# Residential care: Dutch and Italian residents of residential care facilities compared

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SUMMARY. Aims – Characteristics of patients living in residential care facilities and the availability of mental hospital- and residential beds in Italy and The Netherlands were compared to assess whether differences in the process of deinstitutionalisation have influenced the composition of their residential patient populations. Methods – Data from the Dutch UTOPIA-study (UTilization & Outcome of Patients In the Association of Dutch residential care providers) and the Italian PROGRES-study were used. Results – Dutch residents were more likely to suffer from substance or alcohol abuse than Italian residents. The latter were more likely to suffer from schizophrenia or a related disorder, less likely to have experienced mental hospital admissions and showed an overall shorter duration of stay in residential care facilities. Contrary to our expectations Dutch residents, who still have good access to long stay beds in mental hospitals, are not less disabled than Italian residents. Finally, the number of beds in residential care facilities per 10,000 inhabitants in the Netherlands is twice (6) as high as in Italy (3). Conclusions – The Italian and Dutch deinstitutionalisation processes have resulted in a different availability in the number of residential beds. However, it did not influence the overall level of functioning of both residential populations.

Declaration of interest: An unconditional grant was received from the Alliance of the 22 Dutch independent residential care providers.

KEY WORDS: deinstitutionalisation, residential facilities, schizophrenia, severe mentally ill.

Received 8.12.2007 - Final version received 02.03.2008 - Accepted on 02.03.2008.

# **INTRODUCTION**

The long term mentally ill people living in residential facilities have largely been neglected in recent mental health services research, with some exceptions (Lelliot *et al.*, 1996; Leff & Trieman, 2000). Therefore, there is a lack of information about their social and clinical characteristics and the quality of housing and services provided. However, the interest in this issue is increasing. The Italian PROGRES-study (de Girolamo *et al.*, 2002; 2004) has made a large scale attempt to characterize all residential care facilities and their residents. A comparable study in the Netherlands (the so called UTOPIA-study: UTilization & Outcome of Patients In the Association of Dutch residential care providers) started in 2006 and allows for a comparison of data.

Both in Italy and the Netherlands, deinstitutionalization set off in the second half of the 20<sup>th</sup> century. In 1978 Law 180 initiated the replacement of mental hospitals with non-hospital facilities in Italy (de Girolamo & Cozza, 2000), whereas in the Netherlands residential care facilities were developed alongside mental hospitals (Wiersma *et al.*, 2002). This difference in development may have led to a different residential population in such facilities. The aim of this report is to compare the Italian and Dutch residential population on socio-demographic, clinical and care characteristics. We expect Dutch residents to be less disabled than the Italian residents, because of the greater availability of, and access to long stay beds in mental hospitals in the Netherlands.

## **METHODS**

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In 2006, approximately 14 beds per 10,000 inhabitants were available in mental health services in the Netherlands. These mental health services roughly provided two places per 10,000 inhabitants in associated res-

Epidemiologia e Psichiatria Sociale, 17, 2, 2008

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idential care facilities in the community as well. There were also 22 independent residential care facilities, which operate independently from mental health services, which approximately provided another three residential places per 10,000 inhabitants. Seven of these 22 Dutch independent residential care providers participated in this study. The sample used in this study was selected on the completeness of the provided client administration data. Data on 1656 residents, equivalent to 71% percent of their residential population, included socio-demographic data (gender, age, civil status, former place of residence), clinical diagnosis, GAF scores, age of first contact with mental health services, and history of mental health care use (length of stay in a residential facility, any former admissions to a mental hospital). Manual searches in medical files were made in case of missing data. Compared to the total patient population of the 22 independent residential care providers (5548 residents), this sample had more often been referred from a mental hospital (58% vs. 54%) and was slightly older (mean age 48 years (SD 15.5) vs. 46 years (SD 15.3). The sample did not differ from the total patient population on other characteristics, such as sex, clinical diagnose, GAF-scores, and length of stay in a residential facility. Therefore we consider the sample as fairly representative.

Chi-square contingency tables and an independent sample t-test for GAF scores were used to compare the Dutch and Italian residential population.

## RESULTS

The catchment area of this sample of Dutch residential care facilities consisted of 5298 km2 with six residential beds for every 10,000 inhabitants, which is twice as high compared to Italy, with an overall ratio of three (de Girolamo *et al.*, 2002).

#### Socio-demographic characteristics

The male/female-ratio is approximately 2:1, with males being younger than females (mean = 45.8 vs. 52.1 years in the Netherlands, and 48.6 vs. 50.9 years in Italy) in both countries. The largest age group consists of patients who are between 50 and 64 years of age. In the Netherlands, more patients under 30 years live in these facilities (15.3% in the Netherlands and 8.4% in Italy). More than 90% of residents in both countries are either never married or divorced; Dutch residents have a higher divorce rate, especially when gender is taken into account

(25.3% of all female Dutch residents is divorced). The residential care facilities accommodate a large group of former mental hospital patients (45.2% in Italy and 58.2% in the Netherlands). More Italian residents have been referred from another residential facility to the current facility than Dutch residents (23.8% in Italy and 9.7% in the Netherlands – Table I).

## **Clinical characteristics**

Almost three quarters of the Italian residents are diagnosed with schizophrenia or a related disorder, while in the Netherlands this is the case for nearly 60% of the residential population. In both countries, a large part of residents with a clinical psychiatric diagnosis and comorbid substance or alcohol abuse is suffering from schizophrenia (54.7% and 57.9% respectively). However, the total number of people suffering from (comorbid) alcohol or substance abuse is much higher in the Netherlands. Nevertheless, the level of functioning in terms of GAF scores is higher for the Dutch population. The median age of Dutch residents at first contact with mental health services was four years higher (26 years, mean=29.3) than that of Italian residents at first mental health services contact (22 years; de Girolamo *et al.*, 2004).

## **Characteristics of care**

The majority of Dutch residents (57%) lives more than three years in the current residential facility, while in Italy this applies to about one third of the residential population. Dutch residents were more often admitted to a mental hospital in the past.

#### DISCUSSION

Although the data were retrieved from client administration systems and medical files, and were not gathered under strict systematic research conditions, they provide valuable information about social and clinical characteristics of the Dutch residential population in the community and allow for a global comparison with a corresponding population in Italy. Even though all but one of the characteristics we compared were significantly different (caused by the relatively large cohorts), the Dutch and Italian residential populations are quite similar. Nevertheless, the most striking difference was the relatively low rate for primary and comorbid substance or alcohol abuse in Italy.

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	The Netherlands $(n = 1656)$	Italy <sup>1</sup> ( $n = 2962$ )	Statistic	Result
Socio-demographic characteristics				
	% (n)	% (n)		
Gender				χ², df, p
male	61.2 (1014)	63.2 (1873)		1.79
female	38.8 (642)	36.8 (1089)	χ²	df = 1 p = 0.18
	50.0 (012)	50.0 (1005)	x	-
Age groups	15.2 (052)	0.4 (0.51)		χ², df, p
16-29	15.3 (252)	8.4 (251)		
30-39	15.0 (248)	19.2 (570)	. 2	<b>50 7</b>
40-49	22.8 (376)	21.8 (647)	$\chi^2$	58.7
50-64	32.4 (535)	34.3 (1015)		df = 4 p =
65 +	14.6 (241)	16.2 (479)		0.0000
Civil status $(n = 1561)$				χ², df, p
Never married	77.8 (1214)	82.0 (2418)		
Separated / divorced	17.0 (265)	10.6 (313)	χ²	52.1
Widowed	3.3 (51)	2.9 (86)		df = 3 p =
Currently married	2.0 (31)	4.4 (131)		0.0000
Former place of residence $(n = 1465)$				χ², df, p
On their own / Family residence	26.5 (389)	24.6 (715)		λ, αι, μ
Other residential care facility	9.7 (142)	23.8 (692)	χ²	138
(Forensic) mental hospital / long stay ward	58.2 (852)	45.2 (1310)	x	$df = 3 p = 0.0^{\circ}$
Other (e.g. Salvation Army, jail, homeless)	5.6 (82)	6.4 (185)		ui = 5 p = 0.0
	5.0 (02)	0.4 (105)		
Clinical characteristics				
	% (n)	% (n)		
Diagnostic categories of residents (n = 1512)				χ², df, p
Schizophrenia and related disorders	58.9 (890)	74.6 (2001)		
Bipolar disorders	5.0 (76)	4.5 (120)	$\chi^2$	121
Other (e.g. organic disorders, mental retardation eating disorders,	34.1 (515)	20.0 (537)	<i>,</i> c	df = 3 p =
pervasive developmental disorders)	· · · ·			1
Primary substance or alcohol abuse	2.0 (31)	0.9 (24)		
	. ,			χ², df, p
Comorbid substance or alcohol abuse	29.2 (432)	4.6 (135)	χ²	537
(n = 1481)	29.2 (432)	4.0 (155)	λ	
(II = 1481)				df = 1 p = 0.0000
<b>GAF scores</b> $(n = 792)$				T, df, p
Mean (S.D.)	49.1 (11.5)	43.6 (17.9)		
Median	50.0	42.0	Т	8.2
				df = 3752, p =
				0.0000
Age of first contact with mental health services (years) (n = 778)				χ², df, p
<18	14.7 (114)	21.2 (624)		
18-29	44.1 (343)	55.7 (1643)	$\chi^2$	132
30-39	20.1 (156)	15.6 (459)	~	df = 3 p =
40 +	21.2 (165)	7.6 (223)		0.0000
Characteristics of care				
	<b>0</b> 7 ()	<b>6</b> ( / . )		
I math of store to DE (>2	% (n)	% (n)		- <b>1</b> F _
Length of stay in RF (years) <sup>2</sup>	10.9 (224)	24 5 (605)		χ², df, p
$\leq 1$	19.8 (324)	24.5 (695) <sup>1</sup>	?	224
1-3	22.9 (375)	40.3 (1147)	χ²	234 4f - 2 -
3-6	22.4 (366)	17.0 (482)		df = 3 p =
6+	34.9 (570)	18.3 (522)		0.0000
				χ², df, p
Former admission to a (forensic) mental	89.9 (1146)	54.8 (1577)	$\chi^2$	521
hospital > 0 (n = 1275)				df = 1 p = 0.000

# Table I. - A comparison of Dutch and Italian residents in residential care facilities in the community.

1 Data derived from De Girolamo et al. (2004)

2 The Dutch categories for 'length of stay in RF' are slightly different from the Italian categories, which are: < 1 year, 1-3 years, 4-5 years and 6+ years respectively. Still, a comparison is made to give an impression of the trend in the data.

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This may indicate a more restrictive policy in the Italian residential facilities in admitting patients with dependency problems (de Girolamo *et al.*, 2004).

Another difference was the higher percentage of residents diagnosed with schizophrenia or a related disorder in Italian residential facilities. However, from this it can not be concluded that the Italian residents are more severely disabled, because the Dutch residents more often experienced an episode of hospitalization in the past.

The comparison of overall mean GAF scores of both populations showed a significantly lower level of functioning of Italian residents compared to the Dutch residential population. However, since both GAF scores were between 40 and 50, they do not seem to imply a clinically relevant difference.

Although Dutch residents were overall younger than Italian residents, their length of stay in a residential facility was longer. This may indicate a higher turnover rate in the Italian residential facilities, perhaps pressured by the much lower number of available places. In addition, Italian residents may have a more effective or available social support system, which makes discharge more likely. Especially, the role of the family as a support system may be much stronger in the Italian culture than it is in the Netherlands.

We expected the Italian residents of residential facilities to be more disabled than the Dutch residents, because mental hospitals in the Netherlands still offer long stay facilities for the most disabled patients. However, we did not find evidence to support this expectation.

The overall ratio of available residential places per 10,000 inhabitants (three residential places per 10,000 inhabitants) is different from the sample ratio (six residential places per 10,000 inhabitants). This difference can be explained in the following way: independent residential care facilities do not operate in some Dutch mental health regions, while the number of inhabitants of these regions is included in the calculation of the overall ratio. For our sample, we have corrected the ratio for this by only including the number of inhabitants of the catchment areas of the seven participating independent residential care facilities.

#### CONCLUSION

During the process of deinstitutionalisation the mental hospitals in Italy were replaced by residential care facilities, while in the Netherlands these residential facilities were developed alongside the mental hospital. In the Netherlands, this has not led to a substantial decrease in the total number of available psychiatric hospital beds compared to other European countries like England, Sweden or Spain (see e.g. Priebe *et al.*, 2005). Moreover, the number of available beds per 10,000 inhabitants in residential care facilities is much higher than in Italy. However, the difference in availability of mental hospital beds between Italy and the Netherlands has not led to major differences in the overall level of functioning between their residential populations, according to their overall mean GAF-scores.

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