alcohol and drug expenses of patients with severe mental illness [23].

Despite data showing that patients with severe mental illness tend to spend their discretionary money on inappropriate expenses, the level of control that should be exercised over their budget is a complicated issue. From an ethical perspective, the choice between increased external management of patients' money and freedom of choice regarding expenses is not easy to make. From a social perspective, opting to spend public money on pensions that are directly distributed to patients or on rehabilitation services can also be debated.

This study has limitations which curb the breadth of our conclusions. First, our clinical study included only 57 patients, even though this sample seemed to be broadly representative of schizophrenic patients followed in Geneva's outpatient clinics. The second limit is that in Geneva the healthcare system is particularly compassionate towards individuals suffering from severe, chronic mental disorders, which is unfortunately not the case in some other parts of the world. Also, even if data on expenses were collected prospectively over a one-month period, patients may

have underreported certain kinds of expenses (i.e., those devoted to psychoactive substances).

Conclusion

Despite a generous and compassionate healthcare system in Geneva, our findings emphasize the difficulties encountered by patients suffering from schizophrenia and their families to manage discretionary money. These data could be considered to reflect a rather satisfying situation, but it could be improved by fostering the use of funds on systems devoted to recovery rather than granting funds without providing assistance on how to handle them.

Patients' financial management skills often reflect their level of functioning. Therefore, an assessment of these skills should be an integral part of their evaluation. Assisting patients who have difficulties in managing money should be a routine feature of rehabilitation [3]. Such support could possibly help them to take part in more constructive activities. More globally, these results stress the need to implement a comprehensive system aiming at recovery, which should include evaluation and enhancement of the financial management skills of patients with psychosis.

References

1. Affleck J, Mc Guire R (1984) Morningside rehabilitation status scale (MRSS). *Brit J Psychiatry* 145:517–526
2. APA (1994) Diagnostic and Statistical Manual of Mental Disorders. In: American Psychiatric Association, Washington DC
3. Drake RE, Bartels SJ, Teague GB, Noordsy DL, Clark RE (1993) Treatment of substance abuse in severely mentally ill patients. *J Nerv Ment Dis* 181:606–611
4. Elbogen EB, Soriano C, Van Dorn R, Swartz MS, Swanson JW (2005) Consumer views of representative payee use of disability funds to leverage treatment adherence. *Psychiatr Serv* 56:45–49
5. Estroff SE, Zimmer C, Lachicotte WS, Benoit J (1994) The influence of social networks and social support on violence by persons with serious mental illness. *Hosp Community Psychiatry* 45:669–679
6. Foldemo A, Ek AC, Bogren L (2004) Needs in outpatients with schizophrenia, assessed by the patients themselves and their parents and staff. *Soc Psychiatry Psychiatr Epidemiol* 39:381–385
7. Frank JB, Degan D (1997) Conservatorship for the chronically mentally ill: review and case series. *Int J Law Psychiatry* 20:97–111
8. Grossman LS, Willer JK, Miller NS, Stovall JG, McRae SG, Maxwell S (1997) Temporal patterns of veterans' psychiatric service utilization, disability payments, and cocaine use. *J Psychoactive Drugs* 29:285–290
9. Gutiérrez-Maldonado J, Caqueo-Urizar A, Kavanagh DJ (2005) Burden of care and general health in families of patients with schizophrenia. *Soc Psychiatry Psychiatr Epidemiol* 40:899–904
10. Health NIoM (1976) CGI clinical global impressions. In: ECD-EU assessment for psychopharmacology. Rockville
11. Herrman H, Hawthorne G, Thomas R (2002) Quality of life assessment in people living with psychosis. *Soc Psychiatry Psychiatr Epidemiol* 37:510–518
12. Huguélet P, Mohr S, Boucherie M, Dupont-Willemin S, Ferrero F, Borrás L (submitted) Patients with schizophrenia and their finances: what they earn and own

13. Kay S, Fiszbein A, Opler L (1992) Positive and negative syndrome scale. USA
14. Kouzis AC, Eaton WW (2000) Psychopathology and the initiation of disability payments. *Psychiatr Serv* 51:908–913
15. Leplège A, Réveillère C, Ecosse E, Caria A, Rivière H (2000) Propriétés psychométriques d'un nouvel instrument d'évaluation de la qualité de vie, le WHOCOL-26, à partir d'une population de maladies neuromusculaires. *Encéphale* 26:13–22
16. Luchins DJ, Roberts DL, Hanrahan P (2003) Representative payeeship and mental illness: a review. *Adm Policy Ment Health* 30:341–353
17. Marson DC, Briggs S (2001) Assessing competency in Alzheimer's disease: treatment consent capacity and financial capacity. In: Gauthier S, Cummings JL (ed) *Alzheimer's Disease and Related Disorders Annual 2001*. Martin Dunitz Ltd, London
18. Marson DC, Sawrie SM, Snyder S, McInturff B, Stalvey T, Boothe A, Aldridge T, Chatterjee A, Harrell LE (2000) Assessing financial capacity in patients with Alzheimer disease: a conceptual model and prototype instrument. *Arch Neurol* 57:877–884
19. Murphy B, Herrman H, Hawthorne G, Pinzone T, Evert H (2000) Australian WHOQOL instruments: user's and interpretation guide. Australian WHOQOL Field Study Centre, Melbourne, Australia
20. Nelson H (1982) *Adult Reading Test (NART): test manual*. Windsor, UK
21. OMS (1994) *Classification Internationale des Maladies CIM-10 / ICD-10*. Paris
22. Presly AS, Grubb AB, Semple D (1982) Predictors of successful rehabilitation in long-stay patients. *Acta Psychiatr Scand* 66:83–88
23. Ries RK, Dyck DG, Short R, Srebnik D, Fisher A, Comtois KA (2004) Outcomes of managing disability benefits among patients with substance dependence and severe mental illness. *Psychiatr Serv* 55:445–447
24. Rosen MI, Rosenheck R (1999) Substance use and assignment of representative payees. *Psychiatr Serv* 50:95–98
25. Rosen MI, Rosenheck RA, Shaner AL, Eckman TA, Gamache GR, Krebs CW (2002) Substance abuse and the need for money management assistance among psychiatric inpatients. *Drug Alcohol Depend* 67:331–334
26. Rosenheck R, Lam J, Randolph F (1997) Impact of representative payees on substance use by homeless persons with serious mental illness. *Psychiatr Serv* 48:800–806
27. Shaner A, Eckman TA, Roberts LJ, Wilkins JN, Tucker DE, Tsuang JW, Mintz J (1995) Disability income, cocaine use, and repeated hospitalization among schizophrenic cocaine abusers—a government-sponsored revolving door? *N Engl J Med* 333:777–783
28. Steinberg ML, Williams JM, Ziedonis DM (2004) Financial implications of cigarette smoking among individuals with schizophrenia. *Tob Control* 13:206
29. Wilson BA, Alderman N, Burgess PW, Emslie H, Evans JJ (1996) Behavioural assessment of the Dysexecutive Syndrome. Thames Valley Test Company, England
30. Zanello A, Weber Rouget B, Gex-Fabry M, Maercker A, Guimon J (2006) Validation of the QFS measuring the frequency and satisfaction in social behaviours in psychiatric adult population. *Encephale* 32:45–59