

Do locked doors in psychiatric hospitals prevent patients from absconding?

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ABSTRACT – Background and Objectives: In the acute treatment of acute psychiatric patients coercive measures are often required and therapeutic relationships can be affected by such measures. In this study we assessed whether opening the entrance door of an acute psychiatric ward influences absconding behaviour.

Methods: An acute psychiatric ward was primarily closed (91.4%) for six months and primarily open (75.6%) for six months over the time period of one year. In this one year period, 337 patients were treated (206 male, age: 40 ± 16 years): 60.2% of the patients had schizophrenia, 13.6% had affective disorders, 11.6% suffered from addiction and 14.5% displayed other diagnoses.

Results: In terms of age ($t = 0.026$, $df = 335$, $p = 0.979$), gender ($\chi^2 = 1.6$, $df = 1$, $p = 0.13$), diagnoses ($\chi^2 = 7.337$, $df = 1$, $p = 0.062$) and duration of stay ($t = -0.90$, $df = 335$, $p = 0.928$), we found no significant differences between the patients admitted in the closed and those admitted in the open ward period. Absconding ($df = 1$, $\chi^2 = 5.107$, $p = 0.029$), aggressive incidents ($\chi^2 = 4.46$, $df = 1$, $p = 0.050$) and coercive medications ($\chi^2 = 4.646$, $df = 1$, $p = 0.037$) were observed significantly more often in the closed door period. Moreover, the duration up to readmission was reduced in the closed time period ($t = 2.314$, $df = 54$, $p = 0.025$).

Conclusions: We hypothesize that open doors reduce patient's discomfort, improve ward atmosphere and aggressive acts and do not appear to increase the risk of absconding.

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Introduction

Entrance doors to wards where psychiatric care is provided are often locked, which is not the case with wards where somatic care is provided. A recent review suggested that increasingly more modern inpatient wards are being kept permanently locked, even though this appears to be contrary to the current Mental Health Act Code of Practice¹. One study showed that even acute psychiatric wards with a selective open door policy are closed on up to 86% of treatment days². While reasons to lock a ward usually point to patient's safety, literature on locked doors in inpatient psychiatric wards is inconclusive regarding the effects of this practice [for review see 1]. The most frequent argument for closing the doors in psychiatric hospitals is the prevention of absconding, followed by aggressive or suicidal behaviour of patients³. However, one study suggested that threatening events after absconding seem to happen rarely⁴. Indeed about 13-38% patients leave the unit without the permission of staff^{4,5}. Moreover, patients seem to wait until they have their first chance to leave, and after coercive measures are ceased, up to 50% of those absconding from closed wards did not return from their first permitted leave^{4, 6-10}.

Absconding of patients disrupts the therapeutic climate of the psychiatric unit¹¹ and can be moreover a source of guilt, frustration, anger, concern or embarrassment in mental health professionals who care for these patients^{4,12}. However, wards can be locked in the absence of committed patients and can be open in the presence of committed patients³. In this study we were mainly interested in the effect of an open door on absconding and aggressive incidents.

Materials and methods

An acute psychiatric ward was primarily closed for six months and primarily opened for six months over one year. In this time period we evaluated post-hoc the newly introduced "open-door" policy. In this time period 337 patients (206 male, age: 40 ± 16 years) were treated. In the first six months the entrance door was open on 8.6% of days, in the second time period the door was open on 75.6% of days. Of the patients, 60.2% were diagnosed with schizophrenia, 13.6% with affective disorders, 11.6% suffered from addiction and 14.5% displayed other diagnoses. The therapeutic setting did not change, i.e. cognitive behavioural groups were offered three times a week and a psychodynamic orientated group, running group, relaxation group and social competency training were offered once a week by the same psychologist over the whole time period. Diagnoses were made according to the 10th revision of the *International Statistical Classification of Diseases and Related Health Problems*. The acute unit studied in this pilot approach handles all admissions from the area "Bezirk Berlin Mitte". With 6.42 beds available per 10,000 inhabitants, Berlin's bed capacity for psychiatric patients is one of the lowest in Germany. Of the 12 different areas (regional service provisions) in Berlin, the hospital ("Berlin Mitte") is among those with the lowest bed capacities. About 20% of the patients treated are legally committed. The social structure of the population in "Bezirk Mitte" is one of the weakest in Berlin and according to recent statistics of the Berlin police department, all acts of violence, force, murder and thefts are highest in this city area.

"Absconding" was defined as staying absent without leave for more than 24 hours and leaving against medical advice, i.e.

when a patient left against the express advice of the ward psychiatrist. "Coercive medication" was defined as forced oral or intramuscular medication in the presence of staff members. "Aggressive incidents" were defined as massive physical attacks of the patient on staff members or patients.

Data were collected retrospectively. Analyses were computed using statistical software (PASW 14.0®). Group differences were calculated with the chi-square test or t-test for independent samples, specific tests used were indicated in the table.

Results

176 patients (111 male, age: 39.9 ± 15) were admitted in the closed period, 161 patients (97 male, age: 40 ± 17) in the open period. The duration of stay was 18.8 ± 23 days in the closed and 18.6 ± 21 days in the open time period ($t = -0.09$, $df = 335$, $p = 0.928$) (see table 1).

In terms of age ($t = 0.026$, $df = 335$, $p = 0.979$), gender ($\chi^2 = 1.6$, $df = 1$, $p = 0.13$), diagnoses ($\chi^2 = 7.337$, $df = 1$, $p = 0.062$) and duration of stay ($t = -0.90$, $df = 335$, $p = 0.928$) we found no significant differences between the patients admitted in the closed and those admitted in the open ward period.

During the whole one year period, 57 (17%) patients left the unit without permission, 22 of them in the open and 35 in the closed time period. Absconders' diagnoses were: addictive disorders (7 patients), schizophrenia (36 patients), affective disorders (9 patients) and other diagnoses (5 patients).

Absconders in our sample tended to be male (44 male versus 13 female patients) ($\chi^2 = 7.452$, $df = 1$, $p = 0.007$) and significantly younger than non-absconders (41 ± 16 versus 34 ± 10 years) ($t = 2.9$, $df = 127$, $p = 0.004$). The results of our study thereby confirm most of the findings from the literature^{3,4}. Absconding was observed significantly more often in the closed time period ($\chi^2 = 5.107$, $df = 1$, $p = 0.029$) and the time

Table 1

	Closed 91%	Open 75%	t/chi ²	Significance
Patients (n)	176	161		
Gender (male)	111	97	1.6 ¹	n.s. ¹
Age (years \pm SD)	39.9 ± 15	40 ± 17	0.026 ²	n.s. ²
Diagnoses			7.33 ¹	n.s. ¹
Duration of stay (days \pm SD)	18.8 ± 23	18.6 ± 21	-0.90 ²	n.s. ²
Absconders (n = 57)	35	22	5.107 ¹	$p = 0.029^1$
Interval to readmission (days \pm SD)	9 ± 9	26 ± 34	2.314 ²	$p = 0.025^2$
Aggressive incidents (n = 36), 319 patients included	23	13	4.46 ¹	$p = 0.050^1$
Suicides (n)	2	0	2.2 ¹	n.s. ¹
Instances of Coercive Medication (n = 25), 319 patients included	17	8	4.646 ¹	$p = 0.037^1$

¹ = Chi², Chi²-test.

² = t, t-test.

interval to readmission was reduced in the closed time period ($t = 2.314$, $df = 54$, $p = 0.025$). In this one year period, 25 instances of coercive medication and 36 aggressive incidents were noted retrospectively in the patients' files ($n = 319$). Significantly more coercive treatments ($n = 319$, $\chi^2 = 4.646$, $df = 1$, $p = 0.037$) and aggressive incidents ($n = 319$, $\chi^2 = 4.460$, $df = 1$, $p = 0.050$) were observed in the closed period. During the one year period, two inpatient suicides occurred, both in the closed period (see table 1).

Discussion

In this study, we found no evidence that a closed entrance door reduces absconding. In contrast, we found a significantly reduced absconding rate in the time period during which the entrance door was mostly open. To the best of our knowledge, this is the first study showing the effects of opening doors in an otherwise unchanged therapeutic setting.

One study showed that the majority of abscondings from closed wards occurs after patients have been given permission to leave the ward unaccompanied⁴. A recent review suggested that about 20% of abscondings happen, while patients are restricted to the unit, doors are locked, and staff is stationed at the doors⁵. The safety factor "closed door" might therefore be overestimated.

Absconders often refer to feeling disturbed by other patients, feeling stigmatized by being on a closed unit, missing interesting activities and being concerned about issues at home as the major factors influencing their decision to go absent without leave⁴. These motives to leave point to the importance of offering patients less stigmatizing treatment options and more possibilities to retreat and

leave. Moreover, a general closing of doors in psychiatric hospitals might increase prejudice and stigmatization of schizophrenic patients¹³. Indeed, it has been argued that the chronic exposure to the stigma of being on a closed unit might increase the risk of relapse, poor compliance and depression in schizophrenic patients¹⁴. Moreover, the prevalence of violence among subjects with schizophrenia who do not abuse substances is indistinguishable from that among their neighbourhood controls¹⁵, suggesting that general policies of danger control via closed doors cannot be based on the diagnosis of schizophrenia in a majority of patients.

Closing the doors of psychiatric units might increase aggressive incidents, as was observed in our study. This hypothesis appears to be supported by the fact that ward crowding was found to be significantly associated with aggressive incidents¹⁶ and increased absconding rates have been connected to a punitive or threatening atmosphere on an inpatient unit⁵. In a study by Falkowski *et al.*¹⁷, 19% of absconders referred to being disturbed by other patients as a reason for leaving the ward. A further 17% described the stigma of being on a closed ward as a major factor influencing their decision to go absent without leave. Other reasons reported were: disliking the staff (13%), the food (11%), the ward (8%), lack of privacy (7%) and responding to hallucinations (5%). These data suggest that the personal freedom associated with an open door might prevent patients from absconding. Locked entrance doors in psychiatric wards might be experienced by patients as confinement, forced dependence on the staff and emotional distress²¹. Indeed, the need for the staff to maintain control is often given as an argument for closing psychiatric entrance doors³. In line with this, evidence suggests that personality, stress, and burnout of nursing staff

are predictive of incidents on closed psychiatric wards, i.e. a restrictive attitude might provoke incidents and absconding behaviour^{22,23}. We did not systematically examine the patients' attitude during the open versus the closed door period; however, several patients personally communicated to us how much they appreciated the open setting.

As the clinician-patient relationship is among the strongest factors for adherence to therapy in schizophrenic patients^{28,29} an open door strategy might increase adherence. In our study a significantly shorter interval up to readmission in the closed time period suggests that increased non-adherence following discharge from the hospital is associated with the closed door. In line with our finding it has been shown that general satisfaction, satisfaction with medication, ward equipment, visiting opportunities, and regulations for going out are significantly lower at discharge on a closed ward³⁰.

The most important aspect of an open door might be a better rapport between patients and treatment staff and a less restrictive attitude on the part of the staff. Accordingly, one study showed that the best staffed ward with the most experienced staff had the lowest rate of irregular discharges, and the ward with the least experienced medical staff had the second highest rate of irregular discharges, 43% of which were absent without leave²⁴. In line with this hypothesis, several studies noted that patients who were admitted during weekend shifts, when staffing and staffing continuity are reduced, had an increased likelihood of being discharged against medical advice²⁵⁻²⁷. However, these aspects highlight also the limitations of our study. Firstly, a psychotherapeutic setting is rather unusual in acute psychiatry, and although this setting did not change during the two time periods, the increased psychological support for patients might have held them back from leaving the unit in both periods.

In Germany, the law requires that a patient is supervised 1:1 whenever he or she is fixated to the bed during coercive treatment. During the open period, coercive measures were occurring less frequently so we used the personal, who was now no longer required to supervise coercive treatment to guard the door or accompany single suicidal patients. This factor may have contributed to reduce coercive treatment incidents during the open door period.

Altogether, we hypothesize that closed doors in psychiatric hospitals do not improve the safety of patients, as the risk of absconding, aggressive acts and coercive measures were decreased with an open door policy. Our study suggests that opening the door unless otherwise required and achieving a good patient-staff rapport can reduce absconding and improve treatment effects.

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Disclosure/ Conflicts of Interest

The authors declare that, except for income received from their primary employer, no financial support or compensation has been received from any individual or corporate entity over the past 12 months for research or professional service related to this study and there are no personal financial holdings that could be perceived as constituting a potential conflict of interest.

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