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Reinstitutionalisation in mental health care: comparison of data on service provision from six European countries

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Abstract

Objective To establish whether reinstitutionalisation is occurring in mental health care and, if so, with what variations between western European countries.

Design Comparison of data on changes in service provision.

Setting Six European countries with different traditions of mental health care that have all experienced deinstitutionalisation since the 1970s—England, Germany, Italy, the Netherlands, Spain, and Sweden.

Outcome measures Changes in the number of forensic hospital beds, involuntary hospital admissions, places in supported housing, general psychiatric hospital beds, and general prison population between 1990-1 and 2002-3.

Results Forensic beds and places in supported housing have increased in all countries, whereas changes in involuntary hospital admissions have been inconsistent. The number of psychiatric hospital beds has been reduced in five countries, but only in two countries does this reduction outweigh the number of additional places in forensic institutions and

supported housing. The general prison population has substantially increased in all countries.

Conclusions Reinstitutionalisation is taking place in European countries with different traditions of health care, although with significant variation between the six countries studied. The precise reasons for the phenomenon remain unclear. General attitudes to risk containment in a society, as indicated by the size of the prison population, may be more important than changing morbidity and new methods of mental healthcare delivery.

Introduction

Since the 1950s, deinstitutionalisation has dominated mental healthcare reforms throughout western Europe. Large asylums have been closed or downsized, and the total number of psychiatric hospital beds has

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fallen dramatically. Mental health services have been established in the community, albeit with significant variation between countries.¹⁻⁴

Community mental health care is being further developed in the United Kingdom through substantial additional investment in specialised teams such as assertive outreach and early intervention. It has been argued, however, that the new era of reinstitutionalisation has already begun and has occurred largely unnoticed by the public and with little professional debate.⁵ Major characteristics of reinstitutionalisation are the rising numbers of forensic beds, involuntary hospital admissions, and places in supported housing. However, the argument has as yet not been based on systematic and precise figures.

This paper presents data from six European countries representing different traditions of health care. We aimed to establish whether reinstitutionalisation is taking place and, if so, to what extent and with what variation between European countries. We also wished to investigate whether reinstitutionalisation compensates for the loss of conventional psychiatric hospital beds and how it compares against changes in the general prison population. This rate can be seen as a non-healthcare indicator of societal tendencies to risk containment, and data suggest that psychiatric morbidity is high among prison inmates.⁶

Methods

The study included data from six European countries that fulfilled the following criteria: experience of major mental health reforms involving deinstitutionalisation within the second half of the 20th century; availability of reliable and reasonably complete data; and representation of different traditions of mental health care, including Scandinavian, central European, and

Mediterranean countries. We thus included England, Germany, Italy, the Netherlands, Spain, and Sweden.

We collected data on forensic beds, involuntary hospital admissions, places in residential care or supported housing, conventional psychiatric hospital beds, and the general prison population. For each of these categories, we investigated how numbers have changed since 1990. We chose this period of time because 1990 has a historical significance as the end of the post-war period in Europe and the beginning of a new political era.⁷ If reliable data for the period since 1990 or for the whole country could not be established, we used shorter periods and regional data. As healthcare systems and legislation in the six countries vary considerably, the precise definitions of forensic beds, involuntary hospital admission, and supported housing also differ between some countries but have been consistent over time within each country. Although supported housing is often regarded as an alternative to asylums and therefore a sign of deinstitutionalisation, it still represents a form of institutionalised care and protection.⁸

Results

The number of forensic beds and places in supported housing have increased in all countries (table). Involuntary admissions have risen in England, the Netherlands, and, especially, Germany, but have fallen slightly in Italy, Spain, and Sweden. The number of psychiatric beds has been reduced in all countries. In England, Spain, and Sweden, the number of psychiatric beds that have been closed is greater than the total number of additional forensic beds and places in supported housing that have been established in the same period of time. In Italy and the Netherlands, the increase in forensic beds and supported housing has

Number of forensic beds, involuntary hospital admissions, places in residential care or supported housing, psychiatric hospital beds, and prison population in six countries in 1990-1 and 2002-3. Values are numbers per 100 000 population unless stated otherwise

Service provision	England	Germany	Italy	Netherlands	Spain	Sweden
Forensic beds:						
1990	1.3 (1991)	4.6	2.0	4.7 (1991)	1.2 (1992)	9.8 (1993)
2002	1.8* (2001)	7.8	2.2 (2001)	11.4 (2001)	1.5	14.3 (2001)
Change (%)	+38	+70	+10	+143	+25	+46
Involuntary admissions:						
1990	40.5 (1991)	114.4 (1992)	20.51	16.4	33.8	39.0 (1992)
2001	50.3	190.5	18.14†	19.1‡ (1999)	31.8§ (2000)	32.4¶
Change (%)	+24	+67	-12	+16	-6	-17
Places in supported housing:						
1990	15.9 (1997)	8.9	8.8 (1992)	24.8 (1992)	5.1 (1994)	76.0 (1997)
2002	22.3	17.9 (1996)	31.6† (2000)	43.8 (2001)	12.7§	88.1
Change (%)	+40	+101	+259	+77	+149	+15
Psychiatric hospital beds:						
1990	131.8	141.7	4.5 (1992)	159.2	59.5 (1991)	168.6
2001	62.8	128.2 (2000)	5.3† (2000)	135.5	43.0 (1999)	58.3
Change (%)	-52	-10	+18	-15	-28	-65
Prison population:						
1992	90	71	81	49	90	63
2002	141 (2003)	98 (2003)	100	100	136 (2003)	73
Change (%)	+57	+38	+23	+104	+51	+16

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*Data refer to restricted patients admitted to all (high security and other) hospitals.

†Data for Emilia-Romagna, a region in northern Italy with a population of 4 million.

‡Data for Drenthe, a rural area with 450 000 inhabitants.

§Data for Andalusia, the second largest region in Spain, with a population of 7 million.

¶Discharges from treatment under the Compulsory Care Act during a six month period.

been much greater than any decrease in conventional psychiatric bed numbers, whereas in Germany the balance is approximately equal. The general prison population has grown in all countries by between 16% and 104%, and the two countries with the highest imprisonment rate (England and Spain) have the lowest rate of forensic beds. We found no clear sign of a harmonisation of provision between countries.

Discussion

Limitations of methods

Comparing the absolute numbers of institutionalised patients between countries is difficult because of internationally varying definitions of the reported forms of care. The differences in definitions, legislation, and healthcare systems cannot be overcome by a descriptive study. Consistent definitions were used within each country, however, and no major changes in mental health legislation have occurred that substantially altered the threshold for involuntary care. This paper thus focuses only on changes over time, and these processes can be synoptically interpreted.

Changes over time

Involuntary hospital admissions have not increased in all investigated countries, and no clear link exists between changes in involuntary admission rates and changes in numbers of hospital beds. Institutions as defined by bricks and mortar—that is, forensic hospital beds and places in supported housing—have shown significant rises.

The extent of the new process varies, with no clear pattern of differences between northern and southern Europe. We could speculate as to whether the increase in institutionalised care since 1990 has compensated for the loss of psychiatric beds in the three decades of deinstitutionalisation before that. However, within the same period of time more or less comprehensive services for community care have also been established to treat in the community patients with severe mental illness who, without these services, may well have been admitted to hospital.^{3–4} Research suggests that these developments have indeed embraced care for a number of patients with severe mental illness.⁹ Why health commissioners in six different countries have still decided to invest heavily in additional institutionalised care is therefore unclear. This is particularly striking with respect to expensive forensic beds, as no evidence exists to show that the number of homicides committed by mentally ill people in the community has risen in the process of deinstitutionalisation.^{10–13}

Reinstitutionalisation or trans-institutionalisation?

Most of the data are consistent with the assumption that deinstitutionalisation, the defining process of mental healthcare reforms since the 1950s, has come to an end. Although the number of psychiatric hospital beds has further decreased in five of the six studied countries since 1990, this was partly or more than compensated for by additional places in other forms of institutionalised care. This evidence indicates, therefore, that a degree of new institutionalisation does exist as an international phenomenon, despite wide differences in healthcare systems between the countries studied here. Whether this process should be described as reinstitutionalisation or only as trans-institutionalisation (that is,

What is already known on this topic

The bases for institutionalisation and deinstitutionalisation in mental health care remain poorly researched and understood

Isolated aspects of reinstitutionalisation have been reported, mainly for the United Kingdom

It has been argued that reinstitutionalisation reflects a new international pattern, but this is not based on systematic evidence

What this study adds

Reinstitutionalisation in the form of newly established forms of institutionalised mental health care has occurred in different European countries since 1990

The balance between further reduction of psychiatric hospital beds and new provision of institutionalised care varies between countries

The general prison population has increased in all the countries, and this may be linked to the processes of deinstitutionalisation and reinstitutionalisation

a mere shifting of placements from one structure to another) remains debatable. It might depend on the national balance between further reduction of hospital beds on the one hand, and newly established institutionalised care on the other. To clarify this, research is needed on the type of patients using each of the current designations (forensic, supported housing, psychiatric hospital, prison) and how many patients with severe mental illness are cared for outside of these defined institutions.

Potential explanations

Several potentially testable hypotheses exist as to why former deinstitutionalisation now tends to be compensated, or even over-compensated, for by reinstitutionalisation. The need for institutionalised care may have risen because of a greater frequency of illness, severity of illness, or both, possibly influenced by increasing use of illegal drugs. Another reason may be the loss of social support for mentally ill people in traditional families—for example, because of women taking professional roles instead of being domestic carers. Mental health care may have widened its remit and taken patients that it would not have considered as its clientele 20 years ago, such as patients with personality disorders, but no evidence exists that substantial numbers of these new patients have ended in supported housing and forensic beds. Furthermore, private providers may have successfully widened their share of the market and secured profitable funding for an increased supply of institutionalised care.⁸

The substantial increase in the general prison population, however, suggests that reinstitutionalisation in mental health care might not be due to specific factors of morbidity or healthcare delivery, but might rather be driven by a “zeitgeist” towards risk containment in 21st century European society. This pertains even though we do not know how the proportion of mentally ill prison-

ers among the prison population has changed over time. Whatever the case, the data provided here underline the need for more specific research into the phenomenon and causation of reinstitutionalisation. In addition, a professional and public debate is needed on the ethical basis for detaining and "institutionalising" patients with severe mental illness.

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Use of clomifene during early pregnancy and risk of hypospadias: population based case-control study

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Clomifene is widely used for inducing ovulation.¹ It is structurally related to diethylstilbestrol, which has been linked to vaginal and cervical clear cell adenocarcinoma in women exposed in utero. The adverse effect is less severe in sons, although links to testicular cancer and urogenital anomalies, such as epididymal cysts, have been reported.²⁻³ A recent study also found an increased risk of hypospadias in the sons of women exposed to diethylstilbestrol in utero.⁴ Clomifene has a half life of about five days, but its metabolites have been found in blood samples on day 22 of the menstrual cycle and in faeces up to six weeks after administration.⁵ The occurrence of hypospadias may be increasing. Little is known about the risk of hypospadias in boys born to women who have used clomifene to induce ovulation.

Methods and results

Our case-control study was done in the Danish counties of North Jutland, Aarhus, Viborg, and Ringkjøbing (population 1.6 million, with 65 383 male births in the study period: 1989 to 2002, North Jutland 34 859; 1996-2002, Aarhus 20 382; and 1998-2002, Viborg 4148 and Ringkjøbing 5 994).

We identified all cases of hypospadias that had a full prescription history in the period 1989-2003 from the Danish hospital discharge registry, which contains all discharges from hospitals in Denmark since 1977 and includes 10 digit personal identifiers, surgical procedures, and up to 20 discharge diagnoses classified according to ICD-8 (international classification of

diseases, eighth revision) until the end of 1993 and ICD-10 after 1993. The codes for hypospadias in ICD-8 are 752.20, 752.21, 752.22, 752.28, and 752.29; in ICD-10, the codes are Q54.0, Q54.1, Q54.2, Q54.3, Q54.4, Q54.8, and Q54.9.

We found a total of 319 cases of hypospadias (any time post partum) in the four counties. From the Danish birth registry, which contains information on all births in Denmark since 1 January 1973, we selected a control group of 10 records of male births without a diagnosis of hypospadias and with a full prescription history during the same period. We matched cases and controls for birth month, birth year, and county of residence of the child.

The Danish national health service reimburses part of patients' expenditure on many prescribed drugs, including clomifene. The four counties have pharmacies equipped with electronic systems that record information on the drug, dose, personal identification number, and date of dispensing of the drug. All data are transferred to a research database at Aarhus University Hospital. The data from the four counties are electronically available from 1 January 1989 (North Jutland), 1 January 1996 (Aarhus), and 1 January 1998 (Ringkjøbing and Viborg). We took data on all prescriptions for clomifene during the first trimester and 90 days before conception. To avoid confounding, we also took data about prescriptions for antidiabetic

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