



Contents lists available at ScienceDirect

Psychiatry Research

journal homepage: www.elsevier.com/locate/psychres

Crisis intervention at the general hospital: An appropriate treatment choice for acutely suicidal borderline patients

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ARTICLE INFO

Article history:

Received 3 June 2009

Received in revised form 10 June 2010

Accepted 22 June 2010

Available online xxxx

Keywords:

Borderline personality disorder

Suicide attempt

Emergency room

Crisis intervention

3-month follow-up

Self-harm

ABSTRACT

This study investigated whether crisis intervention (CI) at the General Hospital is a suitable management strategy among borderline patients referred to the emergency room (ER) for deliberate self-harm. Two patient cohorts ($n=200$) meeting DSM-IV Borderline Personality Disorder criteria, were prospectively assessed for repeated deliberate self-harm and service consumption. At ER discharge, 100 subjects received CI, while 100 comparison subjects (recruited before the implementation of CI) were assigned to treatment as usual (TAU). At 3-month follow-up, a high proportion of repeated deliberate self-harm and hospitalization in the global study sample was found. However rates were lower in the CI group: 8% repeated deliberate self-harm and 8% psychiatric hospitalization, versus 17% and 56% in the TAU group. The global expenditure for psychiatric hospitalization was 728,840 Swiss Francs (CHF) for CI and 914,340 for TAU. This study indicates that associated with mean hospitalization/relapse rates, CI may be a suitable management strategy for acutely suicidal borderline patients.

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1. Introduction

Borderline personality disorder is considered a common psychiatric diagnosis among depressive patients who are referred to the emergency room following deliberate self-harm. However, little research exists to investigate its prevalence among emergency room patients (Hawton, 2002) and to direct the development of acute services for patients with personality disorders (Gunderson et al., 2000). Further treatment innovation and research in this area may respond to the present need for more secure, reliable and efficient treatment for these patients. Improving acute treatment for borderline patients is indeed an important issue to mental health policies. In fact, those borderline patients requiring hospital admission for attempted suicide have an increased risk of adverse outcome (Paris et al., 1987; Stone, 1990; Links, 1998; Soloff et al., 2000; Yen et al., 2003), require intensive support and careful clinical monitoring (Andover et al., 2005) and have higher treatment costs (Bateman and Fonagy, 2003) especially for inpatient treatment. Psychiatric hospitalization is, however, of unproven value for suicide prevention among these patients (Pirkis et al., 1999; Paris, 2004). Day treatment is a cost-effective choice (Chiesa et al., 2002), but it may not be appropriate for these

subjects in the immediate aftermath of the emergency room. Recent work claims therefore that short-term hospitalization at the general hospital (Hawton et al., 2003) may be the best alternative to classic psychiatric hospitalization. However, few studies have investigated the outcome of acute treatment at the general hospital in suicidal borderline patients.

Previous studies from the current authors indicated that a psychodynamic crisis intervention program is a cost-effective acute treatment among patients with and without personality disorders (Burnand et al., 2002; Cailhol et al., 2009). The crisis intervention program is based on individual psychotherapy intervention provided by experienced supervised nurses (Burnand et al., 2002). These nurses were trained using a manual over a 6-month period and had weekly supervision sessions with a psychoanalyst. Each patient receives an individualized program, which shares common specific goals and strategies. The crisis intervention program a) provides active cognitive and affective support to integrate/move away from present stress disorder, b) facilitates therapeutic alliance and develops a working alliance, c) helps expressing overwhelming experiences of rage, helplessness and deception, d) conveys insight on repetitive patterns of idealized masochistic attachment, and e) focuses on life events involving separation and loss yet on impaired mourning of significant affective relationships as a main target of the treatment.

This intensive treatment includes interpersonal intervention with the family and other close friends, especially partners, in order to clarify communication processes and decrease acute conflicts, as well as teaching the patient and their families adapted coping behaviours.

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Finally, caregivers are in charge of the dedicated psycho-education of the patient (illness, treatment and which problems are to be expected after discharge and how to respond to them) and provide active help in organizing the subsequent acute treatment after hospital discharge.

Since increased treatment effects were obtained during the early phase of this treatment in a subject subgroup with concurrent borderline personality disorder, a shorter 5-day version of this program was developed and used in the framework of short-term psychiatric hospitalization at the general hospital.

Based upon the present rationale, the study aims at investigating the feasibility and outcome of crisis intervention programmes for suicidal borderline patients. In particular, it was assumed that receiving a few days of specialized intervention at the general hospital would be associated with:

- no need for further inpatient treatment at crisis hospitalization discharge,
- lower rates of treatment disruption, repeated deliberate self-harm and suicidal crisis relapse at 3-month follow-up compared to treatment as usual only,
- fewer psychiatric hospitalizations at 3-month follow-up compared to treatment as usual only.

2. Methods

2.1. Design

As seen in Fig. 1, the study was designed to conduct a prospective 3-month follow-up of a cohort of well assessed borderline patients assigned to crisis hospitalization at the general hospital after being referred to the emergency room. Patients were repeatedly evaluated at admission (emergency room), at crisis hospitalization discharge and at 3-month follow-up. A comparison group was obtained using a cohort of 100 borderline patients (meeting the same inclusion/exclusion criteria) who were investigated and prospectively followed-up in the same service environment before the implementation of crisis hospitalization at the general hospital (Cailhol et al., 2007). These comparisons were focused on collecting preliminary data to plan future controlled research and did not aim at estimating the efficacy/efficiency of the experimental program.

2.2. Study environment and intervention

The study was conducted at the Consultation-Liaison and Crisis Intervention Service of the General Hospital of Geneva, affiliated with the University Medical School. It was approved by the university ethics committee (number: 08-229R/Psy 08-0311R). Eight-thousand psychiatric patients from a 500,000 inhabitant catchment area are seen every year at the emergency room of this community hospital. Five to six hundred patients are referred for deliberate self-harm every year. It should be noted that the emergency department of the hospital is an interdisciplinary service including a well staffed psychiatric team. An "evaluation and brief intensive treatment unit" was implemented in 2002–2003, in order to avoid inappropriate long term psychiatric hospitalization. The post-emergency room intervention has a specific epidemiological target: acute behavioural and emotional dyscontrol in borderline personality disorder patients. This clinical population is known for having significant suicidal ideation/behaviour when coping with stressful life events (almost traumatic abandonment from a romantic partner), conflicting interpersonal relationships and an acute realm of infantile traumatic experiences.

Unit characteristics:

- 8 beds
- voluntary/non-voluntary admission
- maximum length of stay = 5 days
- intensive, interdisciplinary care
- accurate unit management
- daily clinical supervision
- secure, supportive and warm environment

To evaluate the impact of preventive interventions among suicidal patients, suicidal behaviour should be well defined. Over the last years several constructs have

been utilized (Silverman et al., 2007). The term "deliberate self-harm" (Hawton, 2002) stresses both the self-damaging intention and the outcome (fatal versus non-fatal). This classification had been adopted in 1992 by ICD-10 in the category intentional self-harm, which includes purposefully self inflicted poisoning or injury, and suicide attempted (Bertolote et al., 2009). In this paper we adopted the definition of deliberate self-harm. In addition, we considered a severity criterion (self-harm severe enough to require formal admission in the internal medicine unit of the emergency service of the Geneva General Hospital).

2.3. Procedure

All patients referred to the emergency department were screened for deliberate self-harm. Presence of severe deliberate self-harm, DSM-IV clinical criteria for borderline personality disorder and an age between 18 and 65 were inclusion criteria. Bipolar disorder, psychotic disorder, severe substance dependence, mental retardation, poor French and no insurance coverage were considered as exclusion criteria. All subjects gave their informed consent. Two well trained clinical psychologists with research experience completed the selection procedure utilizing the IPDE interview (Loranger et al., 1994). Regular inter-test ratings indicated good clinical judgment on the IPDE interview reliability for presence of definite borderline personality disorder diagnosis (average inter-rate reliability ICC2: 0.89). At discharge from the emergency room, the comparison group was assigned to treatment according to the clinical judgement of an attendant psychiatrist, while the intervention group benefited first from a short-term hospitalization in a crisis intervention service (as described previously) and was subsequently assigned to treatment as usual in the same system of service according to the same guidelines.

At 3-month follow-up, a research psychologist, blind to the aims of the study, traced all patients at discharge from the general hospital and at 3-month follow-up, using the computerized register of the Hospital Centre. She monitored outpatient treatment failure (defined as any relapse requiring additional emergency treatment), formal re-hospitalization in a psychiatric unit (also considered as synonymous of adverse outcome) and repeated episodes of deliberate self-harm. Information about death was obtained from regular contacts with "the Geneva registry office" and with the families, for those who left the country. Overall, 200 patients – i.e. the totality of the two initial sample cohorts – had 3-month follow-up. Since there is only one psychiatric inpatient agency in this catchment area and no insurance coverage was provided outside for those patients eligible to the study, these data gave a precise view of the real service provided, hospitalization rates and repetition rates among patients meeting the same selection criteria in this catchment area.

2.4. Statistical analyses

Data analysis was performed on 200 subjects using the Systat 8.0 software. No attrition was observed for 3-month follow-up measures. After computing the basic statistics, we compared the pre–post cohort profiles at intake using chi squared statistics, independent t tests, Fischer exact test and Mann–Whitney U tests to investigate differences between groups according to the metric characteristics of the data. Survival analysis was used to compute the mean number of days survived following repeated deliberate self-harm and hospitalization at 3-month follow-up. To compute hospitalization costs, cost-units for each type of hospitalization (standard inpatient hospitalization, crisis intervention at the general hospital and hospitalization in non psychiatric units of the general hospital) were provided from the analytic accounts of this Hospital Centre. Independent t tests were used to compare the intervention group and the comparison group on hospitalization days, number of days survived following repeated deliberate self-harm, hospitalization and costs for services consumed at 3 months.

3. Results

3.1. Sample characteristics

These subjects were adults, hospitalized in the internal medicine unit of the emergency centre for self intoxication as shown in Table 1. An elevated proportion of them (86%) met criteria for concurrent DSM-IV Major Depressive Disorder. In fact, the Hamilton Depression Rating Scale mean score was 21.4 ± 4.6 , which corresponded to severe depressive symptoms. For the DSM-IV Borderline Personality Disorder, the mean IPDE dimensional score in the intervention group was 13.6 ± 2.0 and the mean number of definite criteria met (a score of 2 at the corresponding item of the IPDE algorithm) was 6.0 ± 1.1 among subjects assigned to CI. The comparison group was fully comparable in age (31.5 ± 11.1), gender (83% female), presence of DSM-IV major depression (86%), severity of depressive symptoms (HDRS mean score: 22.5 ± 5.8), DSM-IV criteria met for borderline prototype (6.3 ± 1.2) as well as for referral modalities and deliberate self-harm characteristics.

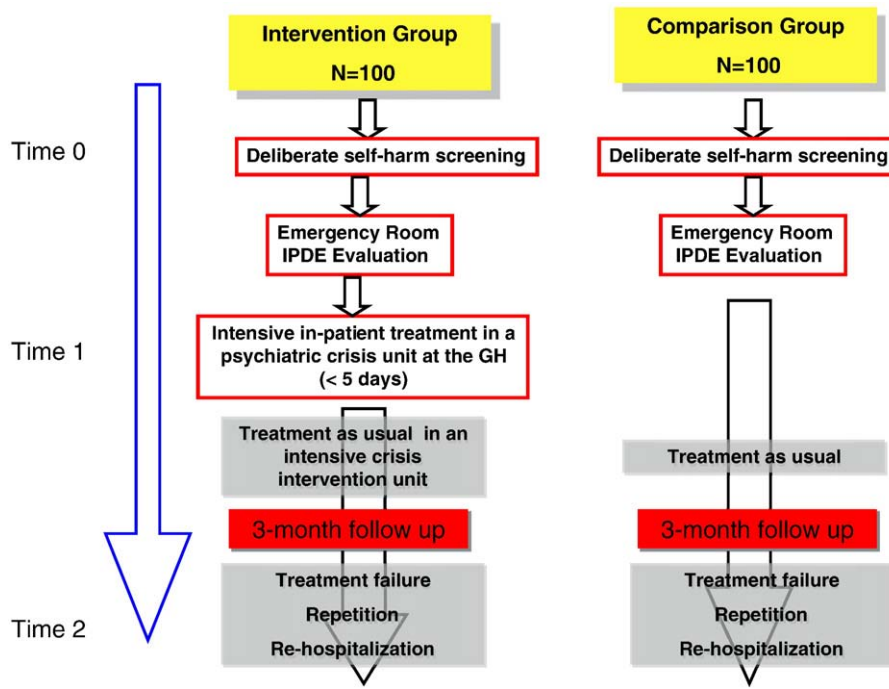


Fig. 1. Study design.

3.2. Crisis intervention characteristics and treatment assigned at discharge from the general hospital

The mean duration of crisis hospitalization at the general hospital was 4.6 days ± 1.2 (range: 1–10) and the total number of days used in this treatment program was 458. No drop-out was observed during short-term hospitalization at the general hospital. At crisis hospitalization discharge, 3 patients required standard psychiatric inpatient treatment (mean duration: 8.3 ± 5.1, range 4–14). 97 patients no longer required residential treatment and were assigned to outpatient care, 13 of them dropped-out (overt refusal of or did not reach outpatient treatment for various reasons). Among those patients starting outpatient treatment, 18 had been referred to outpatient visits (14 in a private practice), 36 were referred to a specialized outpatient crisis centre providing a modified Dialectic Behavioural Therapy (DBT), 29 had a combination of psychodynamic psychotherapy and 1 had residential treatment in an half way home. No specific

data concerning the treatment assigned at discharge from the emergency room are available for the comparison group, but treatment as usual was mainly provided by high quality outpatient intervention services which were present in the catchment area.

3.3. Results at 3-month follow-up

At 3-month follow-up, a significant minority of patients (n = 25, 12.5%) had repeated attempted suicide, but a higher percentage (n = 64, 32%) had been hospitalized at least once in the total study sample. When we compared the results of the intervention group and the comparison group, we realized that the majority of patients who needed hospitalization belonged to the comparison group (Table 2). In fact, as far as the patient cohort who received supplementary CI was concerned 8 patients met the criteria for deliberate self-harm, while in the comparison group 17 patients met these criteria. As shown in Fig. 2, the mean number of day survived to relapse in the intervention group (mean survival time: 81.1 ± 23.6, 95% CI 75.1–84.9) was significantly higher than in the comparison group (mean survival time: 42.2 ± 43.6, 95% CI 35.5–50.8). Two patients had multiple repeated deliberate self-harm and no patient died from suicide during

Table 1 Patient characteristics at intake.

	Intervention group N = 100			Comparison group N = 100			P
	Mean	S.D.	%	Mean	S.D.	%	
Age	32.6	10.9	.	31.5	11.1	.	0.49
Gender (F)	.	.	87	.	.	83	0.43
Major depressive disorder	.	.	86	.	.	86	1
Hamilton Depression Rating Scale scores	21.4	4.6	.	22.5	5.8	.	0.12
Suicide attempt	.	.	95	.	.	100	0.06
Borderline personality disorder diagnosis	.	.	100	.	.	100	1
Borderline personality disorder criteria	6	1.1	.	6.3	1.2	.	0.13

Table 2 Outcome measured at 3 months.

	Intervention group N = 100			Comparison group N = 100			P
	Mean	S.D.	%	Mean	S.D.	%	
Suicide attempt repetition			8			17	0.05
Suicide attempt day survival	85.6	16.3		79.8	25.9		0.05
Hospitalization survival	81.1	23.6		42.2	43.6		0.00
Psychiatric hospitalization			8			56	0.00
N of days of psychiatric hospitalization	1.94	7.79		9.3	16.5		0.00

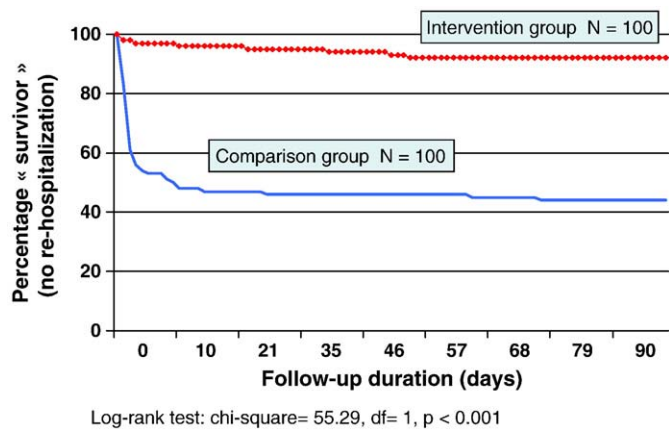


Fig. 2. Survival to standard psychiatric hospitalization among DSM-IV borderline patients referred to crisis intervention at the emergency department of the general hospital (intervention group) or to a treatment as usual only (comparison group).

the follow-up in the intervention group, while in the comparison group 3 patients had multiple relapses and one patient completed suicide at day 88. The presence of a suicidal crisis severe enough to require some form of supplementary inpatient treatment (irrespective of the treatment choice) was considered as a suicidal crisis relapse (treatment failure). Overall, 14 patients met this criterion in the intervention group and 56 in the comparison group.

During the 3-month follow-up, the total number of days in supplementary standard inpatient treatment and crisis intervention at the general hospital after discharge was significantly less in the intervention group (respectively 194 and 23) than in the comparison group (933) as shown in Table 2. The total 3-month costs for the supplementary acute inpatient treatment after discharge from the general hospital was significantly lower for the intervention group than for the comparison group (Fig. 3). Even taking into account the additional expenditure for short-term crisis intervention hospitalization at the general hospital, the cost would still be lower for the intervention group (CHF: 728,840) than for the comparison group (CHF: 914,340).

4. Discussion

4.1. Limitations

The most important limitation of the study is its naturalistic design, which prevents any inference of the comparative efficacy/efficiency of the crisis intervention model. In addition, recruitment

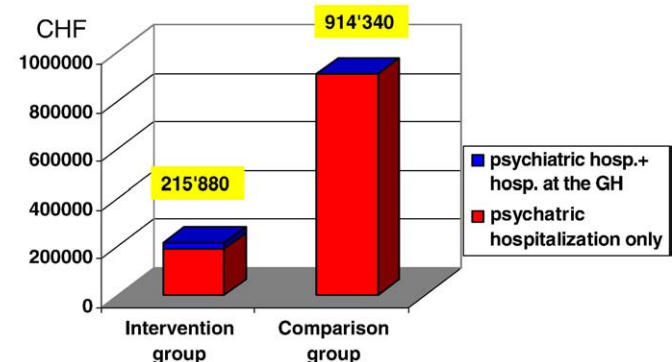


Fig. 3. Expenditures for supplementary hospitalization at 3-month follow-up. Separate variance for psychiatric hospitalization: $t = -4.032$, $df = 140.7$, $P < 0.000$. Separate variance for psychiatric hospitalization + hospitalization at the GH: $t = -3.885$, $df = 141.1$, $P < 0.000$.

took place at different times which might have introduced difficult to detect selection biases. The borderline patients were however consecutively selected at the only medical emergency room admitting patients who committed deliberate self-harm in the catchment area. Despite the large sample of patients with typical borderline profiles, the wide range of specialized community psychiatric services may have had an impact on the external validity of the present observations of low repetition/hospitalization rates among subjects assigned to supplemental CI. Additional limitations are the lack of patient interviews aimed at assessing symptom severity and psychosocial outcome at 3-month follow-up as well as the short follow-up period. Moreover, the fact that these patients had high prevalence of depression and different medical treatment were provided in the two treatment groups might represent a bias in the results. Lack of systematic record of antidepressant medication in the two treatment groups is therefore a limitation of this study. Patients in the comparison groups were systematically assigned, however, to intensive specialized outpatient care in a crisis intervention program and received systematically antidepressant treatment (McQuillan et al., 2005).

Considering these limitations, the only issue that we could address is whether or not crisis intervention at the general hospital may respond to the significant need for psychiatric hospitalization at an acceptable relapse risk among borderline patients.

4.2. Discussion of the results

In this study, the observation that one-third of subjects underwent such adverse outcomes as repeated deliberate self-harm, hospitalization, or both, in the first 3 months following discharge from the emergency room indicated that borderline patients are a significant challenge to contemporary emergency services. The repetition rates found among borderline patients assigned to crisis intervention at the general hospital are in the range of those reported among patients with deliberate self-harm who received specific outpatient interventions in the immediate aftermath of discharge from the emergency room (Huey et al., 2004; Gunderson and Hoffman, 2005; Zanarini et al., 2006; Eudier et al., 2006). These studies included, however, suicidal patients irrespective of the presence/absence of a borderline personality disorder diagnosis. The only study investigating a subgroup of patients, seen after an episode of deliberate self-harm, with personality disturbance within the flamboyant cluster (B) and a previous parasuicide within the last 12 months, reported between 56% repeated attempted suicides for patients who received a manual assisted cognitive-therapy (MACT) and 71% for patients who were in the control group (Guthrie et al., 2003), which is very similar to our findings in the TAU group (56%).

Studies conducted among carefully assessed borderline patients also indicated that structured outpatient psychotherapy programs and day treatment markedly decreased repetition and hospitalization rates (Evans et al., 1999; Tyrer et al., 2003; Brown et al., 2005; Cedereke and Ojehagen, 2005). Thus, the implementation of these treatments is strongly recommended for these patients (Linehan et al., 2006). However, specialized outpatient treatment programs should be considered as a successful solution for the acute treatment of the real everyday borderline patient referred to the emergency room. Broad access to a well funded system of community services, including DBT oriented day treatment and an outpatient psychodynamic psychotherapy providing additional risk management, did not prevent, "per se," 56% of patients in the treatment as usual group to require psychiatric hospitalization at least once, mostly for acute suicidal threat. More important, in the present study most hospitalizations occurred within a few days following discharge from the general hospital suggesting that the presence/absence of specific management of the crucial transition from emergency to acute outpatient treatment may have significant relevance for better mental

health policies and require further studies. Outcome studies of specialized psychotherapy for borderline patients do not provide clear recommendations on whether or not the real borderline patient may start these programs at discharge from the emergency room. Moreover, 97% of subjects who received supplemental CI did not require additional inpatient treatment, had average rates of repeated deliberate self-harm, hospitalization and treatment failure at 3-month follow-up. Together with more than half of the patients who received TAU only showing adverse outcomes, mostly in the first weeks, these findings suggest that CI is feasible and may provide a suitable alternative to standard psychiatric hospitalization among acutely suicidal borderline patients. The results are in line with previous reports emphasizing the importance of new treatments aimed at preventing hospitalization, acute treatment failure and repeated deliberate self-harm among acutely suicidal borderline patients (Bateman and Fonagy, 1999; Gunderson et al., 2000) as well as with previous follow-up studies suggesting that the outcome of borderline patients may be better and faster than previously thought (Bateman and Fonagy, 2001) where comprehensive treatment is available (Giesen-Bloo et al., 2006).

4.3. Conclusion

This study suggests that short-term intensive care at the general hospital may contribute to solving this problem although this treatment is not considered as an alternative to structured psychiatric acute treatment, but targeted at optimising early assignment to specialized outpatient programs and more efficient management of relapse among borderline patients in a suicidal crisis. Therefore, a last important point is whether or not implementation of brief hospitalization, aimed at delivering intensive interdisciplinary intervention at the general hospital, is an affordable financial burden for contemporary systems of psychiatric services. The observation that the presence/absence of supplementary intensive care at the general hospital was associated with a one-third saving of total inpatient treatment costs (including cost of both standard psychiatric hospitalization and crisis hospitalization) at 3-month follow-up suggests that enough room may be available to further this research. In conclusion, this study indicated that borderline patients, referred to the emergency room for deliberate self-harm improve quickly and do not often require classic psychiatric hospitalization where crisis intervention at the general hospital is available. Moreover, the present observations of 8% repeated deliberate self-harm, 8% hospitalization and 14% acute treatment disruption at 3-month follow-up among patients referred to supplementary CI suggest that a combination of well adapted intensive care and comprehensive outpatient treatment may provide an appropriate management strategy for these subjects and may be a cost-effective alternative to classic psychiatric hospitalization for acutely suicidal borderline patients. Therefore, these data show that transition from emergency treatment to outpatient treatment has significant relevance for better mental health policies and should be considered more closely for borderline patients.

References

Andover, M.S., Pepper, C.M., Ryabchenko, K.A., Orrico, E.G., Gibb, B.E., 2005. Self-mutilation and symptoms of depression, anxiety, and borderline personality disorder. *Suicide and Life-Threatening Behavior* 35, 581–591.

Bateman, A., Fonagy, P., 1999. Effectiveness of partial hospitalization in the treatment of borderline personality disorder: a randomized controlled trial. *American Journal of Psychiatry* 156, 1563–1569.

Bateman, A., Fonagy, P., 2001. Treatment of borderline personality disorder with psychoanalytically oriented partial hospitalization: an 18-month follow-up. *American Journal of Psychiatry* 158, 36–42.

Bateman, A., Fonagy, P., 2003. Health service utilization costs for borderline personality disorder patients treated with psychoanalytically oriented partial hospitalization versus general psychiatric care. *American Journal of Psychiatry* 160, 169–171.

Bertolote, J.M., Fleischmann, A., De Leo, D., Wasserman, D., 2009. Suicidal thoughts, suicide plans and attempts in the general population on different continents. In: Wasserman, D., Wasserman, C. (Eds.), *Oxford Textbook of Suicidology and Suicide Prevention: A Global Perspective, Part 2*, pp. 99–104.

Brown, G.K., Ten Have, T., Henriques, G.R., Xie, S.X., Hollander, J.E., Beck, A.T., 2005. Cognitive therapy for the prevention of suicide attempts: a randomized controlled trial. *Journal of American Medical Association* 294, 563–570.

Burnand, Y., Andreoli, A., Kolatte, E., Venturini, A., Rosset, N., 2002. Psychodynamic psychotherapy and clomipramine in the treatment of major depression. *Psychiatric Services* 53, 585–590.

Cailhol, L., Damsa, C., Marclay, L., Burnand, Y., Lazignac, C., Andreoli, A., 2007. Predictive factors of suicidal behaviour recurrence in borderline personality disorder patients. *Encephale* 33, 156–159.

Cailhol, L., Rodgers, R., Burnand, Y., Damsa, C., Andreoli, A., 2009. Therapeutic alliance in short-term supportive any psychodynamic psychotherapies: a necessary but not sufficient condition for outcome? *Psychiatric Research* 170, 229–233.

Cedereke, M., Ojehagen, A., 2005. Prediction of repeated parasuicide after 1–12 months. *European Psychiatry* 20, 101–109.

Chiesa, M., Bateman, A., Wilberg, T., Friis, S., 2002. Patients' characteristics, outcome and cost-benefit of hospital-based treatment for patients with personality disorder: a comparison of three different programs. *Psychology and Psychotherapy* 75, 381–392.

Eudier, F., Gault, S., Batt-Moillo, A., Drapier, D., Millet, B., 2006. Diminution des répétitions suicidaires grâce à une réorganisation des soins psychiatriques dans un service d'accueil-urgences. *La Presse Médicale* 35, 759–763.

Evans, K., Tyrer, P., Catalan, J., Schmidt, U., Davidson, K., Dent, J., Tata, P., Thornton, S., Barber, J., Thompson, S., 1999. Manual-assisted cognitive-behaviour therapy (MACT): a randomized controlled trial of a brief intervention with bibliotherapy in the treatment of recurrent deliberate self-harm. *Psychological Medicine* 29, 19–25.

Giesen-Bloo, J., van Dyck, R., Spinhoven, P., van Tilburg, W., Dirksen, C., van Asselt, T., Kremers, I., Nadort, M., Arntz, A., 2006. Outpatient psychotherapy for borderline personality disorder: randomized trial of schema-focused therapy vs transference-focused psychotherapy. *Archives of General Psychiatry* 63, 649–658 Erratum in: *Archives of General Psychiatry* 63, 1008.

Gunderson, J.G., Hoffman, P.D., 2005. *Understanding and Treating Borderline Personality Disorder. A Guide for Professionals and Families*. American Psychiatric Publishing, Washington, DC.

Gunderson, J.G., Shea, M.T., Skodol, A.E., McGlashan, T.H., Morey, L.C., Stout, R.L., Zanarini, M.C., Grilo, C.M., Oldham, J.M., Keller, M.B., 2000. The Collaborative Longitudinal Personality Disorders Study: development, aims, design, and sample characteristics. *Journal of Personality Disorder* 14, 300–315.

Guthrie, E., Kapur, N., Mackway-Jones, K., Chew-Graham, C., Moorey, J., Mendel, M., Marino Francis, F., Sanderson, S., Turpin, C., Boddy, G., 2003. Predictors of outcome following brief psychodynamic-interpersonal therapy for deliberate self-poisoning. *Australian and New Zealand Journal of Psychiatry* 37, 532–536.

Hawton, K., 2002. General hospital management of suicide attempts. In: Hawton, K., Van Heeringen, K. (Eds.), *The International Handbook on Suicide and Attempted Suicide*. Wiley Press, pp. 519–538.

Hawton, K., Houston, K., Haw, C., Townsend, E., Harriss, L., 2003. Comorbidity of axis I and axis II disorders in patients who attempted suicide. *American Journal of Psychiatry* 160, 1494–1500.

Huey, S.J., Henggeler, S.W., Rowland, M.D., Halliday-Boykins, C.A., Cunningham, P.B., Pickrel, S.G., Edwards, J., 2004. Multisystemic therapy effects on attempted suicide by youths presenting psychiatric emergencies. *Journal of the American Academy of Child and Adolescent Psychiatry* 43, 183–190.

Linehan, M.M., Comtois, K.A., Murray, A.M., Brown, M.Z., Gallop, R.J., Heard, H.L., Korslund, K.E., Tutek, D.A., Reynolds, S.K., Lindenboim, N., 2006. Two-year randomized controlled trial and follow-up of dialectical behavior therapy vs therapy by experts for suicidal behaviors and borderline personality disorder. *Archives of General Psychiatry* 63, 757–766 Erratum in: *Archives of General Psychiatry* 64, 1401.

Links, P.S., 1998. Developing effective services for patients with personality disorders. *Canadian Journal of Psychiatry* 43, 251–259.

Loranger, A.W., Sartorius, N., Andreoli, A., Berger, P., Buchheim, P., Channabasavanna, S.M., Coid, B., Dahl, A., Diekstra, R.F.W., Ferguson, B., Jacobsberg, L.B., Mombour, W., Pull, C., Ono, Y., Regier, D., 1994. *The International Personality Disorder Examination (IPDE): the World Health Organization/Alcohol, Drug Abuse, and Mental Health Administration International Pilot Study of Personality Disorders*. *Archives General Psychiatry* 51 (3), 215–224.

McQuillan, A., Nicastro, R., Guenet, F., Girard, M., Lissner, C., Ferrero, F., 2005. Intensive dialectical behaviour therapy for outpatients with borderline personality disorder who are in crisis. *Psychiatric Services* 56, 193–197.

Paris, J., 2004. Is hospitalization useful for suicidal patients with borderline personality disorder? *Journal of Personality Disorder* 18, 240–247.

Paris, J., Brown, R., Nowlis, D., 1987. Long-term follow-up of borderline patients in a general hospital. *Comprehensive Psychiatry* 28, 530–535.

Pirkis, J., Burgess, P., Joelley, D., 1999. Suicide attempts by psychiatric patients in acute inpatient, longstay inpatient and community care. *Social Psychiatry and Psychiatric Epidemiology* 34, 634–644.

Silverman, M.M., Berman, A.L., Sanddal, N.D., O'Carroll, P.W., Joiner, T.E., 2007. Rebuilding the tower of Babel: a revised nomenclature for the study of suicide and suicidal behaviors. Part 1: background, rationale, and methodology. *Suicide Life-Threatening Behavior* 37 (3), 248–263.

Soloff, P.H., Lynch, K.G., Kelly, T.M., Malone, K.M., Mann, J.J., 2000. Characteristics of suicide attempts of patients with major depressive episodes and borderline personality disorder: a comparative study. *American Journal of Psychiatry* 157, 601–608.

- Stone, M.H., 1990. *The Fate of the Borderline Patients: Successful Outcome and Psychiatric Practice*. The Guilford Press, New York.
- Tyrer, P., Thompson, S., Schmidt, U., Jones, V., Knapp, M., Davidson, K., Catalan, J., Arlie, J., Baxter, S., Byford, S., Byrne, G., Cameron, S., Caplan, R., Copper, S., Ferguson, B., Freeman, C., Frost, S., Godley, J., Greenshields, J., Henderson, J., Holden, J., Keech, P., Kim, L., Logan, K., Manley, C., MacLeod, A., Murphy, R., Patience, L., Ramsay, L., De Munro, S., Scott, J., Seivewright, H., Sivakumar, K., Tata, P., Thornton, S., Ukoumunne, O.C., Wessely, S., 2003. Randomized controlled trial of brief cognitive behaviour therapy versus treatment as usual in recurrent deliberate self-harm: the POPMACT study. *Psychological Medicine* 33, 969–976.
- Yen, S., Shea, M.T., Pagano, M., Sanislow, C.A., Grilo, C.M., McGlashan, T.H., Skodol, A.E., Bender, D.S., Zanarini, M.C., Gunderson, J.G., Morey, L.C., 2003. Axis I and axis II disorders as predictors of prospective suicide attempts: findings from the collaborative longitudinal personality disorder study. *Journal of Abnormal Psychology* 112, 375–381 Erratum in: *Journal of Abnormal Psychology* 2004 113, 301.
- Zanarini, M.C., Frankenburg, F.R., Hennen, J., Reich, D.B., Silk, K.R., 2006. Prediction of the 10-year course of borderline personality disorder. *American Journal of Psychiatry* 163, 827–832.