

# Care needs of people with mental illness and aggression

Andrew Stevens, Pamela Gooder and Nicholas Drey

People with violent or dangerous behaviour represent a considerable health care burden. The health needs of this group have been considered a priority in recent years. Both health commissions and psychiatrists need to know the numbers of patients that they are responsible for and whether their needs are being met. The appropriateness of placement was used as the measure of need for this study.

People with threatening or violent behaviour present with a range of psychiatric disorders which pose a threat to themselves or others. Collectively they represent a considerable health care burden. This burden reflects both their own health care needs and the protection of society at large. The steps in measuring this need are to assess the prevalence of the violent behaviour population, and to compare the prevalent population with the appropriate care available (Stevens & Raftery, 1994). The key criterion for the appropriateness of care is agreed by consensus to be the provision of the minimum security required for the necessary health care to be provided (Department of Health, 1992). In recent years the Department of Health has recognised the need for this activity (National Health Service Management Executive 1992*a,b*, 1993*a,b*). Courtney *et al* (1992) revealed significant unmet needs for patients with challenging behaviour in the community requiring access to psychiatric services, and Lodge (1991) rued the decline of acceptable asylums for problem patients.

The care of people with threatening or violent behaviour is costly, and is often required for long periods. Health commissions can find themselves faced with a bill of at least £50 000 per patient per year (Wing, 1994). Although caring for these patients has always been expensive, the contracting process readily identifies the current costs especially as many are dealt with as extra contractual referrals.

## The study

A questionnaire setting out patient and facility criteria was developed, piloted and sent to all psychiatrists ( $n=111$ ) in the former Wessex region (population three million) as well as to

the three special hospitals. The questionnaire was also sent to purchasers of health care who have out-of-region placement contracts. Respondents were asked to complete an entry for each individual who came into the patient definition for the period 25–29 January 1993. Patient identification by initials and date of birth was included to allow the identification of double counting. Patient inclusion criteria are listed below.

- (a) Aged 17 years or over.
- (b) People with a Wessex address, or of unknown address whose offence was committed in Wessex, or people of an unknown address whose connection with Wessex is greater than for any other region, irrespective of whether they were being treated (or imprisoned) in Wessex at the time of the census.
- (c) Mentally disordered offenders or people with a challenging behaviour including all people:
  - (i) who have been identified and drawn into the penal system (prisons, remand, courts and police) but are in need of mental health care—except those for whom the need concerns principally therapy for drug and alcohol misuse.
  - (ii) who had a challenging behaviour as their principal mental health problem. Challenging behaviour in this instance means threatening or dangerous behaviour (to others), but does not include people with other problems who might need similar facilities but do not have threatening or violent behaviours. Other problems e.g. subjective symptoms (from phobias to hallucinations) and their associated behavioural problems, suicide and attempted suicide, socially embarrassing or unacceptable behaviours, slowness, lack of motivation of self-care and lack of overall insight and overall social disablement are only relevant if accompanied by threatening or violent behaviour.

- (iii) to whom the mentally disordered offender or challenging behaviour label is relevant to their need for appropriate facilities this week whether because of their offence, current behaviour or continued risk of dangerous behaviour, or very disturbed behaviour that is difficult to manage.
- (iv) whose principal presentation is mental illness and those whose principal presentation is learning disability should be included.

The psychiatrists were asked to give details of both current patients and those on waiting lists under their care, including those on remand or in prison who met the inclusion criteria. Purchasers were asked to give details of current patients, on waiting lists and each in-patient placed by extra-contractual referral (ECR) or placed out of the Wessex region whose psychiatrist put them in this category.

The current placement of each patient was identified (Appendix) and the respondent was asked for their assessment of whether the patient was currently best placed. Judgements of appropriateness of care were left to the individual practitioner, guided by the definition of facilities. In the case of special hospitals, appropriateness was identified by whether patients were cleared for discharge but were awaiting placement. For patients who were not thought to be best placed the respondents were asked for their opinion of the best placement.

### Findings

Responses were obtained from all six purchasers in the region and from 101 out of 111 psychiatrists in the region. Non-responders were almost entirely made up of psychiatrists whose main specialism was child or elderly mental health. Two of the three special hospitals responded. The number of missing cases from the third special

hospital is likely to have been low given the overlap between the responses from the other two special hospitals and the psychiatrists in the region. Where duplicate returns were made for an individual there was a high correlation of responses. If the responses varied, the response of the psychiatrist currently, or most recently responsible, for the patient's care was given precedence.

Altogether 306 patients with threatening or violent behaviour were identified with a primary diagnosis of psychiatric disorder, which is equivalent to a point prevalence of 10.2 per 100 000 population. People with a primary diagnosis of learning disability were also surveyed but excluded from the analysis because their needs are different from patients who present with mental illness. Of the 306 patients 46 were identified via the health commissions but 28 of these were simultaneously identified by psychiatrists.

Table 1 shows the location of patients across the different facilities at the time of the survey (the definition of the facilities is given in the Appendix). Within the 'others' category, five responses were uncoded and the remainder were in the facilities listed under 'others' in the Appendix.

Across the region 86 out of 306 (28%) patients with psychiatric disorder were considered not to be in the most suitable place for them. Table 2 gives the numbers and percentages in each facility who are not best placed and also shows the most appropriate placings for these 86 patients. The most appropriate placement for five of the 22 patients with best potential placement listed as 'other' was thought to be prison and for the remaining 17, no preferred placement was given.

The facilities with the largest proportions of inappropriate admissions were the acute admissions and the special hospitals. The biggest placement deficits were for regional medium

Table 1. Numbers of patients (with contracts and extra-contractual referrals) in each type of facility

Facility	Number of patients in facility within the region	Number of extra-contractual referrals	Total (%)
Special hospital	49	0	49 (16)
Regional medium secure unit <sup>1</sup>	41	9	50 (16)
Local semi-secure provision	16	0	16 (5)
Acute admission ward	41	6	47 (15)
Long-term local facility	42	2	44 (14)
Supported community provision	23	0	23 (8)
Independent living	29	0	29 (9)
Other	41	7	48 (16)
All	282	24	306 (99)

1. At the time of survey there were 28 places at Ravenswood hospital, but individuals were also located in the independent sector at Kneeworth.

Table 2. Numbers and percentages of patients in each facility who were misplaced and the best potential placements

Facility	Not in best placement		Best potential placement
	n	(% of total in placement)	
Special hospital	18	(37)	1
Regional medium secure unit	8	(16)	19
Local semi-secure provision	4	(25)	20
Acute admission ward	20	(43)	4
Long-term local facility	9	(20)	8
Supported community provision	0	(0)	11
Independent living	5	(17)	1
Other	22	(79)	22
Total	86	(28)	86

secure places, local semi-secure provision and supported community provision.

Figure 1 shows both the current placement of all 306 patients and the best potential placement of these patients. The bars on the left hand side of the chart represent the numbers currently located in each facility, divided into those who are correctly placed and those who are currently not best placed. The bars on the right hand side of the chart represent the numbers who would be in each facility if everyone was best placed. Both the special hospitals and the acute admissions wards are therefore seen to be over-used by these patients, principally because of a shortage of regional medium secure and local semi-secure and supported community places.

## Comment

### Prevalence

The prevalence of people with mental illness and aggression in Wessex was 10.2 per 100 000 population. When the 113 patients in the region with learning disability are included the prevalence becomes 14.0 per 100 000. By contrast a survey in Camberwell estimated a need for 13 per 100 000 places in secure units alone (Wykes *et al.*, 1982). A survey in Leeds estimated a need for 7.1 per 100 000 in secure units (O'Grady *et al.*, 1992). The prevalence within the equivalent places in this survey (special hospitals, regional medium secure units and local 'semi-secure' provision) was 3.8 per 100 000. Including people with learning disability, the prevalence was 4.7 per 100 000.

The relatively low prevalence in Wessex could relate to non-responders, underestimates by responders, the definition of the client group, or true differences in mental illness prevalence. All responders were followed up twice and the remainder were almost entirely child psychiatrists and psychiatrists whose main interest was the elderly, so it is unlikely that an upward correction for non-response would be justified. Individual responders may have underestimated their populations although this would be no more likely than in the Leeds and Camberwell Studies.

The exclusion of patients admitted for treatment of alcohol or drug misuse, (not excluded by O'Grady *et al.*, 1992 or Wykes *et al.*, 1982) may be relevant, but a more likely explanation is a true lower level of prevalence in a relatively affluent and less urban part of Britain. This would be borne-out by studies of prevalence rates and mental illness in general, both directly e.g. the Office of Population Censuses and Surveys survey of psychiatric morbidity in Britain finding 56% more neurotic disorder in Thames Regions than in Wessex (Meltzer *et al.*, 1995) and indirectly e.g. through Jarman Deprivation

Facility	Current placement		Optimal placement
Special hospital	31	18	1
Regional medium secure unit	42	8	19
Local semi-secure provision	12	4	20
Acute admissions ward	27	20	4
Long-term local facility	35	9	8
Supported community provision	23	0	11
Independent living	24	5	1
Other	26	22	22

Figure 1. Comparison of the numbers of people currently within each facility with the numbers that would be best placed in that facility (n=306). □, current correctly placed; □, current misplaced; (total population 3 million); ■, optimal placements.

Scores (for which Camberwell ranks fifth from bottom, Leeds East and West 45th and 52th, whereas the Wessex districts rank from 72nd (Southampton) to 166th (Winchester) (Wing, 1994)).

A further problem is that prisons were not directly surveyed. This had been ruled out in view of the illogic of surveying only local prisons and the difficulties of identifying a clear respondent on the mental health of inmates. Prisons were, however, part of the potential current placement of Wessex psychiatrists' case loads. Only a small minority (14) of patients were so identified. This difficulty does not make this study inconsistent with previous ones, but does imply the need for a large scale prison survey to complement these findings.

#### *Placement appropriateness*

This study found that, in the former Wessex region, while there was a clear mismatch of patients with their most appropriate placings, a majority of patients were appropriately placed. Some shortages of places, most marked in regional medium secure units, local 'semi-secure' provision, long-term local facilities and supported community provision were identified. Two points concerning the mismatch are of note: first, the facilities with most shortages are those specifically designed to cater for patients with challenging behaviour whereas the places being occupied by the patients who were not best placed notably included acute admission wards for which there are many uses and on which there is great pressure. Second, people tend to be placed in settings that are more secure (and therefore more expensive) than thought to be necessary. This goes against the recommendation of the Reed Committee that people should be kept under conditions of no greater security than is justified by the degree of danger that they present to themselves and to others (Department of Health, 1992).

Some of the mismatch could be solved by relocating patients to appropriate placements without changing the current distributions of facilities. By moving patients around, in theory at least, half (48 out of the 86 inappropriately placed) could have been matched to appropriate placings. The situation for the hypothetical remaining 38 patients is shown in Table 3. In addition the patients who are placed by out-of-region ECRs could be better off placed within the region if the appropriate facilities were available. None of the ECR patients were reported as not best placed which may reflect the involvement of non-psychiatrists in the response, but it is more likely to reflect the fact that once a patient has been sent on an ECR there is some discretion as to the type of facility to which they are referred.

A caveat to the calculations, is that the assessment of correct placing in the survey was necessarily subjective. However, the allocative mechanism is also judgemental and so the information extracted should be relevant to service planners. Therefore, the mismatch of people to facilities suggests that there are obstacles to the movement between facilities in response to changing needs. This lack of ability to respond to changing needs has been identified by others (Courtney *et al*, 1992).

One of the obstacles to moving patients between facilities is the lack of cross facility working. Individual psychiatrists only have responsibility for a narrow range of facilities. Increasing the flow between facilities requires someone to have information on the changing requirements of patients and the availability of places in a wider range of facilities. More cross facility working should be encouraged with clinicians sharing information on the needs of their patients for more appropriate facilities. As the needs of individuals and the level of security that they require change over time, the services should be sufficiently flexible and interlinked to respond to the changing care needs.

Table 3. The needs of the 38 patients who could not be matched to appropriate placements after moving patients between facilities

Facility	Current placement - not best placed	Best potential placement
Special hospital	17	
Regional medium secure unit		11
Local semi-secure provision		16
Acute admission ward	16	
Long-term local facility	1	
Supported community provision		11
Independent living	4	
Other		
All	38	38

As regards the overall shortage, the Hospital Advisory Group of the Reed Committee estimated that the number of medium secure beds should be increased to at least 1500 nationally. In Wessex, investment at the medium secure unit at Knowle has now provided additional beds which would help to provide appropriate placements for people who do not need the facilities of a special hospital. In the short-term at least the strain on the system posed by a very difficult client group, although important, can be considered finite.

## Appendix 1. Definition of facilities

### *Special hospital*

Ashworth, Rampton and Broadmoor Hospitals; these hospitals provide maximum levels of security for detained patients in England and Wales

### *Regional medium secure unit*

Wessex (Ravenswood) and other NHS regional units of similar type, as well as equivalent independent facilities (e.g. Kneesworth, Stockton Hall, etc.) including those taking individuals over 17 years of age. Regional secure units provide medium level of security at a regional or sub-regional basis and have strict admission policies, taking patients who will need care at this level of security for no longer than 18 months.

### *Local 'semi-secure' provision*

Not established in many districts, but may be independent from the acute admission wards and may have length of stay as several weeks/months. (The security level is not equivalent to 'medium-secure care' and the staffing is not specialised forensic psychiatry (consultants and nursing staff)). The 'security' may be mostly increased staffing provision with some physical security. This low-secure provision, usually organised at district health authority level, offers care in conditions more secure than an open psychiatric ward, and may take the form of a special care unit or a locked ward.

### *Acute admission ward (including attached intensive care provision)*

Either in an institutional setting or in a new-build facility, and also including intensive care provision which is attached to the acute admission ward that can manage short-term disturbed behaviour, i.e. there is no transfer to another

clinical team or a more distant facility. The main element of 'security' is likely to be in increased staffing levels.

### *Long-term local facility home (24 hour staffed)*

This provision is for individuals who require long-term nursing support and who, because of their 'challenging' behaviour, require increased staffing levels and possibly an element of physical security. The emphasis being upon the long-term need for this care.

### *Supported community provision*

This provision emphasises vulnerable clients who require a significant element of support, but who do not necessarily require high staffing levels or physical security.

### *Independent living*

'Own' home and 'group' homes where there is no continuous staffing and no elements of physical security.

### *Other*

The location of individuals was either not given or was not within the above facilities. The other locations are: probation type hostel, locked facility, residential special school, behavioural unit, rehabilitation ward, parental home, private facility, rest home, on home leave and homeless. This category also included a few individuals, identified by psychiatrists, as being in prison.

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- \*Andrew Stevens, Senior Lecturer in Public Health Medicine, Pamela Gooder, Senior Registrar in Public Health Medicine, and Nicholas Drey, Research Fellow in Public Health Medicine, Wessex Institute for Health Research and Development, Dawn House, Highcroft, Romsey Road, Winchester SO22 5DH**