VU VRIJE UNIVERSITEIT AMSTERDAM

VU Research Portal

Argus: assessment and use of data in evaluating coercive measures in Dutch psychiatry

Janssen, W.A.

2012

document version
Publisher's PDF, also known as Version of record

Link to publication in VU Research Portal

citation for published version (APA)
Janssen, W. A. (2012). *Argus: assessment and use of data in evaluating coercive measures in Dutch psychiatry*.

General rights
Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal ?

Take down policy
If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

E-mail address:
vuresearchportal.ub@vu.nl

Download date: 25. Sep. 2021

Chapter 2.

Quantitative developments in containment measures

Original title: Kwantitatieve ontwikkelingen.

Translated from Dutch.

W.A. Janssen[a]

H.H.G.M Lendemeijer[a]

[a] Kenniscentrum GGNet, GGNet, Box 2003 7230 GC Warnsveld, the Netherlands.

Published in: Derde evaluatie Wet Bijzondere opnemingen in Psychiatrische ziekenhuizen, Deel 3. (2007), Den Haag Ministerie van Volksgezondheid Welzijn en Sport. pag. 11 – 28.

Introduction

This chapter provides a first effort to answer the question: what is the development of coercive measures in general and enforced treatment in particular? To answer this question we first present the legal context and then present the number of measures gathered by the Dutch Mental Health Inspectorate (IGZ) over the years 2000 - 2005. We present the number of coercive measures undertaken within enforced treatment, as well as undertaken under emergency conditions. These figures are related to the number of involuntary admissions and compared to findings of studies carried out within a nationwide project entitled 'enforced treatment and coercion under pressure' [*Dwang en drang*, Abma, et al. 2005). These findings are descriptive and provide a general overview of trends. This chapter gives a first interpretation of the figures as well as some preliminary explanations for the detected trends.

Required reports of emergency measures and enforced treatment

According to the Special Admission in Psychiatric Hospitals Act (Bopz) from 1994 onwards all hospitals with a permission for admitting involuntary treatment are obliged to report each emergency measure as well as each enforced treatment to the IGZ. According to the Bopz seclusions, restraints or forced medication may only be used within an emergency measure for the short term within a week or as part of a specifically elaborated involuntary treatment, for the long term above a week. According to the Bopz the hospitals have to relate figures on these measures to the number of involuntary admissions. Second, they are obliged to clarify how they dealt with objection and complaints occurring within these involuntary treatments.
By law emergency and enforced treatment are mandatory reported to the IGZ immediately when carried out. Coercive measures taken with the patient's consent, however, need to be registered within hospitals but are not mandatorily reported to the inspectorate. As a consequence of this stipulation in the law, an unknown number of coercive measures were not reported to the inspectorate. To deal with this discrepancy, the current study compared figures of hospitals' own databases to figures of the IGZ.

Number of reports

In the six years covered in the current study an increase in the number of emergency measures (Bopz art 39) by 36% and in the number of enforced treatments (Bopz art 38) by 13% was observed.

Expressed in absolute figures this increase was not significant, when comparing the consecutive years with each other.

In 2005 the number of emergency measures was significantly higher than the trend, while in 2001, the number of enforced treatments was significantly lower than the trend. Over the whole period, the increase of emergency measures was significant, while the increase of enforced treatments was not.

Table 1. Number of emergency measures as well as enforced treatments between 2000 and 2005

	2000	2001	2002	2003	2004	2005	+/-	Mean	CI 95%
Art 39	4283	4465	4305	4957	5312	**5818**	+36%	4857	4205 - 5508
Art 38	1788	1962	**1739**	1968	2057	2027	+13%	1924	1787 - 2060

Number of patients subject to coercive measures

The number of patients subject to emergency treatment was in 2005 quite a deal higher than in 2000. Over the 6 year observation window 31% more patients experienced a coercive measure within an emergency treatment. The number of patients subject to enforced treatment increased by 25%. The increase in the number of patients was only in 2005 significantly different from the year before. In 2002 as well as in 2005 significantly fewer patients received enforced treatment than the year before.

Table 2. Number of patients emergency (Art 39) as well as enforced treatments (Art 38) between 2000 and 2005

	2000	2001	2002	2003	2004	2005	+/-	Mean	CI 95%
Number of patients Art 39	2773	2906	2862	3180	3393	**3644**	+31%	3126	2767 - 3485
Mean number of reports per patient		1,54	**1,50**	1,56	1,57	1,60		1,55	1,52 – 1,59
Range of reports per patient	1 - 50	1 - 70	1- 21	1 - 82	1 - 52	1 - 84			
Number of Art 38	1259	1332	**1215**	1431	1607	1566	+25%	1402	1232 - 1572
Mean number of reports per patient	1,42	**1,47**	1,43	1,38	**1,28**	**1,29**		1,38	1,30 – 1,46
Range of reports per patient	1 - 45	1 - 33	1 - 18	1 - 26	1 - 13	1 - 27			

Number of coercive measures within emergency treatment

Between 2000 and 2005 the number of coercive measures reported within emergency treatment (Bopz art 39) increased. The number of seclusions in a high secured room (in Dutch: separaties) increased by 37%. The number of seclusions in middle secured rooms (in Dutch: afzondering), as well as the number of applied mechanical and chemical restraint doubled between 2000 en 2005.

From 2004 onwards a significant increase may be observed in the number of reported mechanical restraints as well as the number of in emergency administered enforced medication reports. In 2005, the number of seclusions, either in a secured room or not, increased significantly.

Table 3. Number of coercive measures within emergency treatment (Bopz art 39)

	2000	2001	2002	2003	2004	2005	+/-	Mean	CI 95%
Seclusion high secured	3727	3902	3832	4448	4750	**5105**	+37%	4294	3704 – 4884
Seclusion middle secured	275	312	269	404	463	**593**	+116%	386	253 – 519
Mechanical restraint	**150**	190	171	247	**331**	**327**	+118%	236	153 – 318
Chemical restraint	**593**	657	775	1104	**1275**	1226	+107%	938	624 – 1253
Enforced fluid or feeding	12	**6**	15	16	**23**	20	+ 67%	15	9 – 22
Anders	0	0	0	0	0	0	0	0	0

Number of coercive measures within enforced treatment

Within enforced treatments the number of coercive measures increased during the observation window. It is striking to notice the number of chemical and mechanical restraints increased significantly in 2004.

Table 4. Number of coercive measures within enforced treatment (Bopz art 38)

	2000	2001	2002	2003	2004	2005	+/-	Mean	CI95%
Seclusion high secured	**1293**	1436	1334	1380	1437	1429	+ 11%	1385	1321 - 1448
Seclusion middle secured	148	144	**110**	224	212	**236**	+ 59%	179	125 – 233
Mechanical restraint	80	111	**82**	104	**119**	99	+ 24%	99	83 – 116
Chemical restraint	585	677	570	793	**1004**	919	+ 57%	758	571 – 945
Enforced fluid or feeding	25	26	25	30	**37**	27	+ 8%	28	23 – 33
Anders	43	50	20	32	57	45	+ 5%	41	27 - 55

Combined coercive measures

The combined measures were not reported to the IGZ, consequently we only have figures between 2000 and 2002 from the 12 hospitals participating in the studies mentioned above (Janssen, et al. 2005). Most of the measures concerned single measures. Of the combined coercive measures seclusion in a

high secured room co–occurred most frequently with forced intramuscular medication. This combination increased throughout the years within both emergency as well as enforced treatment apart from the year 2002 with respect to enforced treatment. Most of the other combinations, such as seclusion in combination with mechanical restraint, or seclusion in combination with mechanical as well as forced intramuscular medication occurred far less often.

Table 5. Combined measures (2000-2002)

	2000		2001		2002	
	Art 39	Art 38	Art 39	Art 38	Art 39	Art 38
Single	88,6%	80,1%	85,5%	77,1%	83,3%	79,3%
Seclusion and enforced medication	8,3%	12,7%	10%	15,8%	12,3%	14,5%
Other combinations	3,1%	7,2%	4,5%	7,1%	4,4%	6,2%

Number of involuntary admission and coercive measures in hospitals

The number of involuntary admissions increased importantly during the observation window of 2000 through 2005. In 2005 16.511 involuntary admissions were reported, a rise of 46% as compared to 2000. Two kinds of involuntary admissions occurred:

1. long term (RM) approved by a judge and serving enforced treatment and
2. short term (IBS), also sanctioned by a judge, aimed at the protection of imminent danger of self or environment.

The number of long term involuntary admissions doubled in these six years while short term involuntary admissions increased by 21%.

Tabel 6. Number of RM and IBS and use of coercive measures (source: IGZ year reports 2000–-2005)

	2000	2001	2002	2003	2004	2005	+/-
Involuntary admissions	11.326	12.431	13.196	14.153	15.660	16.511	+ 46%
RM (long term involuntary admission)	3909	4491	6228	6740	7754	8167	+ 110%
IBS (short term involuntary admission)	6268	6720	6968	6884	7283	7578	+ 21%
Measures within enforced treatment (article 38 BOPZ)	1788	1962	1739	1968	2057	2027	+ 13%
Measures within emergency treatment (article 39 BOPZ)	4283	4465	4305	4957	5312	5818	+ 36%
Totals	6071	6427	6044	6925	7369	7845	+ 29%

Figure 1 and 2 both show that the number of involuntary admissions increased at a higher rate than the number of reported coercive measures either within emergency or within enforced treatment.

Figure 1 Numbers of involuntary admissions compared to coercive measures

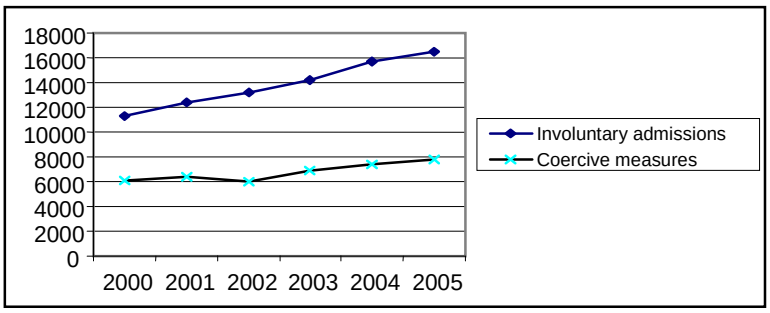
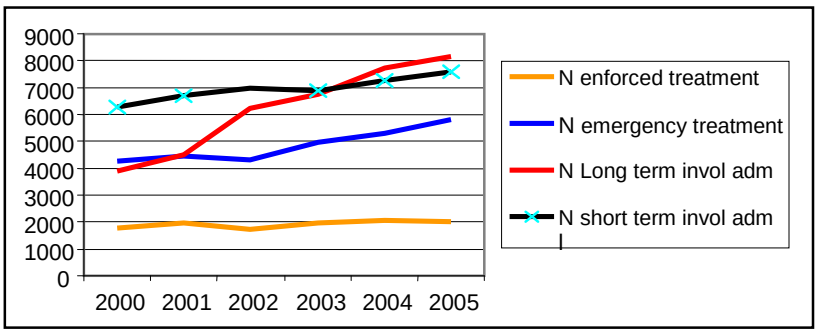


Figure 2 compares the number of measures with the short and long term involuntary admissions, and shows that most of the increase is explained by more long term involuntary admissions.

Figure 2 Numbers of involuntary admissions compared to coercive measures specified



Over the five years between 2000 and 2005 the number of patients admitted with a long term involuntary admission doubled (from 4000 to more than 8000). The number of enforced treatments, however, showed a slight increase over the years and even a decrease after the year 2004. The number of long term involuntary admissions and enforced treatments showed an increasing difference, while this may be expected to follow a comparable line. The number of short term involuntary admissions showed a gradual but steady increase, as in 2005 20% more of these admissions occurred as in 2000. The number of emergency treatments increased at a comparable but somewhat higher rate. Overall, in approximately half of the involuntary admissions an emergency or enforced treatment occurred with a relative decrease over these six years.

Bed occupancy and the number of involuntary admissions compared to the number of coercive measures within emergency of enforced treatment

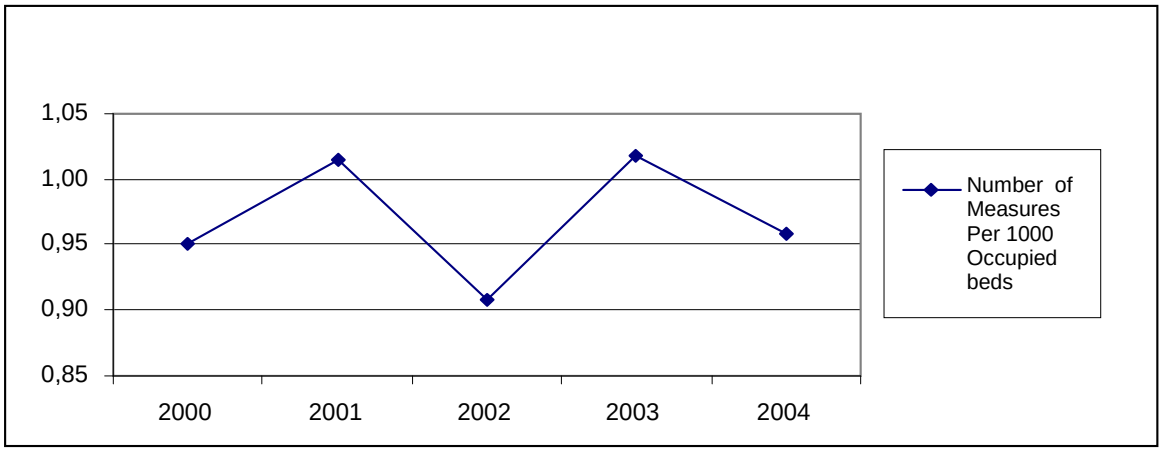
The mean number of occupied beds in mental health care in the Netherlands was calculated using figures provided by GGZ Nederland. These figures show that the number of beds increased over the years between 2000 and 2004.

Table 7 Number of occupied beds in the Netherlands (source: GGZ Nederland)

	2000	2001	2002	2003	2004
Mean daily bed occupation	17.502	17.354	18.226	18.630	21.060

In figure 3 the number of reported coercive measures was compared to the number of occupied beds multiplied by 1000. This figure shows the ratio of number of measures per 1000 occupied beds was reasonably constant and varied around approximately 0,95.

Figure 3. Ratio coercive measures and occupied beds



Estimation of percentage coercive measures actually reported to the IGZ.

Ten hospitals reported coercive measures both with as well as without consent. These hospitals accounted for 34% of the total number of occupied psychiatric beds in the Netherlands in 2005 (GGZ Nederland, 2005). These hospitals proved to be a representative selection of psychiatric hospitals in the Netherlands, as the mean number of coercive measures per patient proved to be comparable to hospitals outside of these hospitals (mean difference= -0.012, t = -0.228, df=3230, p=0.820; 95% CI = 0.111 to -0.088).

Table 8. Overview of reported coercive measures in 10 Dutch hospitals.

10 hospitals	Year	2002				2003			
	Number of beds occupied (2002)	Number of Coercive measures	With consent	Within emergency treatment	Within enforced	Number of Coercive measures	With consent	Within emergency treatment	Within enforced
Totals	1.949.200	8488	5182	1924	1380	7341	3986	2111	1223
Relative %	34%		61%	23%	16%		54%	29%	17%

The findings showed that of the coercive measures in 2002 39% and in 2003 46% was reported either within emergency treatment or within enforced treatment. 61% of the coercive measures in 2002 and 54% in of the coercive measures in 2003 were reported as being carried out with consent. The measures with consent did not need to be reported to the IGZ.

Table 9. Overview of legal status and coercive measures.

Year	2002				2003			
	consent	emergency treatment	enforced treatment	Totals	consent	emergency treatment	enforced treatment	Totals
Voluntary admission	396	48	13		174	164	23	
Short term legal status	589	253	239		374	269	372	
Long term legal stats	277	69	90		759	213	108	
Totals	1262	370	342	1974	1307	646	503	2456
% of total	63%	19%	17%		53%	26%	20%	

In the same database the legal admission status was related to coercive measures with consent, within emergency or within enforced treatment. In a limited number of cases the legal admission status was known. In 2002 1974 and in 2003 2456 measures could be related to legal status. These findings are presented in table 9.

In 2002, of the 1974 measures, 162 (63%) were reported with consent. These occurred in both voluntary as well as involuntary admitted patients. Remarkable is the number of containments within emergency as well as enforced treatment (61 reports, 3% in 2002 and 187 reports, 7,6% in 2003). As the report of these measures to the IGZ was not mandatory, the reliability may be questionable.

Finally, the coercive measures as reported within the 12 participating hospitals were compared to the coercive measures as included in database of the IGZ. The merge of the hospitals own databases with the nationwide data showed 27% of the data could not be tracked in one of the databases. Most of the measures occurred in the hospitals databases but not in the nationwide data. Few did occur in the

nationwide data but not in the hospitals databases. An estimated 30-40% of all coercive measures were known to the IGZ.

Discussion

The figures showed that over the years between 2000 and 2005 the absolute number of coercive measures increased. Seclusion occurred most often, enforced medication was applied second most often. The increase in the number of coercive measures followed the same trend as the nationwide increase in number of admission days in psychiatric hospitals over these years. As approximately 60% of all measures were applied with consent and reporting was not mandatory, the presented data proved to have a limited validity and need to be valued with caution.

Consent and enforcement in the application of coercive measures

The interpretation whether a patient consents or not with a coercive measure depends on the person (mostly a psychiatrist, a doctor or a nurse) performing the registration. This leaves the interpretation of the underlying incentive questionable. Whether the patient de facto does agree or even asks for the intervention is unknown. To which extent does the patient resist against the measure? Is a passive agreement the same as full consent? Which amount of force was administered to let the patient comply with the coercive measure? Discussions with professionals showed the concept of "consent" was interpreted differently. More often regularly than incidentally voluntary admitted patients proved to be secluded or restrained against their will but registered as within consent. Nurses or teams operated in such a way to avoid difficult questions, but also the bureaucracy often accompanying an involuntary (either short or long term) admission status.

Reliability of IGZ data and figures

The database of the IGZ showed a number of systematic imperfections. The merge of the 12 hospitals own databases with the nationwide database showed a large number of differences. One of the explanations of these differences may be the possibility that the IGZ combined more measures occurring within a short timeframe into a single measure. Also, forms may be lost or the processing of the data may be faulty.

Presentation of figures

The figures presented here were based on absolute figures as reported in the year reports of the IGZ. The interpretation of absolute data on coercive measures needs to be done with caution. The figures

presented here imply a continuous significant increase of coercive measures, either within emergency or enforced treatment. This finding provides a partial answer to the main question of this chapter. Bowers, (2000) commented that the presentation of absolute figures have a number of shortcomings. First, such figures do not contain information necessary to understand them. Second, sound comparisons between hospitals or between wards are not possible. For the interpretation background information needs to be taken into account, such as the number of patients of a hospital or a ward. According to Bowers, (2000) the number of incidents per occupied bed is the most informative. Figure 2 showed that while the absolute data showed a clear increase, when corrected for the number of occupied beds this increase was far less powerful.

Bed occupation related to coercive measures within emergency or enforced treatment

Mean bed occupation has risen over the past decade. This implies more patients are admitted or the same number of patients uses the beds for a longer period of time, possibly due to an increase in severity of psychiatric morbidity. The increase in coercive measures may support the last supposition. However, when we look at the mean number of enforced treatments per patient, a clear decrease may be observed over the last 5 years. Consequently, the increase in coercive measures is probably related to an increased number of patients admitted to mental health care in the Netherlands. Both trend lines showed a comparable increase over the last decade, with a near to constant but slightly increasing ratio.

Coercive measures related to involuntary admissions

In contrast to the clear relationship between coercive measures and bed occupancy, the number of involuntary admissions coinciding with coercive measures showed a decrease over the last decade. An increasing number of patients stay at psychiatric hospitals while not being subject to coercive measures. This difference may be explained in various ways. Possibly, less severely ill patients are admitted more often involuntarily, due to a wider interpretation of the dangerousness criterion in the Bopz act. On the other hand professionals may have adjusted to a more severely aggressive admitted population, leading to the use coercive measures at a later point in time, however also leading to more severe incidents. This is a development which is recognised and followed with concern by company medical services as well as by GGZ Nederland.

Types of applied coercive measures

The data from the current study show that danger as caused by patients is primarily dealt with by secluding patients. Enforced medication is second choice at some distance. Of the combined measures

the combination of seclusion and enforced medication occurs most often. These figures show a constant mutual relationship throughout the years.

In short, it is clear quite some effort is necessary to develop an unambiguous interpretation of consent, objection, urge or coercion as well as a sound interpretation of the registration of coercive or coercive measures. The current study shows the registration of data for a legal purpose is unfit for interpretation of trends and developments at a ward or hospital level and leads to the development of Argus as a registration method to cover coercive measures in a valid and reliable way. Five hospitals (Altrecht, GGNet, de Gelderse Roos, GGZ NHN and Parnassia) developed together with the GGZ Nederland and the IGZ a new registration method called Argus.

References

1. Abma, T., Widdershoven, G. & Lendemeijer, B. (2005) *Dwang en drang in de psychiatrie; kwaliteit van vrijheidsbeperkende interventies.* Utrecht: Lemma. 67-76.
2. Bowers L. (2000). The expression and comparison of ward incident rates. *Issues in Mental Health Nursing*. 21, 365-374.
3. GGZ Nederland. (2003). *Kerncijfers uit de GGZ 2000 – 2002*. Utrecht: GGZ Nederland.
4. GGZ Nederland. (2005). *Kerncijfers uit de GGZ 2001 – 2003*; Amersfoort: GGZ Nederland.
5. IGZ. (2000). *Jaarrapport 2000.* www.igz.nl/33986/jaarrapportage_2000.pdf
6. IGZ. (2001). *Jaarrapport 2001.* www.igz.nl/33986/jaarrapportage2001.pdf
7. IGZ. (2002). *Jaarrapport Bopz 2002*. www.igz.nl/dossiers/14861/jaarrapbopz/
8. IGZ. (2003). *Jaarrapport Bopz 2003. def* www.igz.nl/dossiers/14861/jaarrapbopz/
9. IGZ. (2004). *Jaarrapport 2004*. www.igz.nl/33986/jaarrapport2004.pdf
10. IGZ. (2005). *Jaarrapport 2005*. www.igz.nl/33986/2006-05_jaarbericht_IGZ.pdf
11. IGZ. (2002). *Bulletin: melden in het kader van de Wet Bopz in de Inspectie voor de Gezondheidszorg*. Den Haag. www.igz.nl
12. Janssen, W.A, Hutschemaekers, G.H.M., & Lendemeijer, H.H.G.M. (2005). *Dwang cijfermatig in beeld.* In Abma, T., Widdershoven, G. & Lendemeijer, B. (red.) Dwang en drang in de psychiatrie; kwaliteit van vrijheidsbeperkende interventies. Utrecht: Lemma. 67-76.