

Day Hospital in Community Psychiatry: Is it Still an Alternative to Mental Health Care?

Rui Lopes¹, Rosário Curral^{1,2}

ABSTRACT

The Day Hospital constitutes one of the main components of the community psychiatry and it is integrated in the current social psychiatry policy, representing one of the main alternatives to inpatient regimen. The concept was created in ex-URSS in the 1930's and spread to USA during the 40's and 50's, reaching its peak in the 1970's. Even though there was in the decades ahead a decline of expansion and an increased closure of day hospital programs, there has been in the last few years, a renewed interest as well as an increased number of established day hospitals. Although this phenomenon is related to evidence of cost effectiveness and social advantage, showing that they can provide feasible and effective care, new paradigms like acute home care can make it seem old fashionable and aged. Nowadays, a more intensive treatment and an increasing number of therapeutic models applied to different psychiatric disorders, settled by a modern community mental health care system, are becoming the reality of its practice. But the somehow heterogeneity of the community services that the designation day hospital comprises can make difficult the evaluation of its efficacy. The purpose of this review is to find out what is the position of day hospital in the context of actual and future mental health care.

KEY-WORDS: DAY HOSPITAL; COMMUNITY PSYCHIATRY; MENTAL HEALTH

HOSPITAL DE DIA EM PSIQUIATRIA COMUNITÁRIA: CONTINUA A SER UMA ALTERNATIVA NOS CUIDADOS DE SAÚDE MENTAL?

RESUMO

O Hospital de Dia constitui um dos principais componentes da psiquiatria comunitária e está integrado na actual política de psiquiatria social, representando uma das principais alternativas ao regime de internamento completo. O conceito de Hospital de Dia em psiquiatria foi criado na ex-URSS em 1930, expandindo-se para os EUA durante os anos 40 e 50, e atingindo o seu auge na década de 1970. Apesar de se ter registado nas décadas seguintes um declínio da sua expansão e encerramento significativos, nos últimos anos tem surgido um interesse renovado que foi traduzido num aumento do número de Hospitais de Dia. Embora este facto possa estar relacionado com evidência de eficácia ao nível do custo-benefício, benefícios sociais, e prestação eficaz de cuidados, o surgimento de novos paradigmas como o atendimento domiciliário podem fazê-lo parecer antiquado. Actualmente, os seus programas de tratamento integrados num moderno sistema de cuidados de saúde mental comunitária, definem-se por uma intensificação e diversificação de modelos terapêuticos aplicados a diferentes perturbações psiquiátricas. Contudo, a heterogeneidade dos programas na comunidade que a designação de Hospital Dia engloba, pode todavia dificultar a avaliação da sua eficácia. Os autores pretendem com a presente revisão bibliográfica esclarecer a posição do Hospital de Dia no contexto actual e futuro dos cuidados de saúde mentais.

PALAVRAS-CHAVE: HOSPITAL DE DIA; PSIQUIATRIA COMUNITÁRIA; SAÚDE MENTAL

1. *Clínica de Psiquiatria e Saúde Mental, Centro Hospitalar de São João*

2. *Departamento de Neurociências Clínicas e Saúde Mental, Faculdade de Medicina da Universidade do Porto*

INTRODUCTION

Today we are assisting to the “deinstitutionalization” of Psychiatry and Mental Health with the disappearance of the traditional psychiatric hospital known as an “asylum system”. This was impelled by a change of paradigm in social and community policies and ideals with concerns on a closer supervision of patients within the local community. The day hospital is among some of the earliest forms of community and social psychiatry. “Community care” is expected to involve general practitioners and various public or private institutions to develop a network that will enable the sharing of knowledge regarding psychiatric disorders and therapeutic care.

As an alternative to both inpatient and outpatient treatment of acute, short-stay and some chronic psychiatric selected patients, it disposes most of the treatment normally available to inpatients, giving an emphasis to social and therapeutic groups. It contributes to the progressive readaptation to life in the community, keeping the patient's place in the family and promoting the chance of individual freedom and individuals' identity.¹ Despite the growth of community care programs, many individuals with acute psychiatric disorders continue to be treated as inpatients,² with additional treatment costs. Rationalization is necessary to realize the advantages of

day hospital care and to minimize the dangers of institutionalisation,⁷ as patients are sometimes isolated in hospital more often and for longer than it would be necessary.

HISTORY

The first reported day hospital was established in Moscow, ex-URSS, by M. A. Dzhagarov, in 1933, to reduce the duration of inpatient admission in a context of inadequate funds; it consisted mostly of occupational therapy.^{3,4} In the Western countries, the first one was born in Montreal in 1946, as part of a psychiatric teaching hospital, the Allan Memorial Institute, again in an attempt to reduce the demand for inpatient beds. Soon after, in the USA, a partial hospital program was established in 1948 at Yale, at the Menninger Clinic. In 1949 was settled another one in Kansas, and in 1952 at the Massachusetts Mental Health Centre.⁴ As the notions of “therapeutic community” expanded after the Second World War and better ways of dealing with psychiatric disorders evolved due to the advent of psychodrugs, it became apparent that the community needed a site where, discharged patients could be treated without formal inpatient admission.^{5,6} They became popular in the 1960's after the setting up of partial hospitali-

zation program directed by the Community Mental Health Center Construction Act in 1963.⁷

In Europe, they also spread during the 1940s and 1950s, reaching their peak in the 1970s, when provided the main alternative for hospital admission.⁷ In 1948, it was established the first one in England, a “social club” at the Social Psychiatry Centre in London. Then, a number of other such settings followed, and by 1959 existed more than 38. The movement incorporated Bierer’s philosophy: “treatment must include the whole social environment of the patient and all his social relationships. [The patient] must be treated not only as a person but as part of a community,” written in the *Lancet* in 1959 (p. 901).⁶ There were community ideals favoring unrestricted and open communication, a culture of inquiry and group therapies. Similar developments reached the Netherlands and West Germany in the 1970s.^{8,9} At that time there was a rapid growth and expansion across Europe and USA.

However, during the eighties and nineties, that exponential growth was followed by a widespread closure and investment reduction on partial hospitalization programs,^{10,11} associated with the emerging evidence of limited cost-effectiveness,^{12,13} a rise in costs and certain undefinition concerning treatment concepts (clinical population, the purpose of hospitalization and inappropriately length of stay).^{14,15} Finally, day hospitals started to face competition from more radical “non-institutional” alternatives such as assertive community treatment²⁴ and acute home based care. These alternatives made them appear old fashioned, stigmatizing and expensive.¹⁶

Notwithstanding all these facts, in the late years, evidence is demonstrating effectiveness associated with emerging social trends built in a psychiatric reform context. An increasing proportion of psychiatric patients are being treated in day hospital settings.¹⁷⁻²⁰ By 1999, at Germany, with the expansion described, there were 273 day hospitals,⁴⁰ against the 60 settled in the beginning of eighties,²¹ and typically started not to be located on hospital grounds or not to belong to a psychiatric department.^{30,46} Also, at England it was reported by 2004 the existence of 102 acute day hospitals.²² In Poland it was expected an increase in the number of day hospitals, from 56 in 1985 to 430 in 2005.³⁷

DAY HOSPITAL SETTINGS AND TREATMENTS CONCEPTS

In the past several decades various types of partial hospitalization programs have been developed with the purpose of offering either an effective alternative

to hospital admission or an intermediate step after an inpatient stay. “Day” treatment signifies the absence of night-time as it covers the whole day (e.g. 9 to 4 pm) in 5-7 days a week. Although considered by many authors as a continuum, there seems to be some heterogeneity in the different “partial hospitalization” or “day care” programs such as, transitional care for patients leaving hospital, more intensive alternatives to outpatient care (day treatment programs), and support of long-term patients living in the community (day care centers).^{23,24,81}

Day hospital as “partial hospitalization” program has a dynamic structure: it can provide diagnostic and treatment services for acutely ill patients who would otherwise be treated on traditional psychiatric inpatient units, it can offer treatment for patients experiencing some degree of remission from acute illness, and it can provide maintenance and rehabilitation for chronic psychiatric illness.²⁵ This is accomplished by integrating pharmacological, psychotherapeutic and sociotherapeutic treatment integrated in multidimensional service including as well crisis intervention.³⁰ In other words, as Shek et al. defined, is “an ambulatory treatment program that includes the major diagnostic, medical, psychiatric, psychosocial, and pre-vocational treatment modalities designed for people with serious mental disorders which require co-ordinated, intensive, comprehensive, and multi-disciplinary treatment not provided in an outpatient clinic setting facilities”.⁸²

Globally, the objective is to reduce the impact of symptoms, providing emotional support, encouraging social connection, and restoring working capacities. Family members also receive psychological support in supportive groups for families and patients. As multidisciplinary day care facilities, they can offer a diversity of treatment programs, with different ideologies, goals, target populations, intensity and duration,²⁶ suitable for regional needs²⁷ as occurs in the Netherlands²⁸ and UK.²⁹ Marshall et al, differentiate four types of day hospital’s programme structure: (1) acute psychiatric day hospitals as alternative to admission for acute disorders, (2) transitional day hospitals for shortening admission of patients recently discharged from inpatient care, (3) day care centers for rehabilitation or maintenance of long-term disorders, and (4) day treatment programs as intensive alternative to outpatient care.³⁵

The treatment programs are determined according the aims and objectives established by therapeutic orientations on a psychotherapeutic basis, depending this on the type mental disorder designated.³⁰ The question that emerges is if these are or not similar, although the wide spectrum of mental disorders,

how can it be traduced in structural and procedural differences? A recent survey by Seidler KP et al. in Germany studied the different therapeutic orientations and found that patients' characteristics were the main determinants of the differences in treatment programs. Like Marshall et al. differentiate four types of day hospital programs these authors went further in the definition and proposed that it can be specified as three main areas of function (rehabilitation, psychotherapy, crisis intervention) and four therapeutic orientations (psychodynamic, sociotherapeutic, psychodynamic social psychiatric, behavioral social psychiatric).³⁰ They described the rehabilitative orientated day hospitals by more weekend offers and more occupational therapy; between those with psychotherapeutic function and those with crisis intervention the differences are defined mainly by structural characteristics being the first ones more often institutionally affiliated.²⁸ In turn, the psychodynamically orientated day hospitals offer more psychotherapeutic group as well team sessions, and the behavioral social psychiatric orientated have a special concern for individual related work with relatives. The sociotherapeutic orientated offer lesser places for treatment than psychodynamic social orientated, being predominantly located on hospital grounds. They also found as a majority the social psychiatric based orientation combined with psychodynamic or behavioral concepts. They concluded that there were no differences relative to some structural features (such as costs of care, number of employees and rooms), acute crisis beds, diagnosis-specific therapeutic offers and suicidal attempts.²⁸

DAY HOSPITAL OR INPATIENT CARE?

Fifty years of controversy seems to arise in comparing the costs between day hospital and inpatient care. At the beginning of the 70's a greater emphasis was placed on partial hospitalization programs,³¹ but after limited evidence of cost-effectiveness it was verified to a partial closure of such programs. Meanwhile this tendency reverted once again as recent findings showed that a combination of both, as complementing or following each other, may be an appropriate therapeutic approach.³²

In many retrospective studies, day hospital has been as effective as inpatient treatment,^{8,33,34,37,38} and appeared superior in terms of reducing psychopathology in the short term and also in the prevention and reduction of readmission,^{5,34,40} a finding not shown for any other alternative to admission. A systematic review found that treatment in day

hospitals led to cost reductions ranging from 20,9% to 36,9% over inpatient care, being generally cheaper and associated with greater treatment satisfaction than inpatient treatment.³⁵ Further, a recent update of this systemic review concluded that caring for people in acute day hospitals can achieve substantial reduction in the numbers of people needing inpatient care, whilst improving patient outcome.⁸⁴ Creed et al. also found similar findings, being the running costs of a 30 place day hospital roughly one third of those of a 30 bedded ward, as a consequence of, for example, only one nursing shift.³⁶ Kallert et al. demonstrated a cost reduction of 22%,³⁷ and others authors have reached the same conclusions.³⁸⁻⁴² Also, there is an improving of social functioning,⁸ reduction of family burden,^{7,43} and reduction of relapse rates,⁴⁴ and a greater subjective quality of life compared to the inpatient group at time of discharge. However, more recently, Priebe et al. found a mean of 55,7 days compared with a mean of 30,5 days of inpatient care,⁴⁰ and so, finding higher costs. But, again, these generated better patient outcomes than other services, produced a more effective reduction of psychopathology and higher patient satisfaction.⁴⁰

A recent multicenter randomized controlled trial for establishing the effectiveness of acute day hospital care in a large sample across a range of mental health care systems, concluded that day hospital care is as effective on clinical outcomes as conventional inpatient care and more effective on social outcomes.⁴⁵ Nevertheless, as Priebe et al. found, a possible reason for admission to acute treatment on a conventional ward rather than a day hospital may be the greater severity of symptoms.⁸⁵ Interestingly, they also found that female gender and higher literacy patients seem to benefit more from acute treatment in day hospitals.⁸⁵

SPECIALIZED DAY HOSPITALS

Day hospitals specialized in certain mental disorders do exist, and in Europe, approximately one third are predominantly psychotherapeutic, addressing mainly personality disorders.⁴⁶ These patients are, in recent years, being treated in day hospitals with a more psychodynamically orientation. A controlled randomized trial comparing short-term day hospital psychotherapy and outpatient individual therapy for moderate to severe personality disorders found a modest general improvement in a broad range of clinical measures. However, for the most severely ill patients it was no superior.⁴⁷ For borderline personality disorder there are better defined programs and results compared to others persona-

lity disorders.^{83,48,79} A dialectic behavioral therapy⁴⁹ has been applied but do not reach the same good results than the mentalization based-treatment programs of Bateman and Fonagy, especially for patients with more severe disease.^{50,51} This was applied in 18 months of duration, as the first phase of a long term treatment strategy followed by a outpatient treatment.⁴⁹ Avoidant personality disorder patients didn't respond so well to day treatment^{52,53} and need individual psychotherapy supplementing group therapy.⁸⁰

In the elderly, day hospitals are, together with adult day centers and in-home care, valuable alternatives to the full-time family caregiver, the nursing home, community mental health teams,¹ and psychiatric hospitalization. It permits a long term monitoring both for patients and their careers in the community⁵⁴⁻⁵⁶ addressing psychological distress, memory impairment and daytime activities. It can offers intensive assessment, treatment and rehabilitation for functional disorders, depression⁵⁷⁻⁶⁰ and dementia.^{61,62} There is evidence of significant reduction of anxiety and apathy, a better adhesion to therapeutic community treatment,⁶³ lower costs and delay nursing home placements in patients with dementia,⁶⁴⁻⁶⁸ a progressive improvement in the clinical state and higher adhesion to community and group treatment in moderate depressive elderly patients.⁶⁰

Patients with mood disorders are more often admitted to intensive biopsychosocial day hospital programs. A research performed in Italy to determine the effectiveness of an intensive short-term day hospital program showed a significant improvement among depressed patients with comorbid dysthymic disorder, particularly if accompanied by acute stress or crisis.⁶⁹ Those with comorbid personality disorder showed more moderate improvement. However, there is inconsistency towards the improvements on psychopathology and more primary research on the efficacy is needed.^{35,70}

Anxiety disorder is also adequately treated in a psychotherapeutically orientated day hospital, focusing on crisis intervention for current conflicts, especially if a more intense psychotherapy as provided in an outpatient setting is needed or if inpatient setting is not adequate.^{30,80}

There is recent evidence of better results for partial day hospitalization programs compared to outpatient treatment on patients with eating disorders.^{71,72} A day hospital placed in a community setting can provide for patients with anorexia nervosa the advantages of reducing the stigma of being treated in a psychiatric hospital and also of containing parents' fears of their siblings' exposure to individuals with severe psychiatric illness.

In perinatal disorders, as post-partum depression, day hospital can provide a full range of interventions (motherhood classes, anxiety management, occupational therapy, etc.) with minimal family disruption, giving highly anxious mothers the opportunity to gain experience allowing others to care for the infant. In a study of 5 years settled in a mother-baby day hospital with cognitive-behaviour and interpersonal therapy, the authors found effectiveness in reducing the depressive symptoms, higher level of satisfaction and cost savings of approximately 50% in comparison to traditional inpatient treatment.^{73,74}

Day hospital may reduce the negative consequences of inpatient care for suicidal patients, like loss of freedom, regression and hopeless and forced admission.^{75,76} Mazza M et al. developed a day hospital program to manage suicidal ideation and suicidal behaviour integrating crisis intervention strategies and long-term therapeutic management combining biological, psychological and sociological therapies. Of 62 patients that completed the study none committed suicide and only 25% maintained suicidal ideation following one year,⁷⁷ showing promising results, but further studies are needed for more sustainable conclusions.

ACTUAL TRENDS AND ALTERNATIVES TO DAY HOSPITAL

Nowadays, the practice in day hospitals emphasizes in a more intensive treatment settled by a modern community mental healthcare system with community directed services. But, the establishment of new day programs with specified therapeutic techniques are many times determined by the existing fundings. Respite facilities for people temporarily too ill to return home at night, and an emphasis on community follow ups of non-attendees are new practices that are emerging.³⁵ Acute home based care delivered by a specialized crisis team is thought to be feasible for about 55% of patients who would otherwise be admitted and seems to reduce costs and improve satisfaction. Direct comparisons have not been made but it seems that acute home based care is not cheaper and day hospital is better in providing psychiatric care.⁷⁸ In fact, a major problem for acute home based care is the need for a great number of professionals and the costs that dislocation of resources to patients' residency implies. In day hospital instead, there are various professionals for a patient and one can give attendance to several simultaneously. Marshall M. gives a suggestion, if day hospital can be combined with outreach

services for patients who fail to attend, and short term crisis beds for those temporarily too ill to be at home, then it could offer a powerful alternative model for home based care.¹⁶

CONCLUSIONS

Day hospitals emerged first in a context of lack of inpatient beds and insufficient funds. The growth of partial hospital programs was stimulated by the deinstitutionalization of the public mental hospitals and the creation of community mental health centers. Today they can offer day treatment programs for those with acute and severe psychiatric problems, as an alternative to admission to inpatient units, both in terms of cost and adherence to treatment. Being privileged situated between inpatient care and the community, they permit the preservation of patient's social and familial life and the contact with the real world. They can offer medical and nursing care, occupational therapy, psychological treatments, and social work among many others. They may reduce the admission rate to acute inpatient

beds and can also provide a useful period of follow-up for those recently discharged but still needing intensive support, providing early discharge from hospital, faster clinical improvement and comparable or greater level of satisfaction and quality of life.

As we assist to the advances in medical practice, day hospital units with specialized treatment programs for a specified mental disorder are consistently being developed. Although several studies have supported the effectiveness of day hospital for acute disorders, few have determined which kind of patients respond positively to certain types of treatment programs. An uniformization that opposes somehow the existing heterogeneity of programs available, as well a stronger emphasis on diagnostic issues and knowledge of patients' disease and a psychosocial planning treatment for services, are needed to facilitate research programs and to bring better treatment outcomes. New trends as acute home based care are emerging and it is expected that a better definition of what clinical situations benefit more from the different therapeutic modalities available will result on the better performance of mental health services.

REFERENCES

- Gelder MG, Andreasen N, Lopez-Ibor JJ et al. *New Oxford Textbook of Psychiatry*. Oxford University Press; 2009.
- Department of health. *Health and personal social services statistics for England*. London: The Stationery Office; 1996.
- Volovik VM, Zachevitskii RA. Treatment, care, and rehabilitation of the chronic mentally ill in the U.S.S.R. *Hospital & Community Psychiatry* 1986;37:280-282.
- Sadock BJ, Sadock VA. *Kaplan & Sadock's Comprehensive Textbook of Psychiatry*. Lippincott Williams & Wilkins Publishers; 7th edition January 15, 2000.
- Cameron E. The day hospital. An experimental form of hospitalization for psychiatric patients. *Modern Hospital* 1947;69:60-63.
- Shorter E. *A Historical Dictionary of Psychiatry*. Oxford University Press; 2005.
- Pang J. Partial hospitalization: an alternative to inpatient care. *The Psychiatric Clinics of North America* 1985;8:587-595.
- Shene AH, Gersons BPR. Effectiveness and application of partial hospitalization. *Acta Psychiatrica Scandinavica* 1986;74:335-340.
- Priebe S, Gruyters T. Patients' and caregivers' initial assessments of day hospital treatment and course of symptoms. *Comprehensive Psychiatry* 1994;35:234-238.
- Krizay J. *Partial hospitalization: facilities, cost and utilization*. Washington, DC: American Psychiatric Association, Office of Economic Affairs; 1989.
- Department of Health. *The NHS Plan – a plan for investment, a plan for reform*. London: Department of Health, 2000.
- Vaughn P. The disordered development of day care in psychiatry. *Health Trends* 1983;15:91-94.
- Creed F, Black D, Anthony P. Day-hospital and community treatment for acute psychiatric illness: a critical appraisal. *British Journal of Psychiatry* 1989;154:300-310.
- Pryce IG. An expanding "stage army" of long stay psychiatric day-patients. *British Journal of Psychiatry* 1982;141:595-601.
- Gillis K, Russel VR, Busby K. Factors associated with unplanned discharge from psychiatric day treatment programmes: a multicenter study. *General Hospital Psychiatry* 1997;19:355-361.
- Marshall M. Acute psychiatric day hospitals – are not in fashion, but evidence shows that they provide feasible and effective care. *British Medical Journal* 2003;327:116-117.
- Provost D, Bauer A. Trends and developments in Public Psychiatry in France since 1975. *Acta Psychiatrica Scandinavica* 2001;104(Suppl. 410):63-68.
- Puzynski S, Moskalewicz J. Evolution of the mental health care system in Poland. *Acta Psychiatrica Scandinavica* 2001;104(Suppl. 410):69-73.
- Schene AH, Faber AME. Mental health care reform in the Netherlands. *Acta Psychiatrica Scandinavica* 2001;104(Suppl. 410):74-81.
- Vázquez-Barguero JL, Garica J, Torres-González F. Spanish psychiatric reform: what can be learned from two decades of experience? *Acta Psychiatrica Scandinavica* 2001;104(Suppl. 410):89-95.
- Steinhart I, Bosch G. Development and current status of partial hospitalization in the Federal Republic of Germany and West Berlin. *International Journal of Partial Hospitalization* 1983;2:71-81.
- Briscoe J, McCabe R, Priebe S, et al. A national survey of psychiatric day hospitals. *Psychiatric Bulletin* 2008;28:160-163.
- Rosie JS. Partial hospitalization: a review of recent literature. *Hospital and Community Psychiatry* 1987;38:1291-1299.
- Hoge MA et al. The promise of partial hospitalization: a reassessment. *Hospital and Community Psychiatry* 1992;43:345-354.
- Rosie JS, Azim HF, Piper We, et al. Effective psychiatric day treatment: historical lessons. *Psychiatric Services* 1995;47:876-877.
- Kallert TW, Glockner M, Priebe S, et al. A comparison of psychiatric day hospitals in five European countries: Implications of their diversity for day hospital research. *Social Psychiatry & Psychiatric Epidemiology* 2004;39:777-788.
- Schene AH. Partial hospitalization. In: Thornicroft E, Szmulker G, editors. *Textbook of community psychiatry*. Oxford: Oxford University Press; 2001:283-293.
- Schene AH, van Lieshout PAH, Mastboom JCM. Different types of partial hospitalization programmes: results of a nationwide survey in the Netherlands. *Acta Psychiatrica Scandinavica* 1988;78:515-522.
- Mbaya P, Creed F, Tomenson B. The difference uses of day hospitals. *Acta Psychiatrica Scandinavica* 1998; 98(4):283-287.
- Seidler KP et al. Treatment concepts of day hospitals for general psychiatric patients. Findings from a national survey in Germany. *European Psychiatry* 2006;21:110-117.
- Herz MI, Endicott J, Spitzer RL et al. Day versus inpatient hospitalization: a controlled study. *American Journal of Psychiatry* 1971;127:107-118.
- Howes JI, Haworth H, Reynolds P, et al. Outcome evaluation of a short-term mental health day treatment programme. *Canadian Journal of Psychiatry* 1997;42:502-508.
- Sledge WH, Tebes J, Rakfeldt J et al. Day hospital/crisis respite care versus inpatient care. Part I: clinical outcomes. *American Journal of Psychiatry* 1996;153:1065-1073.
- Creed F, Black D, Anthony P, et al. Randomized controlled trial of day patient versus inpatient psychiatric treatment. *British Medical Journal* 1990;300(6731):1033-1037.
- Marshall M, Crowther R, Almaraz-Serrano A, et al. Systematic reviews of the effectiveness of day care for people with severe mental disorders: (1) acute day hospital versus admission; (2) vocational rehabilitation; (3) day hospital versus outpatient care. *Health Technology Assessment* 2001;5:1-75.
- Creed F, Mbaya P, Lancashire S, et al. Cost effectiveness of day and inpatient psychiatric treatment. *British Medical Journal* 1997; 314:1381-1385.
- Kallert TW, Schonherr R, Schnippa, et al. Direct costs of acute day hospital care: Results from a randomised controlled trial. *Psychiatrische Praxis* 2005;32:132-141.
- Dick O, Cameron L, Cohen D, et al. Day and full time psychiatric treatment: a controlled comparison. *British Journal of Psychiatry* 1985;147:246-249.
- Schene AH, van Wijngaarden B, Poelijoe NW, et al. The Utrecht comparative study on psychiatric day treatment and inpatient treatment. *Acta Psychiatrica Scandinavica* 1993;87:427-436.
- Priebe S, Jones G, McCabe R, et al. Effectiveness and costs of acute day hospital treatment compared with conventional inpatient care: randomised controlled trial. *British Journal of Psychiatry* 2006;188:243-249.

41. Swartz MS, Swanson JW, Hiday VA, et al. A randomized controlled trial of outpatient commitment in North Carolina. *Psychiatric Services* 2001;52:325-329.
42. Sautter FJ, Heaney C, Hill R, et al. The integration of inpatient treatment and a transitional day hospital: application of a problem-solving approach. *Psychiatric Hospital* 1992;23:87-93.
43. Parker S, Knoll JL. Partial hospitalization: an update. *American Journal of Psychiatry* 1990;147:156-160.
44. Moscovitz IS. The effectiveness of day hospital treatment: a review. *Journal of Community Psychology* 1980;8:155-164.
45. Kallert TW, Priebe S, McCabe R, et al. Are day hospitals effective for acutely ill psychiatric patients? A European multicenter randomized controlled trial. *The Journal of Clinical Psychiatry*. 2007 Feb;68(2):278-87.
46. Karterud S, Wilberg T. From general day hospital treatment to specialized treatment programmes. *International Review of Psychiatry* 2007;19(1):39-49.
47. Arnevik E, Wilber T, Urnes O, et al. Psychotherapy for personality disorders: short term day hospital psychotherapy versus outpatient individual therapy – a randomized controlled study. *European Psychiatry* 2009;24(2):71-78.
48. Giesen Bloo J, van Dick R, Spinhoven P, et al. Outpatient psychotherapy for borderline personality disorder. Randomised trial of schema-focused therapy vs. transference-focused psychotherapy. *Archives of General Psychiatry* 2006;63:649-658.
49. Simpson EB, Pistorello JA, Costello E, et al. Use of dialectical behaviour therapy in a partial hospital programme for women with borderline personality disorder. *Psychiatric Services* 1998;49:669-673.
50. Bateman A, Fonagy P. Treatment of borderline personality disorder with psychoanalytically orientated partial hospitalization: an 18-month follow-up. *American Journal of Psychiatry* 2001;158(1):36-42.
51. Bateman A, Fonagy P. Health service utilization costs for borderline personality disorder patients treated with psychoanalytically orientated partial hospitalization versus general psychiatric care. *American Journal of Psychiatry* 2003;160:169-171.
52. Karterud S, Pedersen G, Bjordal E, et al. Day treatment of patients with personality disorders: experience from a Norwegian treatment research network. *Journal of Personality Disorders* 2003;17:243-262.
53. Wilberg T, Karterud S, Pedersen G, et al. Outpatient group psychotherapy following day treatment of patients with personality disorders. *Journal of Personality Disorders* 2003;17:510-521.
54. Peace SM. Review of day-hospital provision in psychogeriatrics. *Health Trends* 1982;14:92-95.
55. Cooper B. Principles of service provision in old age psychiatry. *Psychiatry in the elderly*, 2nd edition, Jacoby R, Openheimer C (eds). Oxford University Press: Oxford 1997;357-375.
56. Zank S, Schacke C. Evaluation of geriatric day care units: effects on patients and caregivers. *The journals of gerontology. Series B, Psychological Sciences and Social Sciences* 2002;57(4):348-357.
57. Cheston R, Jones K, Gilliard J. Group psychotherapy and people with dementia. *Aging & Mental Health* 2003;7:452-461.
58. Bramesfeld A, Adler G, Brassens S, et al. Day-clinic treatment or late-life depression. *International Journal of Geriatric Psychiatry* 2001;16:82-87.
59. Plotkin DA, Wells KB. Partial hospitalization (day treatment) for psychiatrically ill elderly patients. *American Journal of Psychiatry* 1993;150:266-271.
60. McKenzie CS, Rosenberg M, Major M. Evaluation of a psychiatric day hospital programme for elderly patients with mood disorders. *International Psychogeriatrics* 2006;18:631-641.
61. Howard R. Day hospitals: The case in favour. *International Journal of Geriatric Psychiatry* 1994;9:525-529.
62. Yaffe et al. Patient and caregiver characteristics and nursing home placement in patients with dementia. *The Journal of the American Medical Association* 2002;287:2090-2097.
63. Weber K, Meiler-Mititelu C, Herrmann FR, et al. Longitudinal assessment of psychotherapeutic day hospital treatment for neuropsychiatric symptoms in dementia. *Aging & Mental Health* 2009;13(1):92-98.
64. Ashaye O, Livingston G, Orrell M. Does standardised needs assessment improve day hospital care outcome in older people? *Aging & Mental Health* 2003;7:159-199.
65. Johansson A, Gustafson L. Psychiatric symptoms in patients with dementia treated in a psychogeriatric day hospital. *International Psychogeriatrics* 1996;8:645-658.
66. Wimo A, Mattson B, Adolfsen R, et al. Dementia day care and its effects on symptoms and institutionalization – A controlled Swedish study. *Scandinavian Journal of Primary Health Care* 1993;11:117-123.
67. Drees RM, Breebaart E, Ettema TP, et al. Effect of integrated family support versus day care only on behaviour and mood of patients with dementia. *International Psychogeriatrics* 2000;12:99-115.
68. Maval L, Malberg B. Day care for persons with dementia: an alternative for whom? *Dementia Geriatric Cognitive Disorders* 2007;6:27-43.
69. Mazza M, Barbarino E, Capitani S, et al. Day Hospital Treatment for Mood Disorders. *Psychiatric Services* 2004;55(4):436-438.
70. Horwitz-Lennon M, Norman SLT, Gaccione P. Partial versus full hospitalization for adults in psychiatric distress: a systematic review of the published literature. *American Journal of Psychiatry* 2001;158:767-785.
71. Kong S. Day treatment programme for patients with eating disorders: Randomised controlled trial. *Journal of Advanced Nursing* 2005;51:5-14.
72. Zipfel S, Reas DL, Thornton C, et al. Day hospitalization programmes for eating disorders: a systematic review of the literature. *International Journal of Eating Disorders* 2002;31:105-117.
73. Howard M, Battle CL, Peralstein T, et al. A psychiatric mother-baby day hospital for pregnant women. *Archives of Women's Mental Health* 2006;9:213-218.
74. O'Hara MW, Stuart S, Gorman LL, et al. Efficacy of interpersonal psychotherapy for postpartum depression. *Archives of General Psychiatry* 2000;57:1039-1045.
75. Creed F, Anthony P, Godbert K, et al. Treatment of severe psychiatric illness in a day hospital. *British Journal of Psychiatry* 1989;154:341-347.
76. Hoffman-Richter U, Kanzig S, Frei A, et al. Suicide after discharge from psychiatric hospital. *Psychiatric Practice* 2002;29(1):22-24.
77. Mazza M, Capitani S, Barbarino E, et al. A treatment protocol for suicidal patients in a day hospital setting: Preliminary results. *Psychiatry Research* 2006;143:307-310.
78. Joy CB, Adams CE, Rice K. Crisis intervention for people with severe mental illness. *Cochrane Database of Systematic Reviews* 2003;(2):CD001087.
79. Sandell R, Alfredsson E, Berg M, et al. Clinical significance of outcome in long-term follow-up of borderline patients at a day hospital. *Acta Psychiatrica Scandinavica* 1993;87(6):405-413.
80. Tyrer P, Remington M, Alexander J. The outcome of neurotic disorders after out-patient and day hospital care. *British Journal of Psychiatry* 1987;151:57-62.
81. Catty JS, Bunstead Z, Burns T, et al. Day centres for severe mental illness. *Cochrane Database of Systematic Reviews* 2007 Jan 24;(1):CD001710.
82. Shek E, Stein AT, Shansis FM, et al. Day hospital versus outpatient care for people with schizophrenia. *Cochrane Database of Systematic Reviews* 2009 Oct 7;(4):CD003240.
83. Karterud S, Arefjord N, Andresen NE, et al. Substance use disorders among personality disordered patients admitted for day hospital treatment. Implications for service developments. *Nordic Journal of Psychiatry* 2009;63(1):57-63.
84. Marshall M, Crowther R, Sledge WH, Rathbone J, Soares-Weiser K. Day hospital versus admission for acute psychiatric disorders. *Cochrane Database Systematic Reviews* 2011 Dec 7;12:CD004026.
85. Priebe S, McCabe R, Schützwohl M, Kiejna A, Nawka P, Raboch J, Reininghaus U, Wang D, Kallert TW. Patient characteristics predicting better treatment outcomes in day hospitals compared with inpatient wards. *Psychiatric Services* 2011 Mar;62(3):278-84.

Correspondência:

Rui Lopes
Clínica de Psiquiatria e Saúde Mental, Centro Hospitalar São João
Alameda Professor Hernâni Monteiro
4200-319 Porto

Email:

rui.lopes@gmail.com