



Do Home-Based Psychiatric Services for Patients in Medico-Social Institutions Reduce Hospitalizations? Pre-Post Evaluation of a French Psychiatric Mobile Team

Sophie Cervello^{1,2}  · Mael Pulcini¹ · Catherine Massoubre^{1,4} · Béatrice Trombert-Paviot³ · Eric Fakra^{1,4}

Published online: 3 October 2018

© Springer Science+Business Media, LLC, part of Springer Nature 2018

Abstract

World Health Organization recommends the implementation of alternatives to full-time hospitalizations. Psychiatric home-care has known a worldwide development in the last 20 years. The psychiatric mobile team for social and medico-social institutions in Saint-Etienne, France, (*Equipe mobile d'intervention en établissements Sociaux et Médico-sociaux*, ESMS) aims to support professionals from medico-social housing institutions (MSHI) in order to maintain people in housing. The objective of the study was to evaluate the efficiency of home-based interventions to reduce hospitalizations and improve collaboration between psychiatric hospital facilities and MSHI. We used a pre-post study design. A same cohort of patients living in a MSHI one year before intervention and one year after implementation of the ESMS was studied. Hospitalizations were compared between the two periods. A survey was conducted for qualitative evaluation among professionals in MSHI. Sixty-three patients were included. Most patients suffered from psychotic disorders (71%). We found a significant decrease in the mean number of admissions per year from 2,06 to 1,48 (Wilcoxon signed rank test; $df=64$; $p = 0,01$). Mobile-team interventions included answering phone calls, home visits, coordination meetings, or clinical interviews with patients in inpatient and outpatient services, with an average of 9,3 interventions per patient ($SD = 11,4$). ESMS was evaluated as “essential” for 73% of 11 professionals from MSHI who answered the questionnaire in May 2017. Assertive Community Treatment and Crisis Resolution Teams are the most studied home-care models in psychiatry. Our results tend to show the efficiency of mobile-team interventions in MSHI, to enhance partnerships.

Keywords Home-care · Mobile team · Community psychiatry · Inpatient services · Protected housing · Crisis intervention

✉ Sophie Cervello
sophie.cervello@gmail.com

Introduction

French public psychiatry has been divided since the 1960's into geodemographic catchment area or "sectors" [1–4]. Each sector should provide inpatient and outpatient services for its population. This reorganization brought the introduction of ambulatory care and improvements in the integration of patients into community life outside of psychiatric hospitals. Advances in psychotropic medications in the 1950's have changed the prognosis of severe mental illnesses and have made this transition possible. There have been multiple achievements in community care for severe mentally ill outpatients since the beginning of the deinstitutionalization movement that started in the 1970's [4–6]. There are currently various models of Alternatives to Full-Time Hospitalization (AFTH) in psychiatry, but the development of these alternatives remains limited in France [7] compared to other countries [6]. There is evidence that community based mental health services improve satisfaction and quality of life for people with psychiatric disabilities [8–12] and contribute to enhance recovery rates and to decrease use of inpatient services [13, 14]. Assertive Community Treatment (ACT) and Crisis Resolution Teams (CRT) are the most studied mobile teams' models [12, 15–22]. Nevertheless, despite international recommendations [23–25] and policy-makers' will to develop AFTH services in psychiatry, professionals encounter difficulties to connect inpatient with outpatient care as well as with social care, and to help severe mentally ill patients to integrate society. Heterogeneity of services and rare systematic evaluation of these programs result in a lack of consensus regarding community psychiatry models in France [7]. Multiple experiences have been described [21, 26–29], but to our knowledge none of those models aimed specifically to link psychiatry with supported housing in social or medico-social institutions.

The aim of the study was to observe and to evaluate the actions of the Saint-Etienne psychiatric mobile team for social and medico-social institutions (*ESMS: Equipe mobile d'intervention en établissements Sociaux et Médico-Sociaux*). The originality of this team was to intervene only with patients living in host families or housed in social or medico-social institutions. All this protected housing institutions were named as Medico-Social Housing Institutions (MSHI) and are detailed in Fig. 1. There were no hospitalization beds suppressed in the sector during the first year of activity and evaluation of ESMS.

The hypothesis of the study was that patients benefiting from the mobile team's interventions were less likely to be hospitalized over a year, compared to the same population a year before. The primary outcome was the number of hospitalizations and the secondary outcomes were the number of days in full-time hospitalization, the length of stay per hospitalization and the satisfaction level among professionals in MSHI.

Methods

Description of the Saint-Etienne Psychiatric Mobile Team for Social and Medico-Social Institutions (ESMS)

ESMS is a mobile unit implemented in September 2015 on a sector from a catchment area of 172,000 inhabitants, covering Saint-Etienne and its surroundings, in France. The program aimed to develop community mental health services and to reduce long-term hospitalizations

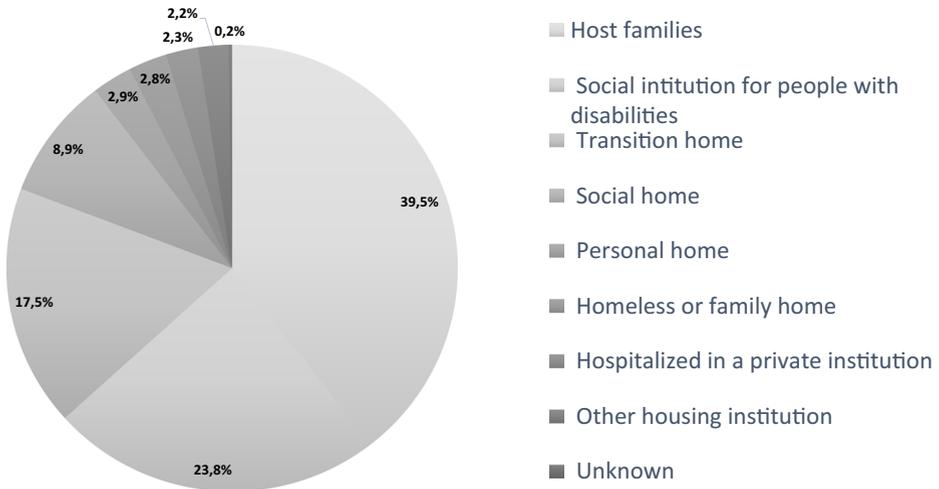


Fig. 1 Location of external mobile team's interventions between March 2016 and March 2017

and frequent re-admissions for patients with severe psychiatric disabilities who were living in MSHI. We were confronted to a growing demand for hospitalizations in our geographic area and to difficulties to maintain high users of psychiatric services in protected housing. Professionals in MSHI had often to manage crisis situations with their residents suffering from mental illnesses, and they were complaining of a lack of communication and reactivity from the psychiatric services. Therefore, we developed a mobile unit in our sector, specifically orientated towards MSHI. The objectives were to rehabilitate long-stay psychiatric hospital patients in the community and to support their integration into MSHI, as recommended by the World Health Organization since 2001 [23, 24]. We aimed to enhance partnership between MSHI and psychiatric services. ESMS offered an alternative to full-time hospitalizations and aimed to prevent crisis situations and use of emergency services.

The team was initially composed of three nurses, 0,1 full-time equivalent (FTE) for an administrator, 0,1 FTE for a psychiatrist and 0,5 FTE for a psychiatric trainee. The staff time resulted from an internal reorganization of the department. Minimal funding was allocated to a car as well as furniture (desk, phone, computer). ESMS office was located close to inpatient units. Interventions of the team included mostly home visits, clinical case discussions, coordination between MSHI and with psychiatric inpatient and outpatient services, phone hotline. The team was operational on working hours from 9:00 to 17:00, 5 days a week.

Study Design

We assessed the effectiveness of ESMS using a pre-post study design. Inclusion criteria were the benefit of at least one ESMS intervention between March 2016 and March 2017, patients aged from 18 to 65 years old, residence in a MSHI, and follow-up in outpatient psychiatric services from Saint-Etienne. We excluded patients who integrated or left MSHI during the study, because they were more likely to be hospitalized in the waiting time to be admitted to an institution, or to be excluded from ESMS interventions for those who integrated an apartment to leave independently.

We measured our primary outcome on a “before” observation period from September 2014 to September 2015 (OP1: Observation Period 1) and an “after” observation period from March 2016 to March 2017 (OP2: Observation Period 2). Therefore, we extracted retrospectively from medical records all data on hospitalizations over a year before the ESMS implementation (OP1) and after (OP2). We identified unplanned hospitalizations in the emergency department, unplanned hospitalizations in inpatient services after emergency services admission, unplanned hospitalizations after direct admission in inpatient services, and planned hospitalizations. Unplanned hospitalizations were more likely associated to crisis situations and planned hospitalizations were often decided for severe mentally ill patients to strengthen the therapeutic alliance and to prevent acute psychiatric and behavioral problems. Unplanned hospitalizations after emergency admission combined unplanned hospitalizations in the emergency department and unplanned hospitalizations after emergency services admission.

Data on hospitalizations for the sector of Saint-Etienne were extracted from the French national psychiatric discharge database (*Recueil d'Informations Médicalisé en Psychiatrie, RIM-P*), to evaluate general variations of hospitalizations in our sector's inpatient services. We computed total number of inpatient days, total number of admissions, mean number of admissions and mean duration of hospitalization, in all inpatient services. Mean number of admissions corresponded to the number of admissions divided by the number of patients hospitalized. Mean duration of hospitalization corresponded to the number of inpatient days divided by the number of patients hospitalized.

We evaluated the needs and the satisfaction level of professionals from MSHI in a survey conducted in May 2016 and in May 2017.

We observed the ESMS activity over a year using data gathered from patients consecutively admitted in the program between March 2016 and March 2017. We registered for each patient included in the ESMS program all interventions of ESMS during OP2.

Statistical Analysis

Statistical analyses were performed with Excel and R version 3.4.1. Software for Windows. We used the Wilcoxon signed rank test to compare data on hospitalizations in our sample between OP1 and OP2.

Data Availability The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

Results

Subjects

ESMS was solicited between March 2016 and March 2017 for 93 patients, which characteristics are described in Table 1. 63 patients were included in the study. Characteristics of patients included in the study were comparable to those from the whole population included in the ESMS program and described in Table 1. The patients included were regular users of psychiatric outpatient services.

Table 1 Characteristics of patients benefiting from ESMS program between March 2016 and March 2017

Patients included in the Program	93	
Characteristics	N	%
Demographic		
Age (M/SD)	46.1/10.7	
Male	61	65.6
Principal diagnosis (ICD-10 code)		
F20-F29 Schizophrenia, schizotypal, delusional, and other non-mood psychotic disorders	66	71.0
F30-F39 Mood [Affective] disorders	11	11.8
F60–69 Disorders of adult personality and behavior	11	11.8
F10-F19 Mental and behavioral disorders due to a psychoactive substance use	1	1.1
Others (F02.2, F70–79, F80–89)	4	4.3
Treatment		
Treatment unknown	7	
More than 2 classes of psychotropic drugs	38	44.2
More than 3 psychotropic drugs	29	33.7
Long-acting injectable antipsychotics	20	23.3
Other medications than psychotropic drugs (Excluded: extrapyramidal corrective agents)	43	50.0
Major treatment change between September 2014 and September 2015	22	25.6
Major treatment change between September 2015 and March 2016	22	25.6
Follow-up	N	%
Change of psychiatrist between March 2016 and March 2017	20	21.5
Patients who were not leaving in social institutions or host families on the 1st September 2014	24	25.8
Unknown leaving place on the 1st September 2014	8	8.6
Patients who were not leaving in social institutions or host families on the 1st March 2016	12	12.9
Unknown leaving place on the 1st March 2016	2	2.2
Integration of a social housing between March 2016 and March 2017	5	5.4
Unknown leaving place or integration of a social housing still in process on the 1st March 2017	5	5.4
Change of social housing between March 2016 and March 2017	10	10.8
Patients who had left social institutions between March 2016 and March 2017	2	2.2

ESMS Activity

A descriptive, observational study was conducted to describe the interventions operated by the mobile team. Details on ESMS interventions are presented in Table 2. Number of ESMS interventions for a patient (all interventions included: phone calls, home visits, meetings for coordination and clinical discussions, clinical interviews in the department) ranged from 1 to 47 with an average of 9,3 interventions per patient (SD = 11,4).

ESMS activity over a year was relatively constant. Number of external interventions per month ranged from 55 (in December 2016) to 96 (in Mai 2016) over a year. Number of home visits per month ranged from 22 (in December 2016 and January 2017) to 61 (in Mai 2016) over a year. External interventions of ESMS were more frequent in host families Fig. 1. Professionals from host families were also more isolated and hosted sometimes patients who had failed to integrate into other institutions. Answering phone calls was a major activity for ESMS. Professionals of MSHI were the first callers (48,5% of all phone calls) Table 2. ESMS answered with a simple advice without programming an external intervention in 42,6% of all calls. Educators and supervising staff of MSHI were the first identified professionals' category to request ESMS interventions for patients.

Table 2 ESMS activity over a year from March 2016 to March 2017

	N	%
Interventions		
Number of reported ESMS actions over a year	869	
Reason for the request		
Patient's follow-up	237	33.9
Working on patient's autonomy, improving negative symptoms	94	13.4
Working on adherence to therapy or advices about treatment	27	3.9
Oddities, delusions	76	10.9
Anxiety	31	4.4
Depression, suicidal ideas or behaviours	61	8.7
Agressive behaviours	39	5.6
Drugs or alcohol abuse	26	3.7
Interruption of psychiatric treatment	9	1.3
New entry in a social institution	46	6.6
Other or unknown reason	223	25.7
Number of phone calls over a year	266	
From patient	48	18.0
From family or entourage	18	6.8
From social institutions' professionals	129	48.5
From psychiatric services professionals	71	26.7
Number of external interventions over a year	470	
Immediately after a specific demand of intervention	166	35.3
Intervention planned after a non-urgent demand	133	28.3
With no express request or at ESMS' initiative or after a first initial demand (follow-up)	97	20.6
During on-place planned time in social institutions	74	15.7
ESMS professionals involved in external interventions		
Nurses	313	66.6
Nurse and psychiatric trainee	115	24.5
Unknown	42	8.9
Type of follow-up	N	%
Remote advice	144	25.7
Isolated intervention	62	11.1
Intervention in a short-time estimated follow-up (<15 days)	20	3.6
Intervention in a medium-time estimated follow-up (15 days to 3 months)	95	17.0
Intervention in a long-time estimated follow-up (>3 months)	232	41.4
Unknown	7	1.3
Type of interventions	N	%
Home visits	416	
Visit to the patient	96	23.1
Visit to the patient and discussion with professionals	220	52.9
Discussion with professionals only	100	24.0
Professionals coordination and synthesis about a patient	225	
In the department	147	65.3
Outside in another psychiatric department or in social institutions	78	34.7
Clinical interviews or support in the department	120	
With the patient only	54	45
With the patient and another mental health professional (eg. Patients' psychiatrist, nurse from inpatient department, social worker...)	66	55

Impact on Hospitalizations

In our study, we found a significant decrease in number of admissions per year for a patient from 2,06 to 1,48 (Wilcoxon signed rank test; $df64$; $p < 0,05$) Table 3. Number of unplanned hospitalizations after emergency admission per year for a patient dropped from 0,73 to 0,27 (Wilcoxon signed rank test; $df64$; $p < 0,05$) Table 3. There were no significant differences between OP1 and OP2 for numbers of planned or unplanned hospitalizations per year for a

Table 3 Hospitalizations between OP1 and OP2 for 63 patients included in the study

	n (OP1)	n (OP2)	Mean/SD (OP1)	Mean/SD (OP2)	p value for difference between OP1 and OP2 (Wilcoxon signed rank test; df64)
Admissions	130	93	2.06	1.48	0.01
Planned or unplanned hospitalizations in inpatient services after direct admission	84	76	1.33/1.8	1.2/1.8	0.25
Unplanned hospitalizations after emergency admission	46	17	0.73/2.3	0.27/0.8	0.048
Number of inpatient days	2273	2031	36.1	32.2	0.57
Planned hospitalization (direct admission)	430	458	6.8	7.3	0.84
unplanned hospitalization after direct admission	1067	1146	16.9	18.2	0.76
unplanned hospitalization in the emergency department	40	7	0.63	0.1	0.09
unplanned hospitalization after emergency services admission	736	420	11.7	6.7	0.29
Planned or unplanned hospitalizations in inpatient services after direct admission	1497	1604	23.7/48.2	25.5/46.6	0.72
Unplanned hospitalizations after emergency admission	776	427	12.3/31.9	6.8/22.2	0.21

patient after direct admission Table 3. The decrease in number of admissions per year for a patient remained significant if we considered all 93 patients followed by ESMS on OP2 ($n = 93$), (Wilcoxon signed rank test; $df94$; $p < 0,05$) Table 3.

Figure 2 shows the differences in number of inpatient days in OP1 and in OP2, sorted by inpatient days in OP1. Number of inpatient days per year for a patient decreased non-

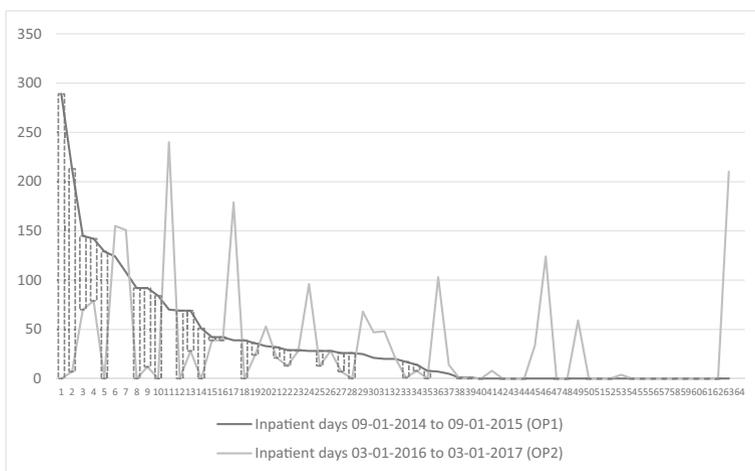


Fig. 2 Differences of inpatient days between OP1 and OP2. A decrease in inpatient days for a patient is represented with a spike under the overall descending line. For example, inpatient days for case one dropped from 289 to 0. Those for case 11 rose from 70 to 240

significantly from 36,1 to 32,2 (Wilcoxon signed rank test; $df=64$; $p = 0,57$). These results were not influenced by the type of hospitalization Table 3.

Length of stay per hospitalization for a patient varied from an average of 27,7 days for the 39 patients hospitalized in OP1, to 33,1 days for the 34 patients hospitalized in OP2. The difference between OP1 and OP2 was not significant (Welch Two Sample t-test, $p = 0,57$).

There were 360 patients admitted in hospitalization in OP1 and 296 patients admitted in hospitalization in OP2, in all inpatient services of the sector of Saint-Etienne. That represented 621 admissions in OP1 and 512 admissions in OP2. Mean number of admissions was stable (1,7 in OP1 and in OP2) in all inpatient services of the sector of Saint-Etienne. Considering our sample of 63 patients, 39 patients were hospitalized in OP1 and 34 patients in OP2. There were 130 admissions in OP1 (21% of all admissions in inpatient services) and 93 admissions in OP2 (18% of all admissions in inpatient services) Table 3. Mean number of admissions in our sample decreased from 3,3 in OP1 to 2,7 in OP2.

Mean duration of hospitalization increased from 62,7 days in OP1 to 69,9 days in OP2 (coefficient: 1,1) for all patients hospitalized in inpatient services of the sector of Saint-Etienne. Considering our sample of 63 patients, mean duration of hospitalization increased from 58,3 days in OP1 to 59,7 in OP2 (coefficient: 1,02).

Satisfaction Level and Needs among Professionals from Housing Institutions

We conducted a pre-post survey among professionals from MSHI to evaluate their needs and their level of satisfaction. Thirteen professionals answered the questionnaire in May 2016 and 11 in May 2017. Respondents assessed that ESMS improved the reactivity of psychiatric services when solicited. The team was evaluated as “very reactive” (ESMS answered in less than 48 h) by 69% of the respondents in 2016 and 64% in 2017. ESMS became “essential” for 73% of the respondents in May 2017, after one and a half year of activity. Professionals expressed needs in terms of crisis resolution training and support, which was one of the ESMS attributions. Home-care could help to overcome a crisis for all respondents (100%), to support professionals of MSHI (82%) and was considered as a possible alternative to full time hospitalization (82%) (Results from May 2017 survey). ESMS was considered more as a support to maintain people in housing and ensure coordination with psychiatric services than as a team which could solve emergency situations.

Discussion

Our results showed a significant decrease in number of admissions per year for patients benefiting of ESMS interventions. ESMS actions were correlated to crisis situations mostly, as we observed a significant decrease in number of unplanned hospitalizations after emergency admission.

We assessed that variations of mean number of admissions and mean duration of hospitalizations were low between OP1 and OP2 in all inpatient services of the sector of Saint-Etienne. Confusion bias related to global variations of hospitalizations in inpatient services was limited. There were also no beds of hospitalization suppressed during the time of evaluation. A

decrease in number of beds available could have been related to a decrease in number of admissions per patient. Therefore, the decrease observed in number of admissions between OP1 and OP2 for the 63 patients included in our study could be related to ESMS activity.

The limitations of the study were the absence of a control group and the short duration of the follow-up period. Changes of psychiatrist, treatment or MSHI were identified as potential factors of confusion. These parameters were registered in OP1 and in OP2 for the patients benefiting of the ESMS program Table 1. Variations were limited. The design of the study also limited confusion biases, as patients were their own control.

One year of follow-up was probably too short to observe significant changes in number of inpatient days in our sample. We did not evaluate the impact of ESMS on clinical outcomes. To focus on numbers of hospitalizations and inpatient days can be a limited evaluation of efficiency, as there are other parameters (institutional or clinical) that could influence hospitalizations.

Efficiency of home-care psychiatric mobile teams remains difficult to evaluate. Gandré et al. showed in a 2017 observational study that the development of AFTH in French psychiatric sectors was associated with a reduction in the length of stay in full-time hospitalization [13]. However, this study compared sectors that had developed AFTH versus sectors that had not and were more likely to have more beds of hospitalization. Development of AFTH was estimated by the share of human resources allocated to those alternatives, and all kind of AFTH were included, like part-time hospitalizations or mobile units [13]. In another study, Gandré et al. suggested that the development of AFTH on sectors was also negatively associated with involuntary fulltime admissions [7]. Joy et al. [20] in 2006 reviewed the effects of a crisis intervention model for people with serious mental illness experiencing an acute episode, compared to “standard care”. They found that home care was slightly superior in avoiding repeat admissions (OR 0.63; CI [0.42–0.94]), but these results were difficult to generalize due to significant heterogeneity.

Evaluation on users’ and professionals’ satisfaction of home-care models is generally positive [10, 11]. In our study, evaluation among professionals from MSHI was used both to evaluate needs and expectations over a psychiatric mobile-team, and to measure satisfaction and utility of the team after 18 months. Results were encouraging and ESMS responded to most of the needs expressed.

Our findings suggest that home care could be efficient for severe mentally ill patients hosted in MSHI. Our model is a relatively low intensive home-based model compared to ACT models [15, 16, 30]. It was not as reactive as some of the crisis resolution teams evaluated in France [26–29, 31–33]. It was a mixed-model that aimed to develop partnerships with MSHI. These experiences are usually more frequent in child and adolescent psychiatry [34, 35] or in old age psychiatry [36–38]. Psychiatric needs in MSHI are high. We explain it with trans-institutionalization, which refers to the transfer of severe mentally-ill patients in long-term hospitalization back to the community [2, 39, 40]. Therefore, developing partnerships between psychiatry and social or medico-social institutions or other supported housing institutions like host families is essential.

We found that psychiatric home treatment in MSHI was an effective mobile-team model for patients with severe mental illnesses. It decreased number of hospitalizations over a year and improved availability and reactivity of psychiatric professionals for home visits and in crisis situations. Central position in coordination and support to other professionals were also essential to enhance partnerships between psychiatry and the medico-social sector. Further

studies would be necessary to evaluate the impacts in terms of quality of life, clinical outcomes, users' and psychiatric professionals' satisfaction. We recommend the implementation of home psychiatric services addressed to MSHI. Rehabilitation programs associated could help these patients to develop their autonomy, as some of them could integrate an autonomous housing in the long term.

Acknowledgements We would like to thank ESMS staff and all professionals that were involved in its development.

Authors Contributions Author 1 analysed the data and wrote the first draft of the manuscript. Author 4 and 5 designed the study and helped analysed the data. Author 5 edited the manuscript, coordinate the study and supervised the ESMS team. Author 2 and 3 commented on the manuscript. All authors read and approved the final manuscript.

Compliance with Ethical Standards

Competing Interests The authors declare that they have no competing interests related to this work.

Ethics Approval The ethics committee of the university hospital of Saint-Etienne approved the study (N°IRBN462016/CHUSTE). The authors assert that this work complies with the ethical standards of the relevant national and institutional guides on human research and with the Helsinki Declaration of 1975, as revised in 2008.

References

1. Circular of the 15. Regarding the organizational and equipment program of French departments for the fight against mental disorders [in French]. Paris: Legifrance; March 1960. p. 1960.
2. Henckes N. La psychiatrie de secteur, quelle histoire, quel avenir ? *Esprit* 6 mars. Mars-avril. 2015;3:28–40.
3. Coldefy M, Le Fur P, Lucas-Gabrielli V, Mousquès J. Cinquante ans de sectorisation psychiatrique en France : des inégalités persistantes de moyens et d'organisation. In: *Quest Déconomie Santé Irdes* N° 145 Août; 2009.
4. Coldefy M. The evolution of psychiatric care systems in Germany, England, France and Italy: similarities and differences. *Quest Déconomie Santé Irdes*. Oct 2012;180.
5. Davidsson L. Deinstitutionalization and community based psychiatry—some aspects from literature. *Med Arh*. 1999;53(3):135–8.
6. Taylor Salisbury T, Killaspy H, King M. An international comparison of the deinstitutionalisation of mental health care: development and findings of the mental health services deinstitutionalisation measure (MENDit). *BMC Psychiatry*. 29 févr 2016;16:54.
7. Gandré C, Gervais J, Thillard J, Macé J-M, Roelandt J-L, Chevreur K. involuntary psychiatric admissions and development of psychiatr serv as an Alternative to Full-Time Hospitalization in France. *Psychiatr Serv Wash DC*. 15 mai 2017;appips201600453.
8. Department of Health. Mental Health Policy implementation guide: Adult acute inpatient care provision. 2002.
9. Evans J, Rose D, Flach C, Csipke E, Glossop H, McCrone P, et al. VOICE: developing a new measure of service users' perceptions of inpatient care, using a participatory methodology. *J Ment Health Abingdon Engl*. févr 2012;21(1):57–71.
10. Lemestré M-C. Équipes mobiles, soins à domicile : la voix des usagers. *Inf Psychiatr* 13 juin 2016;me 92(5):406–7.
11. Urban S, Gloor A, Baier V, Mantzouranis G, Graap C, Cherix-Parchet M, et al. Patients' satisfaction with community treatment: a pilot cross-sectional survey adopting multiple perspectives: community treatment and satisfaction. *J Psychiatr Ment Health Nurs*. nov 2015;22(9):680–7.
12. Phillips SD, Burns BJ, Edgar ER, Mueser KT, Linkins KW, Rosenheck RA, Drake RE, McDonel Herr EC Moving assertive community treatment into standard practice. *Psychiatr Serv Wash DC*. juin 2001;52(6):771–9.

13. Gandré C, Gervais J, Thillard J, Macé J-M, Roelandt J-L, Chevreur K. The Development of psychiatry providing an alternative to full-time hospitalization is associated with shorter length of stay in French public psychiatry. *Int J Environ Res Public Health* 21 mars 2017;14(3).
14. Killaspy H, Johnson S, King M, Bebbington P. Developing mental health services in response to research evidence. *Epidemiol Psychiatr Soc.* mars 2008;17(1):47–56.
15. Stein LI, Test MA. Alternative to mental hospital treatment. I. Conceptual model, treatment program, and clinical evaluation. *Arch Gen Psychiatry.* avr. 1980;37(4):392–7.
16. Teague GB, Bond GR, Drake RE. Program fidelity in assertive community treatment: development and use of a measure. *Am J Orthopsychiatry* avr. 1998;68(2):216–32.
17. Ramonet M. La mobilité au risque du contrôle social : apport des pratiques orientées vers le rétablissement. *Inf Psychiatr* 13 juin 2016;me 92(5):365–71.
18. Bonsack C, Adam L, Haefliger T, Besson J, Conus P. Difficult-to-engage patients: a specific target for time-limited assertive outreach in a Swiss setting. *Can J Psychiatry Rev Can Psychiatr.* nov 2005;50(13):845–850.
19. Thornicroft G. Testing and retesting assertive community treatment. *Psychiatr Serv Wash DC.* juin 2000;51(6):703.
20. Joy CB, Adams CE, Rice K. Crisis intervention for people with severe mental illnesses. *Cochrane Database Syst Rev.* 18 oct 2006;(4):CD001087.
21. Robin M, Bronchard M, Kannas S. Ambulatory care provision versus first admission to psychiatric hospital: 5 years follow up. *Soc Psychiatry Psychiatr Epidemiol.* juin 2008;43(6):498–506.
22. While D, Bickley H, Roscoe A, Windfuhr K, Rahman S, Shaw J, et al. Implementation of mental health service recommendations in England and Wales and suicide rates, 1997-2006: a cross-sectional and before-and-after observational study. *Lancet Lond Engl.* 17 mars 2012;379(9820):1005–1012.
23. World Health Organization. The world health report 2001: mental health: new understanding, new hope. Geneva, Switzerland: World Health Organization; 2001.
24. World Health Organization. Mental Health Action Plan 2013–2020; World Health Organization: Geneva, Switzerland, 2013.
25. World Health Organization. Mental Health—Facing the Challenges, Building Solutions Report from the WHO European Ministerial Conference; World Health Organization: Geneva, Switzerland, 2005.
26. Beetlestone E, Demassiet V, Olivier F, Defromont L, Daumerie N, Chabane R. Une expérience de partenariat entre élus, professionnels, et usagers pour favoriser le rétablissement en santé mentale. *Inf Psychiatr.* 2015;91(7):578–85.
27. Roelandt J-L, Vaglio A, Magnier J, Defromont L. La santé mentale en France et dans le monde : « Des hommes, pas des murs ». *Prat En Santé Ment.* 2015;61e année(1):47–58.
28. Bouloudnine S, Mendzat R, Naudin JULICE. Une équipe d'intervention de crise dans une psychiatrie en crise. *Cah Crit Thérapie Fam Prat Réseaux.* 2013;50(1):163–86.
29. Robin M, (d) FP, Ampélas J-F, Kannas S, Bronchard M, Mauriac F, et al. Les dispositifs d'urgence psychiatrique et de crise en France, Psychiatric emergency and crisis services in France, Los dispositivos de urgencia psiquiátrica y de crisis en Francia. *Thérapie Fam* 2001;22(2):133–151.
30. Ramonet M, Roelandt J-L. Soins intensifs à domicile : modèles internationaux et niveau de preuve. *Ann Méd-Psychol Rev Psychiatr* 1 sept. 2013;171(8):524–30.
31. Mauriac F. Traiter la crise au domicile. *Prat En Santé Ment.* 2016;62e année(4):17–20.
32. Robin M, Bronchard M, Kannas S. Ambulatory care provision versus first admission to psychiatric hospital: 5 years follow up. *Soc psychiatry Psychiatr Epidemiol.* 1 juin 2008;43(6):498–506.
33. Naudin J, Mendzat R, Bouloudnine S. Ulice : de la mobilité à la flexibilité. Un point de vue phénoménologique, ULICE : from mobility to flexibility. A phenomenological perspective. *Inf Psychiatr* 13 juin 2016;me 92(5):373–80.
34. Garcin V. Douze ans d'expérience d'un travail de secteur en équipe mobile auprès d'adolescents : quels changements sur les représentations ? Quels résultats sur les activités ? *Inf Psychiatr.* 2016;92(5):357–64.
35. Tordjman S, Garcin V. Les équipes mobiles auprès d'adolescents en difficulté. Paris : Masson; 2009. (coll. pratiques en psychothérapie).
36. Toot S, Devine M, Orrell M. The effectiveness of crisis resolution/home treatment teams for older people with mental health problems: a systematic review and scoping exercise. *Int J Geriatr Psychiatry* déc. 2011;26(12):1221–30.
37. Stancu I, Alnawaqil AM, Marquis S, Miserez M, Gaillard M, Giannakopoulos P. [The mobile Team of the old age psychiatry: principles and perspectives]. *Rev Med Suisse* 16 avr 2008;4(153):957–8, 960, 962–3.
38. Bonsack C, Holzer L, Stancu I, Baier V, Samitca M, Charbon Y, et al. [Psychiatric mobile teams for the three ages of life: the Lausanne experience]. *Rev Med Suisse* 17 sept 2008;4(171):1960–2, 1964–6, 1968–9.
39. Castro B, Bahadori S, Tortelli, Ailam L, Skumik N. Syndrome de la porte tournante en psychiatrie en 2006. *Ann Méd-Psychol Rev Psychiatr.* 1 mai 2007;165(4):276–81.

40. Henderson C, Thornicroft G. The statute of deinstitutionalization in Great Britain. *Sante Ment Que.* 1997;22(2):88–114.

Sophie Cervello, M.D., M.Sc., is psychiatrist at the Resource Center for Psychosocial Rehabilitation and Cognitive Remediation (CRR), in Lyon, France. She worked in a psychiatric mobile team in the Psychiatry department, University Hospital of Saint Etienne, France.

Mael Pulcini, M.D., is psychiatrist in a mobile team in the Psychiatry department, University Hospital of Saint Etienne, France.

Catherine Massoubre, M.D., Ph.D., is the head of the Psychiatry department, University Hospital of Saint Etienne, France. She has experience in eating disorders, emergency psychiatry and suicidology. She belongs to the TAPE research team, EA7423, Jean Monnet University of Saint-Etienne, France.

Béatrice Trombert-Paviot, M.D., Ph.D., is the head of the Public health and medical information department, University hospital of Saint-Etienne, France

Eric Fakra, M.D., Ph.D., is the head of the Psychiatry department, University Hospital of Saint Etienne, France. He created 3 mobile teams in the Psychiatry department in Saint-Etienne. He has experience in psychopharmacology and affective neurosciences. He belongs to the TAPE research team, EA7423, Jean Monnet University of Saint-Etienne, France.

Affiliations

Sophie Cervello^{1,2} • **Mael Pulcini**¹ • **Catherine Massoubre**^{1,4} • **Béatrice Trombert-Paviot**³ • **Eric Fakra**^{1,4}

¹ Psychiatry Department, University Hospital of Saint Etienne, Saint Etienne, France

² Rehabilitation Department (CRR and CL3R), Le Vinatier Hospital, 4 rue Jean Sarrazin, 69008 Lyon, France

³ Public Health and Medical Information Department, University Hospital, Saint-Etienne, France

⁴ TAPE, EA7423, Jean Monnet University of Saint-Etienne, Saint Etienne, France