Humane treatment versus means of control: coercive measures in Norwegian high-security psychiatry, 1895–1978

Magne Brekke Rabben
Norwegian University of Science and Technology, Trondheim

Øyvind Thomassen
Norwegian University of Science and Technology and St. Olavs Hospital, Trondheim

Corresponding author:
Magne Brekke Rabben, Norwegian University of Science and Technology (NTNU), Department of Historical Studies, NO-7491 Trondheim, Norway.
E-mail: magne.brekke.rabben@ntnu.no

---


https://doi.org/10.1177/0957154X19867256
Abstract
This article analyses the use of coercive measures at two national institutions for high-security psychiatry in Norway – Kriminalasylet (Criminal Asylum) and Reitgjerdet – during the period 1895–1978. Historical study of coercion in psychiatry is a fruitful approach to new insight into the moral and ethical considerations within the institutions. We approach the topic through a qualitative study of patient case files and ward reports from the institutions’ archives, as well as a comprehensive quantification of the coercive measures used. The data show shifting considerations of humane treatment and changes in the respect for human dignity in the institutions’ practices. They also show that technological developments, such as the introduction of new psychopharmaceuticals, did not necessarily lead to higher standards of treatment.

Keywords
Coercion, ethics, high-security psychiatry, history, mechanical restraints, Norway, seclusion
Introduction
In this article, we study the use of coercion at two national institutions for high-security psychiatry in Norway – Kriminalasylet (the Criminal Asylum) and Reitgjerde – during the period 1895–1978. The use of coercive measures, such as seclusion, mechanical restraint and chemical/pharmacological restraint, is perhaps the most intrusive act that society can inflict on its members. While coercion may be used for various reasons, it is mostly legitimized by the need for control, security and protection. Psychiatric institutions are charged with the task of treating their patients; but at the same time, they are expected to protect their patients from themselves and other patients, and to protect society from their – potentially dangerous – patients. These tasks are sometimes incompatible. In such cases, medical personnel at the institutions face the difficult task of balancing the ideals of human dignity, humane treatment, and patient autonomy versus the need for security measures. Therefore, the study of coercion can generate important insight into the moral and ethical considerations within psychiatric institutions.

We engage with this topic by examining and contextualizing the use of coercive measures at Kriminalasylet and Reitgjerde. This is done on the basis of both a qualitative source study and quantification of the coercive measures used at the institutions. Since the implementation of the Insanity Act in 1848, the use of coercive means in Norwegian psychiatric institutions has been recorded, documented and quantified by the institutions. Furthermore, between 1872 and 1969 (with some significant interruptions) statistics on seclusion and mechanical restraint in Norway’s psychiatric institutions were published annually. The data presented here constitute the most comprehensive data sets that have been gathered on the historical use of coercion in the Norwegian psychiatric sector, and they give a picture of shifting considerations of humane treatment and respect for human dignity over time. This deviates from the common narrative of the positivistic psychiatric history tradition (which is also prominent in popular belief) that the development of moral and humane norms in psychiatry has shown linear progression from low moral standards to the higher standards of today, and that technological developments such as the introduction of new medicine necessarily has led to better treatment.

Drawing on the archive material from Kriminalasylet and Reigjerde, we ask: to what extent were coercive means used at these institutions, and how did usage patterns change over time? How did factors such as leadership changes, rules and regulations, societal scrutiny, architectural context and new technologies, such as sedatives and medicine, affect the use of
coercion? Also, what can the use of coercion tell us about the presence or absence of moral, ethical and normative considerations within the institutions?

A narrow definition of coercion
Coercion is a diverse and controversial topic and, as a phenomenon in the psychiatric context, it could be understood to cover every aspect of power in the relationship between the patient and the institution. Michel Foucault (2006) noted that asymmetric power relations infuse every aspect of life at an institution, and that patients are thus coerced, even when the coercion is neither physical nor explicit. Psychiatry critic Thomas Szasz, while opposing many of Foucault’s other claims, would certainly have agreed with this notion, as it is his main argument in his book Coercion as Cure (Szasz, 2007). The understanding of coercion as an omnipresent phenomenon is especially relevant for institutions such as Kriminalasylet and Reitgjerdet, which were enclosed, high-security institutions with most patients confined against their will and unable to leave if they wished. Furthermore, by separating their patients from wider society and restricting their autonomy, the institutions also demonstrated many of the characteristics of Erving Goffman’s ‘total institutions’ (Goffman, 1961).

Without dismissing the broad aspects of coercion in institutional life, in this article we focus on coercive measures that our source material allows us to quantify: seclusion and mechanical restraint. Seclusion involves confining a patient to a cell or locked room without the ability to interact with other people at his or her own will. Mechanical restraint is here understood as a means of physically restraining a patient’s movement using bed restraints, belts, chains, strait-jackets or similar tools. From almost the beginning of Kriminalasylet’s history, pharmacological substances were injected into unruly patients in order to forcibly sedate them. This practice, often referred to as chemical coercion or chemical restraint, was also increasingly used at Reitgjerdet throughout the period under study. It has not been possible to quantify the use of this type of coercion, but we have included it in our qualitative study as it was an important means of control, and also because the development and availability of sedating substances influenced when and how the institutions used other coercive measures.

The institutions
Several publications have described the history of psychiatry in Norway (Blomberg, 2005; Kringlen, 2004, 2012; Ludvigsen and Seip, 2009; Skålevåg, 2002; Tranøy and Blomberg, 2005) and, more specifically, Kriminalasylet and Reitgjerdet (Dahl, 2017; Myhre and
Thomassen, 2014; Riaunet, 2014; Thomassen, 2010; Søndenaa, Gudde and Thomassen, 2015). However, little has been written on the use of coercion within psychiatric institutions in Norway. Kriminalasylet and Reitgjerdet were both high-security institutions with a national responsibility to provide care for criminal, dangerous and particularly difficult male psychiatric patients (Dahl, 2017). Kriminalasylet was established in 1895 as a response to the question of what should be done for insane criminals and the criminally insane who were incarcerated in prisons and regular mental asylums. By law, psychiatric patients could not be held in prison; but at the same time, the criminal and violent insane were not especially welcome at regular asylums, as they created unrest within the patient population and required security provisions that did not conform with the moral treatment ideals of the time.

Due to austere economic considerations, several compromises were made in establishing Kriminalasylet. While it was formally a psychiatric institution, it was located in a vacant prison building close to downtown Trondheim and, consequently, had many of the characteristics of a penitentiary. There was little space for patient activities, and the only accessible outside area was a small walled yard. From the outset, the building was deemed unsuitable as a mental asylum, but it was still approved by the national parliament, Stortinget, as a temporary solution. In fact, Kriminalasylet lasted until 1963, when it was closed and its patients were transferred to a new ward at Reitgjerdet. Kriminalasylet was a small asylum: when it opened, it had beds for 16 patients, but in 1900 the first floor was also put to use, and this increased the capacity to 30–35 patients. Patient quarters were comprised of both dormitory rooms and seclusion cells. The latter were in constant use, though their doors were not always locked. The responsibility for governmental oversight was given to the Department of Justice, which also had the final say in patient admissions and discharges.

Reitgjerdet Asylum (from 1942 called Reitgjerdet Hospital) opened in 1923 and was situated in a former leper sanatorium in the outskirts of Trondheim. Earlier in the century, it had become clear that the capacity at Kriminalasylet would not be sufficient to meet the country’s need for high-security psychiatric care. To make matters worse, the entire asylum sector in Norway was overcrowded, and it was a particular challenge to house and treat patients considered dangerous and difficult. Patients who met the criteria for admission to Reitgjerdet were male patients considered unsuitable for treatment in regular asylums and male criminal patients whose care did not demand the high-security measures of

---

2 One notable study is the master’s thesis on coercion at Kriminalasylet during the period 1895–1905 by Vegard Øien (2016).
Kriminalasylet. Before Reitgjerdet Asylum opened, the building was renovated to fulfil the needs of a mental institution. Although it was a high-security institution, it was not as prison-like as Kriminalasylet. The two institutions had the same leadership and were run in coordination, and patients were often moved between them. Kriminalasylet, in many ways, functioned as a high-security ward for the new asylum, as it had a larger share of seclusion cells and a high wooden surrounding wall to prevent patient escapes.

Originally, Reitgjerdet was authorized to house 135 patients. However, its manager, Karl Anton Andresen, estimated in 1923 that it could house up to 166. Within two years, the patient population surpassed this. Overcrowding became a constant issue, especially during World War II, when Reitgjerdet had to receive patients from Norway’s many regular psychiatric hospitals that had been requisitioned by German forces. During the war, Reitgjerdet’s authorized capacity was increased to 160 patients. However, in 1944 and 1945, the patient population rose to almost 300. Many of these patients did not meet the criteria for admission to Reitgjerdet and were discharged or transferred back to their original institutions after the war, but not all. In fact, despite the efforts of Reitgjerdet’s management, it was a continuous challenge to get the country’s regular psychiatric institutions to accept patients who showed improvement and could no longer be considered dangerous or especially difficult. The regular institutions were also overpopulated and, in addition, their leadership tended to be sceptical of patients from Reitgjerdet, who were implicitly (if not explicitly) labelled as difficult to deal with. When the new ward opened at Reitgjerdet in 1963, authorized capacity was increased to 260. This ended the days of overpopulation in the formal sense of the term, but, seen through the lens of the later and higher standards for institutional care, Reitgjerdet was still overcrowded. During the 1970s there was a slow but more or less steady decrease in the patient population. Authorized capacity was reduced to 220 in 1976 and to 200 in 1977.

During the 1970s, Reitgjerdet was increasingly criticized for not providing patient care in accordance with the ideals of humane and modern health care. This escalated in 1978, when Svein Solberg, one of the doctors carrying out civilian national service at Reitgjerdet, staged a patient escape. His purpose in doing so was to draw attention to what he viewed as unacceptable conditions at the asylum. This resulted in several years of critical media coverage of the institution’s practices and of public revelations of extensive and arguably continued use of coercion. Solberg later published his criticisms in a book (1979), and the practices at Reitgjerdet were subjected to national inquiry, which resulted in a report that substantiated many of Solberg’s claims (Blom, 1980). The sustained criticism was a catalyst
for a deinstitutionalization process in Norwegian psychiatry and a sweeping reform of Norwegian high-security mental health care that included the closure of Reitgjerdet in 1987.

Table 1 lists the managers of the two institutions.

**Table 1. Managers of Kriminalasylet (K) and Reitgjerdet (R), 1895–1979**

<table>
<thead>
<tr>
<th>Year</th>
<th>Manager(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1895–1901</td>
<td>Frederik Waldemar Bødtker (K)</td>
</tr>
<tr>
<td>1901–15</td>
<td>Hans Evensen (K)</td>
</tr>
<tr>
<td>1903–4</td>
<td>Johan Scharffenberg (K, substitute for Hans Evensen)</td>
</tr>
<tr>
<td>1915–23</td>
<td>Johan Sofus Widerøe (K)</td>
</tr>
<tr>
<td>1923–38</td>
<td>Karl Anton Andresen (K+R)</td>
</tr>
<tr>
<td>1938–39</td>
<td>Asbjørn Odde (K+R)</td>
</tr>
<tr>
<td>1939–45</td>
<td>Egil Rian (K+R)</td>
</tr>
<tr>
<td>1945–46</td>
<td>Nils Berner Johannessen (K+R)</td>
</tr>
<tr>
<td>1946–69</td>
<td>Henry Anker Lundh (K+R)</td>
</tr>
<tr>
<td>1969–79</td>
<td>Finn Brasch Larsen (R)</td>
</tr>
<tr>
<td>1979</td>
<td>Reidar Larssen (R)</td>
</tr>
</tbody>
</table>

**Laws and regulations**

Enacted in 1848, the Norwegian Insanity Act was one of the most humane laws of its kind in Europe at the time and signified a national breakthrough for the ideals of moral treatment. It outlawed corporal punishment in psychiatric institutions and it established control commissions as authorities to which patients could direct complaints and appeals. It also regulated the use of coercion by specifying that seclusion and mechanical restraint could only be applied for a short period of time and only when unavoidable due to the patient’s condition. The law also demanded that institutions record and document their use of coercive measures (Blomberg, 2002: 213).

In 1898, after Kriminalasylet had been operating for three years, Stortinget passed a special law regulating the institution. This law explicitly set aside some of the regulations of the Insanity Act, including the constraints on coercion. Specifically, the time limits on the use of coercive measures were removed, enabling Kriminalasylet’s staff to seclude or restrain patients for an unlimited period, as long as it was deemed necessary.
Reitgjerdet also had its own law passed by Stortinget, although this one did not set aside the Insanity Act’s limitations on seclusion and mechanical restraint. Rather, the asylum’s regulations, from 1923, specified that coercive measures could only be implemented on doctor’s orders in each specific case; however, it enabled nurses to confine patients in urgent situations and to receive doctor’s approval afterwards.

These laws and regulations remained in effect until 1961, when a new Mental Health Care Act was passed. This law provided new provisions on admission without consent, but no legal framework for the use of coercion within the boundaries of the institutions. In principle, the only path to the legal use of coercion was, at this time, through the judicial principle of necessity, but at the same time there were no working regulations to restrict its use. In practice, therefore, the institutions continued to use coercion more or less as they had before, and national health authorities still asked for documentation on the use of coercive measures. Without written regulations, however, there was no effective governmental authority to guide mental health workers through the ethical considerations of the implementation of coercive means or to correct invidious changes in practice. As a result, governmental oversight slackened.

In 1965, the state of the law was sharply criticized by Trondheim city court’s chief judge and leader of Reitgjerdet’s Control Commission, J.M. Jacobsen, in an article in the Norwegian legal journal, Lov og rett (Jacobsen, 1965). In his opinion, the conditions of the country’s psychiatric hospitals – and the fact that many patients were unable to voice their concerns – called for especially strong legal protection against intrusive treatment. However, this consideration was not present in the legislation at that time. Jacobsen was concerned for patients’ legal protection and the lack of procedures for patients to appeal decisions concerning their treatment, particularly with respect to institutions’ use of coercion. The preamble for the 1961 law stated that coercive measures and other elements of the internal practice of psychiatric hospitals should be regulated not by law, but rather by regulations issued by the Ministry of Social Affairs. However, the Ministry had not yet passed such regulations, and the new law did not give the control commissions a strong enough mandate to serve as a check or an appeal body for decisions concerning patient treatment. Jacobsen pointed out that the state of the law, thus gave psychiatric patients less legal protection from coercion than prison inmates had. Further, he drew attention to what he described as an extensive use of coercion at Reitgjerdet and claimed that, if the same regulations as those operating in the prison sector were to be applied to the mental health care sector, the practices at Reitgjerdet would be illegal.
Despite Jacobsen’s continued criticism, national regulations concerning the use of coercion in the mental health care sector were not implemented until 1971. In the new regulations, seclusion and mechanical restraint were legalized, but only in situations in which they were necessary to prevent a patient from hurting him- or herself or others, and when less intrusive means proved ineffective. In addition, the regulations specified that mechanical restraint should not be used unless seclusion was inadvisable. This preference between the two means of coercion was removed when the regulations were revised in 1977. Mechanical restraint had, by then, again come to be viewed as the more humane option, as it allowed patients to interact socially with staff members and other patients (Blom, 1980: 66).

Empirical sources and methodology
In this study, we have used a combination of qualitative and quantitative sources. Our main qualitative sources have been ward reports and patient case files from the Kriminalasylet’s and Reitgjerdet’s archives, while the quantitative data on the use of seclusion and mechanical restraint at the two institutions has been collected from three sources.

(1) *The annual publications in the series Norway’s Official Statistics on the psychiatric hospitals*

These NOS publications were based on the annual reports that asylums sent to the national health authorities. Until 1929, the office of Norway’s Medical Director compiled the figures from these reports into national statistics. After 1935 this was done by Norway’s Central Bureau of Statistics. We have also used this source to collect national figures on use of coercion. However, there are some significant gaps in the data. In 1930–4, the publication was discontinued due to a lack of funding and, for the period 1941–54, the national health authorities did not collect documentation on coercion, so no data were published. When data on coercion were again collected and published, this occurred against the will of Reitgjerdet’s leadership, who feared that the data would put the hospital in a bad light, since it was a high-security institution caring for the country’s most difficult male patients, and therefore claimed a greater need for coercion than Norway’s regular psychiatric hospitals (NHA/RG/FC-029-003).

Data on coercion are also absent from the publications dated 1970–8. Furthermore, prior to 1935, the publications combined mechanical restraint and seclusion in the statistics. While some data on mechanical restraint were presented in the publications’ footnotes, only a few of the institutions reported the use of mechanical restraints specifically and did so only
for some of the years. This limits our understanding of the use of mechanical restraint in Norwegian asylums during the period. There is, however, good reason to believe that mechanical restraints were used much less than seclusion prior to 1935, as the no-restraint movement originating in British psychiatry in the mid-1800s had significant impact on Norwegian psychiatry well into the 1920s. As discussed later, this was certainly the case for Reitgjerdet, where other sources indicate that mechanical restraint was not used at this institution before 1929, and was seldom used for several years after that.

(2) Archives of the institutions
We also used the institutions’ local records of seclusion and mechanical restraint, found in their archives (NHA/RG/FC, NHA/RG/GD and NHA/K/K-HB). These records were compiled by nurses in each ward every day, and later checked and signed for by the manager or a doctor on duty. This material also has some significant gaps. The Reitgjerdet records do not include the years prior to 1929; also, no records on coercion exist for the periods 1936–43 and 1947–53. For some of these years the records must have been made, but were later lost. However, during the years 1947–53, Reitgjerdet probably stopped keeping coercion records since the national health authorities did not ask for documentation.

(3) Reitgjerdet’s schematic daily reports (NHA/RG/GC)
Using these reports, we were partially able to fill gaps in the archival sources. These reports were produced by a staff member each day, and they summarized the day’s events at the hospital. Based on reports from each ward, they include a head-count, short descriptions of significant events, a list of persons in seclusion and, from 1 February 1947, a list of patients in restraint beds. With only a handful of exceptions, these reports were produced every day from September 1923 to the end of 1978. While the reports are the only quantitative source that covers the use of coercion over the entire period of our study, for reasons discussed below we consider them the weakest of the three data sources, especially for the period post-1962.

Coercion calculations
The way in which coercion was recorded, calculated and presented differed over time, as official guidelines and local practices changed. Every Norwegian asylum contributed figures, but, for many years, there was no clear national standard for the local calculation of them or their presentation to national health authorities. Initially, the NOS publications’ formula for recording the use of coercion at Norwegian psychiatric institutions was that 12 or more hours
of coercion equalled one coercion day. A shorter period of coercion was logged according to
the number of hours (i.e. eight consecutive hours in seclusion was recorded as eight hours).
However, in their reports, some asylums only recorded coercion hours, some only recorded
days and some recorded a combination of hours and days. In an attempt to present comparable
figures, the office of the Medical Director and later the Central Bureau of Statistics made
some independent assumptions and calculations. In the NOS publications variably – and in
different years – they presented the use of coercion in the total number of hours, the total
number of days and the total number of hours relative to 100 patient-care days (with one
patient staying for 100 days of the year equating to 100 patient-care days). The basic principle
for all calculations was that one coercion day constituted 12 coercion hours.

In order to present comparative figures that span the whole period of our study, and
that are controlled for the changing numbers of patients at the institution, we have followed
the Medical Director’s (NOS publications) initial method of calculating use of coercive
measures, and present here the use of coercion as hours per 100 patient-care days. In cases
where we have the number of coercion days but not the total number of coercion hours, we
considered one day equal to 12 hours. In the case of Reitgjerdet’s local records of coercion
(see (2) above) for the years 1929–72, however, everything above 10 hours (rather than 12)
was considered a full coercion day. This means that no coercion episode was recorded as
having lasted for more than 10 hours, which we know from looking at the patients’ case files
was not the case. For these years, therefore, to get comparable figures over time, we have
multiplied the number of coercion hours from the records by 1.2.

In the daily reports (see (3) above), the number of patients in seclusion or a restraint
bed was listed. Usually, the reports gave no additional information. We counted every patient
listed as having been in coercion for one coercion day, which is to say 12 coercion hours.

Thus, the coercion figures presented in this article should not be understood as exact
measures of the amount of coercion used. There are too many assumptions, uncertainties and
systematic errors in the data due to changes in recording practices for this to be the case. This
is especially apparent, given the significantly different output of the three sources. Also,
random sample checks in written reports from the wards has revealed that several situations
that had led to coercion were never recorded in either the institutional coercion records (2) or
the daily reports (3). However, the statistical data we present in this paper are comparable
over time and, most importantly, the data from all three sources show, with a few notable
exceptions, the same trends. This makes them a useful point of departure for discussing the
development of the practice and culture of coercion at the institutions.
Quantifying coercion: Kriminalasylet, 1895–1963

Figure 1 shows the number of hours of seclusion per 100 patient-care days at Kriminalasylet and for all of Norway for 1895–1923, which is the period between Kriminalasylet’s and Reitgjerdet’s opening. In Figures 1–5, the ‘National total’ signifies the total number of hours reported from all Norway’s institutions divided by the total number of 100 patient-care days for the same institutions. Data from the NOS publications (1) and the asylum’s local records (2) show, with two notable exceptions, very few discrepancies. The large spike in the data from the NOS publications in 1906 can most likely be explained by a calculation error made by the Medical Director’s office, as the number of coercion hours is almost exactly the double of what we found based on the local records. The discrepancy in 1908 is probably due to a typo in the NOS publication.

![Figure 1. Kriminalasylet: seclusion hours per 100 patient-care days, 1895–1923.](image-url)
When Kriminalasylet welcomed its first patient in 1895, it was under the leadership of Dr Waldemar Bødtker, who was then 70 years old and had a long career behind him as the manager of the municipal mental asylum in Trondheim. He was well aware of the moral treatment movement and the no-restraint programme that had spread throughout Western psychiatry over the previous decades. Many of his peers in Norwegian psychiatry had expressed their moral conviction that the use of coercion, in general, and restraints, especially, should be limited. Bødtker seems to have shared these views and had a clear understanding that humane patient treatment implied as little coercion as possible. Furthermore, he had previously spoken out about his positive experience of reducing coercion (Rabben and Thomassen, 2019).

The coercion data that Bødtker provided to national health authorities indicated little use of coercion during his time at Kriminalasylet. However, the reports from the head warden and the patient case books tell a different story. Entering his new position as manager of Kriminalasylet, Bødtker had to concern himself not only with patients’ illnesses, but also with their criminal past and potentially dangerous behaviour. Some of the patients gave him concerns for his own safety, and at least one had threatened him personally even before being transferred to Kriminalasylet. With this in mind, Bødtker requested permission from the health authorities to put aside (what he expressed as) humanitarian concerns and to implement methods of coercion that were practised in the prison sector. Three to four patients were secluded and chained to the wall for periods of time – one of these was in some form of chains for nine consecutive months and, after the chains were removed, was still kept in almost constant seclusion.

Kriminalasylet’s second manager, Hans Evensen, was significantly younger than Bødtker when he took over the position as manager in 1901 and came from a different background. Evensen had worked and studied with Emil Kraepelin at his clinic in Heidelberg and had become heavily influenced by the no-restraint movement. Shortly after taking up his position at Kriminalasylet, he suspended all use of mechanical restraint. He did, however, continue to keep patients in seclusion, though he tried to give these patients more opportunities to participate in the institution’s daily life and to interact with other patients. Furthermore, he introduced a new means of coercion into the asylum – the sedating hyoscine injection, which was a powerful chemical restraint. The availability of this technology was probably in part the reason why Evensen felt he could unchain even the most dangerous patients. However, he resorted to hyoscine injection on only rare occasions.
Although Evensen kept patients locked in cells for long periods of time, he did not report this to the national health authorities as coercion. In fact, in his yearly report he made a point of stating that coercion was not used at Kriminalasylet. While the practice of locking dangerous patients in their cells was not kept secret from the authorities, when filling out the standardized forms, both Bødtker and Evensen omitted the continuous coercion used on patients viewed as serious security risks. It is unclear why they chose this reporting practice, but evidently there was not a common national understanding of the formal definition of coercion. In 1905, this issue was addressed by the Medical Director, who sent a letter to all asylums specifying that seclusion meant every instance in which a patient was kept alone behind a locked door during the daytime, and that every device or arrangement that restricted the patients’ ability to move parts of the body should be defined as a mechanical restraint.

After this, the reports on coercion were probably in greater accordance with actual practice at the asylums. As Figure 1 shows, the reported use of seclusion increased significantly on a national level, from a total of 7.2 hours per 100 patient-care days in 1905 to 35.2 hours in 1907. But in Kriminalasylet’s case, the increase was even more dramatic. After 1905, Kriminalasylet reported an annual use of seclusion that was 10–15 times greater than the national total per 100 patient-care days. In 1915, for instance, 502 seclusion hours per 100 patient days meant an average of over 5 hours/day/patient. However, the average was high due to a minority of patients being secluded more or less continuously. Many patients were never secluded.

Figure 2 shows the number of seclusion hours per 100 patient-care days at Kriminalasylet for the period of 1923–61. Data are missing for the period of 1941–52, but it is still clear that the use of seclusion per 100 patient days remained well above the national total throughout the entire period. Kriminalasylet never reported any use of mechanical restraint to the national health authorities, nor did it keep any systematic record of this form of coercion. However, written reports from the wards reveal that belt restraints were used on some patients when they were outside in the yard.
Kriminalasylet treated some of the most dangerous psychiatric patients in the country, so the significant use of seclusion was perhaps not unexpected and did not lead to inquiries from health authorities. However, in addition to the qualities of the patient population, the architecture of the asylum probably contributed to this practice. The cramped conditions at the institution enabled few alternatives to seclusion in the classification and separation of patients. Patients spent most of their waking hours in the living rooms, of which there was one on each floor in addition to a room for unhygienic and less functioning patients (Riaunet, 2014). Thus, if a patient caused unrest, there were few places to put the patient other than in a seclusion cell.

**Quantifying coercion: Reitgjerdet, 1923–78**

Figure 3 provides an overview of the seclusion hours per 100 patient-care days at Reitgjerdet for the period of 1923–50. Over this period, the three data sources provide significantly different outputs. For this period there are only two years where we have data from both the NOS publications (1) and Reitgjerdet’s local coercion records (2): 1929 and 1935. For these two years the two sources show significant discrepancies. As mentioned above, in the years prior to 1973, Reitgjerdet recorded in its local coercion records (2) every instance of coercion as lasting either 5 or 10 hours, which is too rigorous to possibly be accurate. It also means that
a full day of coercion was recorded as only 10 coercion hours. Patient case files reveal, however, that some patients were secluded more or less round the clock. This makes it clear that Reitgjerdet under-recorded its use of coercion and subsequently underreported its use of coercion to national health authorities. To create data that is comparable over time and in conformity with the NOS publications’ practice of treating one coercion day as equal to 12 coercion hours, we have multiplied the total of coercion hours from the local coercion records prior to 1973 by 1.2. This calculation seems to explain the discrepancy between the data from the NOS publications (1) and the local coercion records (2) for the year 1929, but not for the year 1935.

Data from the daily reports (3) show a higher use of seclusion. As stated above, the daily reports provide only a list of secluded patients, and when this is calculated into hours, it gives a higher result; but it is difficult to assess how accurate this measure really is. However, despite their weaknesses, the three data sources show the same trends.

Figure 3. Reitgjerdet: seclusion hours per 100 patient-care days, 1923–50.

Reitgjerdet’s use of seclusion per 100 patient-care days was significantly higher than the national total up to World War II, but still far below that of Kriminalasylet. Often, the
need for higher security and seclusion was used as an argument for transferring patients from Reitgjerdet to Kriminalasylet. The most notable trend shows that the use of seclusion significantly decreased between 1938 and 1939 and plummeted in the early 1940s. Changes in leadership might provide part of the explanation. In 1939, Reitgjerdet’s manager, Karl Anton Andresen, died and was replaced by Egil Rian, who remained manager until he was ousted in 1945 due to his affiliation with the Norwegian Nazi party. Rian’s view of coercion differed from Andresen’s. In the asylum’s annual report in 1941, assistant manager Dr Einar Bø elucidated Reitgjerdet’s new approach. He declared the asylum’s doctors considered it better for the chronically unsteady and violent patients to be housed with calmer patients in an open ward, rather than spending month after month ‘in a dark and grisly seclusion cell’ (NOS no. 100, 1945: 20). This meant that the doctors at Reitgjerdet saw mechanical restraint as a more ethical option than seclusion. As a consequence of this, the asylum’s use of belt restraints increased, while seclusion was rarely used and, according to Bø, only as ‘disciplinary punishment’. The moral and judicial grey areas connected with the disciplinary use of coercion seemed to concern neither Bø nor the national health authorities, who accepted and published his report.

However, it is hard to separate Bø’s arguments for the institution’s changes in practice from plain necessities at the asylum. At the time, Reitgjerdet was completely filled with patients arriving from asylums around the country that had been closed after their premises had been requisitioned by German forces. Even the chapel was being used as a dormitory, and almost all the seclusion cells had been turned into sleeping quarters for two to five patients. Thus, seclusion was a less viable option. At the same time, many of the new patients were better-functioning patients who could more easily be controlled in the asylum environment without the use of coercive measures. Nonetheless, the overcrowding caused chaos. Modern mental health research has established a correlation between overcrowding and aggressive behaviour among patients (Brooks et al., 1994). Reports from the wards at Reitgjerdet substantiate this observation, with frequent descriptions of violence, both among patients and towards staff, as well as numerous escapes. This situation lasted well into the post-war era. As discussed below, we have no data on mechanical restraint for the war years, but after the war, overcrowding was used to explain the increased use of mechanical restraint, and it is highly likely that this was also the case during the occupation.

3 Sinnssykehusenes virksomhet [The Mental Hospitals’ Activity] 1941 (published in 1945). This and all other quotes were translated from Norwegian to English by the present authors.
Figure 4. Reitgjerdet: seclusion hours per 100 patient-care days, 1950–78; for key, see Figure 3.

Figure 5. Reitgjerdet: mechanical restraint hours per 100 patient-care days, 1935–78; for key, see Figure 3.
Figure 4 shows the use of seclusion per 100 patient-care days at Reitgjerdet in the period of 1950–78. The use of seclusion fluctuated until 1962, probably more because of the varying conditions of individual patients than because of systematic changes in policy. The numbers of secluded patients were low: according to the daily reports (3), the average was 2.5 patients each day in 1959. In 1960, this number rose to 5.2, while two years later, in 1962, the number dropped to 0.9.

In 1963, patients at Kriminalasylet were transferred to a new ward at Reitgjerdet, which had an immediate effect on Reitgjerdet’s use of seclusion. The new ward consisted mainly of large dormitories, but the institution’s number of seclusion cells was also increased. Several of the patients from Kriminalasylet had been frequently secluded there and continued to be so at Reitgjerdet. The continuous increase in the use of seclusion after 1962 corresponds with an increase in the use of mechanical restraint over the same period. This is discussed further, below. The spike in the use of seclusion that Figure 4 shows for the year 1973 is probably, to a large degree, due to the new and stricter recording practices that were implemented then, and indicates an under-reporting in the prior years. After 1973, use of seclusion decreased, dropping to 0 in 1977. The new regulations issued in 1977 only partially explain this, as they were approved as late as June that year. Instead, the decrease in the three years prior to 1977 indicates a change in policy that pre-dated the new regulation.

Figure 5 shows the use of mechanical restraint in hours per 100 patient-care days for the period of 1935–78. Before this period, the NOS publications (1) did not systematically differentiate between seclusion and mechanical restraints in its statistics. However, in its first years of operation, Reitgjerdet was restrictive in its use of restraint and reported no use of mechanical restraint in the pre-war years. The no-restraint ideology that Hans Evensen championed had a powerful influence on Norwegian psychiatry, especially at the two high-security institutions in Trondheim that were a part of his legacy. Evensen’s experience of caring for high-security patients was put to good use in Reitgjerdet’s planning phase, where he played a pivotal role (Øgaard, 2015). In 1915, he went from managing Kriminalasylet to leading Gaustad, the largest psychiatric asylum in Norway. This made him one of the leading psychiatrists in the country. From his new position, he continued to disseminate the no-restraint ideology. In his handbook on mental health care published in 1921, he simply stated that mechanical restraint had no place in modern psychiatry (Evensen, 1921: 93).

Not all of Norway’s psychiatric institutions followed Evensen’s teachings, but, for a while, Reitgjerdet did. Its first manager, Karl Anton Andresen, made a conscious effort to
continue Evensen’s no-restraint policy. In 1931, he claimed – in a letter to the manager of another Norwegian psychiatric asylum – that belts and restraining gloves had not been used at Reitgjerdet, ‘except in one special case’ (NHA/RG/FB-083-00875). This was the case of a patient admitted in late 1928, who the staff experienced as such a threat and as having such a will to escape that, during the spring of 1929, he was restrained in his bed. The description of this event in the patient’s case file suggests that it was the first time this specific coercive method was used. The staff did not seem to have a developed language for the practice: instead of using the later well-known Norwegian term *remseng* (‘restraining bed’), the journal author described a leather belt that had been specially made to restrain the patient in the bed (NHA/RG/FB-031-00318). Later in the 1930s, however, several sporadic references to mechanical restraint were recorded, so when Reitgjerdet reported zero use of this coercive measure in the period 1935–40, their claim could not have been completely true. While there is very little data available for the war years, as discussed above, Dr Egil Rian, who replaced Andresen as manager in 1939, had a different approach to coercion and preferred mechanical restraint over seclusion.

The first day on which patients in restraining beds at Reitgjerdet were listed in the daily reports (3) was 1 February 1947. This change in recording policy must have come on the orders of Henry Lundh, who, at that time, had been managing Reitgjerdet for only a few months. On that day, five people were listed as having been restrained. The casebook for one of these patients is missing from the archive, but the casebooks for the other four patients reveal that all were frequently restrained in bed, even before 1 February 1947. On average in 1947, more than 10 patients were listed as having been restrained in bed each day.

This gradual shift from seclusion to mechanical restraint in the 1930s and 1940s corresponds with an increased willingness within the psychiatric profession at the time to implement intrusive somatic treatment methods, indicating a diminishing respect for patients’ bodily integrity. Though somatic treatments for curing the mind were far from a new aspect of psychiatry, practitioners were increasingly willing to wield power over patients’ bodies using insulin, cardiazol and electric shock treatment, often without patients’ consent (Braslow, 1997; Scull, 2015: 290 ff). This culminated in the era of the lobotomy, which, in Reitgjerdet’s case, was relatively short and ended in 1953, after 36 patients had undergone the procedure (Nerland, 2017: 35). In his book *Mental Ills and Bodily Cures*, Joel Braslow (1997: 9) pointed to the close alliance between treatment and control in psychiatry and claimed that these new treatment methods were, in large part, technologies of control. Several authors (of various academic and political backgrounds) have argued that bodily treatment as a means of control
continued after the lobotomy era, but with psychopharmaceuticals as the main vehicle (Allison and Moncrieff, 2014; Haave, 2008: 365 ff; Szasz, 2007). These new medicines alleviated many of patients’ symptoms, but their sedating effects also made them efficient technologies of control – sometimes at great cost to the patients, due to their severe side effects.

As Figure 5 shows, Reitgjerdet's use of mechanical restraint was significantly above the national average, with a steady increase until 1959/1960 and then a noticeable decrease until 1963. The decreased use of coercion in the early 1960s mirrored a national trend that can be attributed to the arrival of the new and more efficient psychopharmaceuticals. Indeed, this was the view of Reitgjerdet’s leadership at the time. In the yearly report from 1962, manager Henry Lundh praised the effects of ataraxica and the calming effect it had on patients, whom he considered easier to treat and interact with (NHA/RG/YA-010-003).

According to our data, however, it was only for a short period of time that the controlling properties of the new pharmaceuticals limited the use of restraint at the hospital. As Figures 4 and 5 show, the trend in the data from both the NOS publications (1) and internal coercion records (2) shows an increased use of both seclusion and mechanical restraint, from 1963 onwards. However, the daily reports (3) do not show the same clear trend. There are good indications that, after 1962, the daily reports should not be trusted as a source for the quantification of coercive measures. Reitgjerdet’s Control Commission would occasionally ask for a list of patients in seclusion and mechanical restraint on a specific date, and these reports can be cross-checked against our data. In 1962, the Control Commission received a list of coercion patients for 19 June. On this list, the numbers of patients listed as being in seclusion and restraint match those in the archival records (2) and daily report (3). However, in the report to the Control Commission, Reitgjerdet’s leadership admitted to restraining numerous patients by fastening one foot to the bed, for security reasons during night-time, even though they did not record this as coercion.

The Control Commission asked for similar reports once in 1963 (20 June) and once in 1964 (11 November). The 1963 report contains figures that correspond with the local coercion record (2), but are far higher than those of the daily report (3). In the 1964 report, the number of general coercion patients is the same as that of the local coercion records (2), but there are discrepancies in the number of patients listed as either secluded or restrained. The daily report (3) for the same day lists far fewer general coercion patients. After 1962, the daily reports seem to list mainly patients who were secluded or restrained in their beds during daytime and to omit the large number of patients who were restrained during the night shift.
With the exception of the data from the daily reports (3), the data in Figures 4 and 5 show that the downward trend in the use of coercive means, created by the new medication, ended in 1963 and was followed by a dramatic increase. However, the changing trend can also, in part, be explained by changes in recording practices. When filing the 1964 annual report, manager Henry Lundh claimed that the increase from the year before in the use of mechanical restraint was due to the institution’s new practice of registering patients restrained in bed on one foot for security reasons (NHA/RG/YA-010-001). It is, however, unlikely that this change in reporting practice fully explains the increased reports of mechanical restraint. If that were the case, we would expect the graph in Figure 5 to level out after 1964. Instead, it shows a steady increase to a peak in 1974, which most likely signifies an actual and continuous increase in the use of restraint over the period, though some of the increase shown for 1973 was probably due to the stricter recording practices implemented that year.

The increased use of coercion separates Reitgjerdet significantly from the data available from other Norwegian psychiatric institutions, and it occurred despite the continuous introduction of more efficient medications. More research is needed to understand how and why the hospital’s practices developed in this way, but, over the period, the psychiatric sector reported increased violence and unrest among the patient population due to the arrival of new patient groups with challenges caused by drug abuse (NHA/RG/HA-001-005). This violence and unrest might have led to an increased use of coercive means at Reitgjerdet, which welcomed the most challenging male patients. But it does not sufficiently explain why the growth in the use of coercion at Reitgjerdet deviated significantly from the national trend.

Our view is that, during the 1960s, a new institutional logic developed. The records on coercion in the 1960s and most of the 1970s display a repetitive use of mechanical restraint, seemingly without individual or ethical considerations of its necessity. This development was probably driven by chronic understaffing (and, in particular, a lack of qualified personnel), as well as the architectural structure of the wards, where patients slept side by side in large halls with little supervision. To ensure control and to keep patients separated at night, most patients in the wards with highest security level were fastened to their beds for the night when the evening shift started at 7 p.m. Some patients were secluded and restrained for up to 22 hours every day for months on end. Coercion became routine, and this was possible partly because of the lack of scrutiny from national authorities and society at large. The ethics and moral implications of psychiatric treatment in institutions were low on the national agenda, and the lack of regulations on coercion after the new law on psychiatric care came into effect in 1961
was a symptom of this. With no regulations and little oversight from the authorities, ethical considerations of the increased use of restraint, and corrections to unfortunate changes in practice, failed to be incentivized. Without outside control, Reitgjerdet’s practices drifted towards what was most convenient, while concerns for human dignity in patient treatment were weakened.

Understaffing and a lack of governmental oversight, however, were national developments, and although Reitgjerdet reported a use of coercive measures far greater than the national average, the extent to which the practice at Reitgjerdet deviated from that of the psychiatric sector in general, is not completely clear. Practices at Norway’s other psychiatric hospitals were never subjected to the same critical inquiry as Reitgjerdet’s, and no systematic historical study has ever been conducted. However, many hospitals have published their own institutional history, and a few of these publications contain references to a routine practice of restraining patients to beds at night (Bjørhovde, 1988; Fygle, 2002; Haave, 2008: 372; Tjelmeland, 2010: 109). In addition, some contemporaries in the 1970s criticized Norwegian institutional psychiatry for having inhumane traits.

After 1974/1975 the spotlight slowly turned towards Reitgjerdet, which began to receive criticism for its practices and, particularly, its excessive use of coercion (Evensen, Gradmann and Larsen, 2010). As a response to the critical reports, Reitgjerdet received funding to renovate the hospital buildings, and construction started on a brand-new welfare building containing a swimming pool, a sports hall and a better infrastructure for work therapy and other types of training. During the same period, some members of Reitgjerdet’s staff became increasingly critical of the institution. Its director at the time, Finn Brasch-Larsen, later claimed that he was working towards decreasing the use of coercion during his years in charge (Blom, 1980: 68).

Our data supports the conclusion that this increased attention towards the conditions at the hospital had some effect on the use of coercion. Figures 4 and 5 show a decrease in the use of both seclusion and mechanical restraint over the period, but this was in no way enough to calm down the hospital’s increasingly turbulent working environment. By 1977,

---

4 One example is the thematic issue of the magazine *Hverdag* (1978, no. 4), with the subtitle *Syk psykiatri* [Sick Psychiatry], which contained, among other things, a ranking of the country’s psychiatric institutions from one star (bad and authoritarian) to three stars (doing the best they can). Reitgjerdet was given one star, but was at the same time described as too bad for comparison. In addition, several of the most critical members of the Norwegian psychiatric profession were interviewed. Among them was Reidar Larssen, who took over management of Reitgjerdet in 1979. Another example is the novel *23-salen* by Ingvar Ambjørnsen (1981), based on his own experience of working at Lier hospital in the 1970s.
Reitgjerdet had become rife with turmoil. Several staff members, who later became known as the ‘Reitgjerdet opposition’, tried to address what they saw as inhumane treatment of the patients, but felt their efforts were ignored or actively opposed by the hospital’s management and the ‘old guard’ of staff members. This culminated in the escape of a patient in October 1978 organized by Dr Solberg, after which Reitgjerdet became the focus of a long run of critical news coverage. Director Brasch Larsen was granted a one-year leave of absence and later chose to resign. His replacement was one of Reitgjerdet’s most ardent critics within the medical profession, Dr Reidar Larsen, who had labelled Reitgjerdet a torture institution and, incidentally, was the only applicant for the job. He represented a fundamental change in treatment philosophy and brought about a radical reduction in the use of coercion at the hospital. His time at Reitgjerdet became short, however. He was severely criticized for his treatment philosophy, which among other things included a significant reduction in the use of psychopharmaceuticals. The staff claimed the patients became sicker and the personnel’s working conditions were much more difficult. He also received criticism for discharging a number of the patients to their local communities, despite many of the local municipalities’ lack of competent personnel and failure to provide satisfactory facilities for proper care and treatment. After only a few months, this led to the national health authorities stripping Dr Larsen of his authority by placing him under the supervision of a second head physician, and he resigned shortly afterwards (Blom, 1980).

Many of the ‘veteran’ staff members continued to work at the hospital after the 1978 scandal, but the culture of coercion at Reitgjerdet nevertheless changed. At the same time, the work had been made easier by a steady decrease in the patient population. The hospital’s previous problems in arranging for the transfer of patients who did not fit the admission criteria for Reitgjerdet more or less disappeared after the national health authorities started to put pressure on regular psychiatric hospitals and smaller psychiatric care units to receive its patients.

From the end of 1978, coercion at Reitgjerdet drastically decreased, and it continued to do so in the following years. Reitgjerdet had, however, become a public symbol of the oppressive psychiatric institution. A public inquiry resulted in an extremely critical report (Blom, 1980). Two years later, in 1982, Stortinget approved a sweeping reform that included replacing Reitgjerdet with a number of regional high-security wards, each with a far smaller number of patients and far higher personnel to patient ratio.
Conclusions
Coercion has always been an integral part of psychiatric care, and, when discussing the patient-personnel relationship, there is no denying the fundamental disproportion of power. Coercion in psychiatry is therefore a fruitful starting point for discussing the ethical and normative ideals of humane treatment. Data on the use of coercive measures at the two high-security mental institutions, Kriminalasylet and Reitgjerdet in Trondheim, Norway, show – despite some weaknesses – clear and varied trends relating to the use of coercion over time. Importantly, the data tell a different narrative than the one commonly assumed (and often implied in the Whiggish positivistic literature on psychiatric history): that moral standards in psychiatry have shown a linear development from low standards to the modern – and higher – standards of today; also that technological development such as the introduction of new psychopharmaceuticals necessarily led to better treatment. While the closing of Reitgjerdet as a result of scandal supports a Whiggish narrative, the development to that point was in no way linear. Rather, Hans Evensen’s and Karl Anton Andresen’s no-restraint ideal and moral standpoint in relation to the integrity of patients and their bodies diminished from the 1930s onwards. At the same time, Norwegian society developed into a modern welfare state and this raised the standards for the country’s health care. The sharp criticism towards Reitgjerdet in the 1970s was therefore partly the result of the hospital falling behind the normative standards of society at large and partly the result of a negative development at Reitgjerdet, where concern for patients’ integrity and their moral value as individuals had weakened until the point where use of coercive measures became routine.

It can be argued that the statistics show the demise of moral treatment in Norwegian high-security psychiatry, as moral treatment ideology was highly concerned with minimal use of restraint. The routine restraint of patients documented in Reitgjerdet’s archival records from the 1960s paints a picture of a psychiatric practice that is far from the ideal shown in Tony Robert-Fleury’s famous painting of Philippe Pinel unchaining patients at Salpêtrière. Nor is it in correspondence with the treatment ideal that the Tuke family put into practice at York Retreat or the no-restraint movement that the York Retreat – at least partially – inspired. This development can probably, to some degree, also be found at other Norwegian psychiatric institutions during the same period, but more research is needed on this topic.

Funding
This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sector.
Acknowledgements
The authors would like to thank Dr Maria Knutzen and Professor Richard Whittington for their valuable comments and help in improving this paper.
References

(a) Archival sources
National Health Archives/Norsk helsearkiv (NHA):
   - Kriminalasylet’s archive (KA): Patient case files (K-FA); Ward reports (K-HA);
     Coercion records (K-HB).
   - Reitgjerdet’s archive (RG): Patient case files (FB); Coercion records (FC and GD); Ward
     reports (GB); Daily reports (GC); Annual reports (YA-010); Control Commission
     (HA).

(b) Publications
(All publications with translated titles are in Norwegian, and were published in Norway)

Allison L and Moncrieff J (2014) ‘Rapid tranquillisation’: an historical perspective on its
emergence in the context of the development of antipsychotic medications. *History of


[Presteseter Hospital 75 Years: A Psychiatric Hospital in Development 1913–1988].
Reinsvoll: Sykehuset.

Reitgjerdet Hospital]. Oslo; accessed (11 July 2019) at:

Madness: Segregation and Internment]. Oslo: Universitetsforl; doi:
10.1177/0957154X05052223


Braslow JT (1997) *Mental Ills and Bodily Cures: Psychiatric Treatment in the First Half of
the Twentieth Century*. Berkeley: University of California Press.

units: effects on seclusion and restraint. *Administration and Policy in Mental Health and
Mental Health Services Research* 22: 133–144.

Evensen H (1921) *Haandbok i sindssykepleie* [Handbook of Insanity Care]. Kristiania: H. Aschehoug & Co.


Norges offisielle statistikk [Norway’s Official Statistics] (NOS) (1895 to 1969) *Sinssykehusenes virksomhet/Psykiatriske sykehus* [The Mental Hospitals’
Activity/Psychiatric Hospitals]. Published by Medisinaldirektøren [the Medical Director] up to 1930, and by Statistisk sentralbyrå [Central Bureau of Statistics] after 1935.


