

## Randomised controlled trial of teaching general practitioners to carry out structured assessments of their long term mentally ill patients

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### Abstract

**Objective**—To assess the impact of teaching general practitioners to carry out structured assessments of their long term mentally ill patients.

**Design**—Randomised controlled trial.

**Setting**—Sixteen group general practices in South Thames (west) region.

**Subjects**—440 adults disabled by long term mental illness.

**Interventions**—Patients were identified by using practice data with help from local psychiatric and social services. In eight practices the practitioners were taught a structured assessment schedule to use with patients every six months for two years.

**Main outcome measures**—Changes in drug treatments, referrals, consultation rates, and recording of preventive health data in the two years after intervention.

**Results**—Follow up data were available on 373 patients (84.7%). At least one structured assessment was recorded for 127 patients in the intervention group but only 29 had four assessments recorded. Participating practitioners considered the structured assessment to be time consuming and reported that it did not often lead directly to changes in treatment or referrals. Changes in treatment with neuroleptic drugs and referrals to community psychiatric nurses, however, were significantly more frequent in the intervention group (differences for intervention group minus control group adjusted for activity in two years before intervention were 14.3% (95% confidence interval 4.3% to 24.33%;  $P < 0.01$ ) for neuroleptic drugs and 13.3% (2.0% to 24.6%;  $P < 0.05$ ) for referrals). There were no significant differences in psychiatric admissions, use of the Mental Health Act, drug overdoses, prescriptions, referrals or admissions for physical problems, consultation rates, continuity of care, or recording of preventive data.

**Conclusions**—Teaching general practitioners about the problems of long term mentally ill patients may increase their involvement in patients' psychiatric care. Regular structured assessments do not seem feasible in routine surgery appointments. More training for general practitioners and increased resources such as more nurse time may be necessary if improvements in care of long term mentally ill patients in general practice are to be generalised.

### Introduction

More than 100 000 long term mentally ill people in England are now living in the community.<sup>1</sup> There is serious concern that they may not receive the continuing care they need.<sup>2</sup>

A quarter or more of such patients have no contact with specialists and depend on general practitioners for medical care.<sup>3-6</sup> Very few practices, however, have

policies for this care,<sup>7</sup> and general practitioners do not review the care of chronic mental illnesses as often as they do chronic physical illnesses.<sup>8</sup> Repeat prescriptions for psychotropic drugs are often given without the doctor seeing the patient,<sup>9</sup> and a prescription may not be reviewed for years.<sup>10</sup> Often general practitioners only treat physical problems and issue sickness certificates.<sup>3,6</sup>

To increase their involvement general practitioners may have to be more proactive. To detect acute mental problems doctors are taught to use open ended questions and allow the patient to set the agenda.<sup>11</sup> This approach, however, may be counterproductive with long term mentally ill patients, many of whom suffer from apathy and poor insight<sup>12</sup> and cannot be relied on to volunteer problems. Observation of mental health professionals suggests that important problems can be missed unless a structured approach is used in the assessment of such patients.<sup>13</sup>

We assessed the impact of teaching general practitioners to carry out structured assessments of their long term mentally ill patients. We hypothesised that this would lead to increased activity among general practitioners in terms of consultation rates, the continuity of care, changes of drug treatments, referrals to other agencies, and the recording of preventive health data.

Previous studies have included only patients in long term contact with psychiatric services.<sup>14-16</sup> These samples may be unrepresentative<sup>6</sup> or include considerable numbers who are not clinically disabled,<sup>17</sup> despite increasing awareness that the need for support is related more to disability than to diagnosis.<sup>18,19</sup> Therefore we defined as long term mentally ill those with enduring disability owing to impaired social behaviour associated with mental illness rather than selecting a specific diagnostic group.

### Methods

The recruitment of practices and identification of long term mentally ill patients have been described in detail previously.<sup>6</sup> Data were obtained about practice size, training status, and records systems.<sup>6</sup>

Long term mentally ill patients were identified from data on repeat prescriptions, diagnostic indices when possible, and records of appointments and visits. In addition, local psychiatric and social service teams were asked to identify long term mentally ill patients who they knew were registered with participating practices. Patients had to match the study definition for inclusion (appendix 1).

Minimisation was used to balance intervention and control groups in terms of the number of partners, the list size, and the number of long term mentally ill patients in each practice. An independent statistician assigned practices to intervention and control groups in random order, one at a time, balancing the groups with respect to these three factors.

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All intervention group practitioners were offered two sessions of two hours each of teaching given by TB and TK. This was done in small groups either at St George's Medical School for practices nearby or on site in the more distant practices. By using written and videotaped material the first session highlighted the problems of long term mentally ill people and the principle of structured assessments. In the second session the doctors reported back on their experience in using the schedule (appendix 2) and TB outlined possible interventions for problems found.

Schedule cards for assessment were placed in the record envelopes of identified patients in the intervention practices in June 1992. The practitioners were asked to use the schedule with each patient four times, roughly six monthly. The practitioners in the control group received no teaching and were asked to try to ensure that their long term mentally ill patients were seen by them every six months. It was left to each of the 16 practices to decide how they should organise reviews of patients.

To determine characteristics of patients, a random sample from all 16 practices was interviewed by TK between March 1993 and September 1994. Patients were selected in groups of 20 until at least 100 had been interviewed. Patients' consent was sought via their general practitioners, on practice headed paper, with a reminder after four weeks. Instruments used included the present state examination<sup>20</sup> for psychiatric symptoms and the social role performance schedule<sup>21</sup> for social disability.

Indications of patients' contacts with consultant psychiatrists, community psychiatric nurses, and social workers at the time the intervention was introduced were noted from correspondence received and filed in the practice records. Where there was neither documented contact during the preceding 12 months nor a clear indication of continuing appointments the patient was recorded as no longer in contact.

To assess the impact of the intervention, written and computerised data from the practice were gathered (by TK) for the two years before the intervention and for the two years after. These included the number of doctor-patient encounters; the number of records which seemed to be in the same doctor's handwriting (as a measure of continuity of care); changes in prescriptions for psychotropic drugs (recorded both in the practice records and in letters received from psychiatrists); prescriptions for physical problems (divided into acute, for less than 28 days' supply, and chronic); referrals (to psychiatrists, other consultants, community psychiatric nurses, social services, and other agencies); admissions (psychiatric inpatient and day hospital admissions, non-psychiatric admissions, and admissions for drug overdoses); and preventive health data recorded in the previous five years (smoking habit, alcohol consumption, blood pressure, weight, serum cholesterol concentration, cervical cytology (either carried out or offered for women aged 20 to 64), and contraception (given or offered for women aged 20 to 44)).

Data were analysed with the statistical package for social sciences (SPSS-PC+). The results were analysed by practice. For each item of activity a cross sectional comparison was made between the intervention and control practices for the two year period after the intervention was introduced. The significance of differences between the two groups in any one item of activity was assessed by using analysis of covariance, including the level of activity for that item in the two years before the intervention as a covariate. Assumptions of normality were checked with a normal probability plot of the residuals. The results were expressed as the difference between the two groups for any particular item of activity, adjusted for differences

in activity before intervention together with 95% confidence intervals.

Within the intervention group correlation coefficients were calculated to assess relations between the number of structured assessments carried out and recorded levels of activity to determine whether changes found were related to use of the assessment schedule.

Within the control group for each item of activity a longitudinal comparison was made between the two years before the identification of patients and the two years after, to assess whether the act of identification was associated with subsequent changes in activity in the absence of teaching about the problems of long term mentally ill people and the use of structured assessments.

At the end of the study the general practitioners in the intervention group were sent a questionnaire to determine their views on the acceptability and usefulness of the assessment schedule. All 16 practices were asked what arrangements if any had been introduced to ensure patients were reviewed six monthly.

## Results

Sixteen practices out of 110 that were approached agreed to participate. They were all computerised group practices. Twelve were training practices, and all 16 kept copies of letters received in the patients' records.

Overall 440 long term mentally ill patients were identified in the 16 practices, 216 in the intervention practices and 224 in the control practices. Of these, 262 (59.5%) were women, with a mean age of 47.4 years. In their practice medical records, 253 patients (57.5%) had a recorded diagnosis of a psychotic disorder and 187 (42.5%) a non-psychotic diagnosis. The length of illness ranged from two to 46 (mean 18) years.<sup>6</sup> There were no significant differences between the intervention and control patients in age, sex, type of diagnosis, or length of illness.

Of the 35 general practitioners in the intervention group practices, 34 attended the first teaching session and 29 attended the second.

### INTERVIEW DATA

Of 200 patients eventually selected for possible interview, three had died and 29 had moved. In four cases the general practitioner advised that they should not be approached. Of the remainder, 48 declined to be interviewed and 15 failed to reply to both letters. Interviews were therefore carried out with 101 of 164 eligible patients, a response rate of 62%. There were no significant differences between responders and non-responders in age (mean 45.9 v 45.1 years respectively), sex (54 (53.5%) women v 34 (53.9%)), or recorded diagnosis (52 (51.4%) psychotic v 39 (61.9%)).

On the present state examination ratings 33 patients had total symptom scores of 0 to 4 (below the index of definition for a psychiatric case), 17 had threshold scores of 5, and 51 had scores of 6 or more. The ratings on the social role performance schedule indicated that six patients had no serious problems, 24 were partially disabled, and 71 were totally disabled in at least one area of performance.

### DATA FROM MEDICAL RECORDS IN GENERAL PRACTICE

After two years of the total of 440 patients, nine (2.0%) had died and 56 (12.7%) had moved. Two patients' records could not be located. Follow up data was therefore available on 373 patients (84.7%), 184 in the intervention practices and 189 in the controls.

Two years after the intervention, cards for structured assessment were retrieved from the records of 171 of the patients from the intervention practices;

TABLE I—Details of treatment with psychotropic drugs and referrals for psychosocial problems before and after intervention. Figures are numbers (mean percentage within practices) of long term mentally ill patients in two years before and two years after intervention

Detail	Control group (189 patients)		Intervention group (184 patients)		Difference (%) after intervention (intervention minus control)	Difference (%) adjusted for activity in two years before intervention (95% confidence intervals)
	Before	After	Before	After		
Changes of neuroleptics	61 (33.6)	47 (26.1)	61 (32.0)	75 (39.4)	13.3	14.3 (4.3 to 24.3)**
Changes of antidepressants	62 (34.0)	51 (27.8)	55 (29.2)	62 (34.7)	6.9	8.7 (-2.0 to 19.4)
Changes in other psychotropic drugs	60 (30.1)	43 (23.2)	57 (27.4)	70 (37.8)	14.6	16.0 (-3.4 to 35.5)
Any change in psychiatric drug treatment or dosage	113 (58.5)	95 (51.4)	104 (54.2)	123 (66.9)	15.5	16.6 (2.2 to 31.0)*
Referrals to consultant psychiatrists	41 (23.7)	28 (15.1)	26 (13.7)	38 (21.7)	6.6	11.6 (-4.9 to 28.1)
Referrals to community psychiatric nurses	21 (14.7)	11 (5.4)	12 (5.4)	30 (15.9)	10.5	13.3 (2.0 to 24.6)*
Referrals to social services, housing or employment agencies	15 (7.7)	5 (2.7)	6 (2.3)	10 (5.4)	2.7	3.6 (-2.8 to 9.9)
Any type of referral for psychosocial problems	64 (36.5)	39 (20.9)	39 (19.2)	68 (38.3)	17.4	26.1 (7.9 to 44.3)*

\*P<0.05. \*\*P<0.01

they could not be found for the other 13. Of these 171, one or more structured assessment was recorded for 127, two or more were recorded for 80, three or four for 50, and four for 29 patients.

At the time of the intervention, 100 of the control group patients (a mean of 55.6% of patients within practices) were already in contact with consultant psychiatrists, 61 (mean 34.4% within practices) were in contact with community psychiatric nurses, and 17 (mean 9.9%) were in contact with social services compared with 84 (43.8%), 61 (32.0), and 9 (5.8%) of the intervention group patients, respectively. None of these differences was significant.

Table I shows recorded changes of treatment with psychiatric drugs and referrals in the two years before and after the intervention. Changes in prescriptions for neuroleptic drugs and referrals to community psychiatric nurses were significantly more common in the intervention group practices after the intervention. Changes in other treatments with psychiatric drugs and referrals all tended to be more common in the intervention group, but these differences were not significant.

No significant differences were found between intervention and control groups in the two years after intervention in recorded admissions to psychiatric hospitals (32 patients in the intervention practices (mean proportion of 17.3% within each practice) compared with 28 in the controls (mean 14.8% within each practice)); admissions under the Mental Health Act (12 (6.2%) v 10 (5.5%), respectively); admissions to psychiatric day hospitals (12 (6.1%) v 4 (1.9%)); admissions for drug overdoses (1 (0.5%) v 4 (2.3%)); referrals for physical problems (69 (37.3%) v 58 (30.6%)); admissions for physical problems (26 (14.2%) v 31 (16.1%)); mean number of practice consultations in two years (13.8 v 17.1); mean number

(and proportion) of consultations in the same handwriting (11.1 (81%) v 12.1 (71%)); or mean number of drug treatments for physical problems in two years, either acute (2.27 v 2.65) or chronic (1.22 v 1.58).

There were also no significant differences between intervention and control groups in the recording of relevant preventive data within each practice for the previous five years, including smoking habit (recorded in 149 intervention group patients (a mean of 81.1% within practices) v 146 (mean 76.5%) among the controls), alcohol consumption (131 (71.2%) v 134 (71.1%)), blood pressure (158 (86.2%) v 158 (84.7%)), weight (140 (76.2%) v 146 (77.8%)), serum cholesterol concentration (31 (17.7%) v 34 (18.1%)), cervical cytology (81 (89.9%) of 91 eligible patients v 89 (92.5%) of 98), and contraception (30 (83.5%) of 41 v 18 (58.9%) of 35).

Within the intervention group there were no significant correlations between the proportions of patients who received structured assessments and the proportions whose treatment with psychiatric drugs was changed or who were referred.

Within the control group there were no significant differences in activity between the two years before the identification of long term mentally ill patients and the two years after for consultation rates, continuity of care, changes in drug treatments, referrals or admissions for physical problems, or the recording of cholesterol concentration, cervical cytology, and contraception. Table I shows that there was, however, a significant decrease in referrals to consultant psychiatrists in the control group (P=0.035), non-significant decreases in referrals to community psychiatric nurses and social agencies, and non-significant decreases in changes in treatment with psychotropic drugs. The only significant increases in activity within the control group over time were in levels of recording of smoking habit, alcohol consumption, blood pressure, and weight, of between 10% and 15% from the beginning to the end of the two years of the intervention period. There were similar increases in levels of recording of these preventive data in the intervention group during this time.

#### GENERAL PRACTITIONERS' VIEWS OF THE STRUCTURED ASSESSMENT

Of the 35 original general practitioners in the intervention practices one retired, one emigrated, and one died during the study period. Of the remaining 32, 31 had used the structured assessment once with at least half of their long term mentally ill patients (the other practitioner had no such patients on her list). Of these 31, 27 reported that they had always or usually applied the structured assessment schedule opportunistically, when patients happened to consult. Five had written to patients, and five had telephoned to ask them to attend for review. Five had visited patients who had failed to attend.

Table II shows the responses of these 31 doctors to

TABLE II—General practitioners' views on acceptability and usefulness of structured interview

Statement	No of general practitioners (out of 31) agreeing with statement		
	Often	Sometimes	Never
Structured interview did not seem worth doing	7	9	15
There was not enough time in the consultation to carry out structured interview	4	10	17
Patients declined to answer structured interview questions	0	4	26
Doctor felt uncomfortable using structured interview	1	7	23
Doctor-patient relationship seemed to benefit from use of structured interview	4	14	9
Doctor-patient relationship seemed to be harmed by use of structured interview	0	2	23
New psychological problems were discovered	1	14	16
New social problems were discovered	0	15	16
New physical problems were discovered	0	18	13
Treatment with psychotropic drugs was changed	0	8	23
Other types of drug treatment were changed	0	13	18
Referrals to consultant psychiatrists resulted	0	5	26
Referrals to community psychiatric nurses resulted	0	4	27
Referrals to social services resulted	0	2	29
Referrals to other specialists resulted	0	2	29
Crises in patient's care were averted	0	4	21

statements about the acceptability and usefulness of the assessment schedule. While most considered that the assessment was easy to use and acceptable to patients, over half considered that sometimes or often there was not enough time in the consultation to carry it out; nearly all considered that the assessment had not led directly to changes in treatment or referrals.

Of the 35 control group practitioners, two retired, one was absent due to sickness, and two failed to return questionnaires despite three reminders. Of the 30 responders, eight said that they had sometimes written to their long term mentally ill patients asking them to attend for review. The remainder reported that they assumed that their patients were frequent attenders and would be seen at least six monthly without any recall.

## Discussion

In some ways these practices were unrepresentative. The practitioners had to do extra work to set up registers of their long term mentally ill patients and to carry out the structured assessments. They did not include any singlehanded practices nor any in the most deprived inner city areas, which may have higher caseloads of such patients.<sup>22</sup> They were computerised, were mostly training practices, and had partners interested in psychiatry.<sup>6</sup> Nearly all of their long term mentally ill patients were already being seen frequently, and prescriptions for physical problems and relevant preventive health data were recorded in a high proportion of cases.

The group of patients was heterogeneous in terms of psychiatric diagnosis,<sup>6</sup> defined as it was in terms of social disability, but the data from the present state examination and social role performance schedule allowed comparison with other studies of diagnostically heterogeneous psychiatric patients. Of 101 patients interviewed, 68 (67.3%) had symptoms at or above the index of definition threshold for a psychiatric case on the present state examination, and 71 (70.3%) were totally disabled in at least one area of the social role performance schedule. This may be compared with levels of 51.5% and 89.3%, respectively, among Netherne Hospital long stay patients,<sup>23</sup> and levels of 87.5% and 37.8%, respectively, among psychiatric outpatients in Camberwell.<sup>24,25</sup> Therefore this group's symptoms and disabilities were comparable to those of patients in long term contact with psychiatric services.

Changes in treatment with psychiatric drugs, especially neuroleptic drugs, and referrals for psychosocial problems, especially to community psychiatric nurses, increased in the intervention group compared with the controls. Changes in these measures of the process of care suggest that involvement of general practitioners in the psychiatric care of long term mentally ill patients can be increased, even in already well organised practices. We have no data on outcome in terms of patients' levels of symptoms or social functioning. No significant effects were observed on psychiatric inpatient or day hospital admissions, use of the Mental Health Act, or drug overdoses. The small sample size, however, gave the study limited power, and clinically significant differences in these less common events may have been missed.

### EFFECT ON PRIMARY CARE

Our findings do not demonstrate any effects of the intervention on the non-psychiatric primary care of the patients, including consultation rates, continuity of care, the recording of preventive health data, treatment with non-psychiatric drugs, and non-psychiatric referrals and admissions. These activities, however, were already high among these practices, and

there may have been limited scope for increases.

Most participating doctors found the structured assessment easy to use, acceptable to patients, and possibly beneficial to the doctor-patient relationship. About half, however, thought that it was sometimes too time consuming for routine consultations; most did not consider that it led directly to changes in treatment or referrals, and they did not repeat the assessments in most cases. The lack of correlation between the number of assessments recorded and changes in drug treatments and referrals was consistent with the perceived lack of usefulness of the schedule. Therefore the differences found were probably due to some other aspect of the intervention.

General practitioners in both groups may have become more aware of their long term mentally ill patients through setting up case registers. We attempted to reduce differences and to control for the increased awareness among the intervention group practitioners by asking the control group doctors to see their long term mentally ill patients six monthly. Most doctors in the control group did not introduce recall procedures, however, assuming their patients were frequent attenders. Most doctors in the intervention group were given prompt lists by their practice managers, so their awareness of patients was probably higher. The structured assessment cards in patients' records would have also reminded the intervention doctors of the study.

### CHANGING BEHAVIOUR

The lack of increase in nearly every item of activity in the control group during the two years after the identification of patients suggests that simply going into practices and identifying long term mentally ill patients does not by itself lead to increased involvement of general practitioners in their care. It is interesting to note that the differences found in the control practices were in the direction of decreased referrals, particularly to consultant psychiatrists, and decreased changes in treatment. This may have been because the control practices had been more active in the two years before the intervention and so more of their long term mentally ill patients were already in contact with specialists. Therefore there was less scope for further referrals and subsequent changes of treatment in the control practices. The increases in recording of smoking habit, alcohol consumption, blood pressure, and weight in both the control and intervention group practices were consistent with the introduction in 1992 of target payments for health promotion by general practitioners<sup>26</sup> and may not have been a consequence of this study. To assess the impact of simply identifying long term mentally ill patients in the absence of teaching about the structured assessment would have required comparison with a third group of practices in which the practitioners were not given lists of their patients, to control for secular changes over time.

The teaching given to the doctors in the intervention group may by itself have led to increased activity, even in cases when the doctor did not carry out a structured assessment. Although we did not assess knowledge or confidence in any systematic way, it seemed during the teaching that many of the doctors became more confident in managing their long term mentally ill patients.

Change in behaviour after teaching is consistent with previous research. Rutz *et al* found that teaching Swedish general practitioners about depression had significant effects on their drug treatment and referrals.<sup>27</sup> In the United States one evening session of teaching about affective disorders increased diagnostic accuracy and recommendations for treatment among primary care physicians, at least for case vignettes.<sup>28</sup>

## Key messages

- Many long term mentally ill patients lose contact with psychiatric services and depend on general practitioners for medical care
- General practitioners do not review chronic mental illnesses as often as they do chronic physical illnesses
- Teaching general practitioners to carry out structured assessments of their long term mentally ill patients was associated with increases in changes of treatment and referrals
- This increased activity may have resulted from an increased awareness of the patients or increased knowledge about their problems rather than being a direct result of the structured assessments
- General practitioners need more training in the management of long term mentally ill patients

Our results suggest it is possible to increase the involvement of general practitioners in the care of long term mentally ill people in the community, at least in practices which are well organised with motivated partners interested in psychiatry. Only a minority of general practitioners have any formal postgraduate experience in psychiatry, however,<sup>29</sup> and there are many other groups of patients in need of their time. Structured assessments are time consuming, and this study suggests they are not generally feasible in routine surgery appointments. Special sessions may be necessary to assess patients, perhaps with help from community psychiatric nurses or practice nurses, similar to the clinics for asthma and diabetes which are now widespread in general practice. If the contribution of general practice to the psychiatric care of long term mentally ill people is to be increased and improved in a more generalised way then increased training will be necessary, together with increased resources such as more nurse time.

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## Appendix 1

### Definition of a long term mentally ill patient

One who for two years or more has been disabled by impaired social behaviour as a consequence of mental illness.

Disability is the defining criterion; the patient is unable to fulfil any one of four roles:

- holding down a job
- self care and personal hygiene
- performing necessary domestic chores
- participating in recreational activities.

The disability must be due to any one of four types of impairment of social behaviour:

- withdrawal and inactivity
- responses to hallucinations or delusions
- bizarre or embarrassing behaviour
- violence towards others or self.

The diagnosis may be one of the psychoses; a severe and chronic non-psychotic disorder, including depression, anxiety, and phobic disorders; obsessional neurosis; severe personality disorder; eating disorder; alcohol or drug misuse; or a mental illness which has not been given a specific label.

### Criteria for exclusion

Dementia or other organic brain disorder. Learning disability (mental handicap). Patients under 16 or over 65 years old.

## Appendix 2

### Structured assessment

#### QUESTIONS

I have a set of questions to ask you. I am interested in changes in how you have been since we last met.

#### Anxiety

Have there been times lately when you have felt very anxious or frightened or tense? (More than before?)

### Depression

Have there been times lately when you have been very depressed or sad or tearful?

### Delusions

Have you had the feeling lately that people are talking about you or plotting about you or trying to hurt you?

Is there anything special about you that would make anyone want to do that?

### Hallucinations

Have there been times lately when you have heard noises or voices or seen strange things when no one else was about and there was nothing else to explain it?

### Physical symptoms

How have you been feeling physically?

Have there been times lately when you have had trouble sleeping?

Have you had any pains anywhere lately?

Have you developed any lumps anywhere?

Have you been bleeding from anywhere lately?

### Daily occupation

Do you have somewhere that you go out to most days?

### Social support

Is there anyone that you can really count on for help in a crisis?

Is there anyone who really counts on you?

Is there anything else I can do for you?

### OBSERVATIONS

#### Bizarre behaviour

Postures, grimaces, flippant remarks, loss of social restraint.

#### Slowness and underactivity

Sits abnormally still, moves very slowly, says very little.

### Hostility

Irritable, verbally or physically aggressive.

### Self neglect

Clothes, hygiene, nutritional state.

### Incoherence of speech

It is difficult to make sense of what the patient says.

### Side effects of drugs

Tremor, rigidity, orofacial dyskinesia, akathisia.

## PATIENT CODE NUMBER

Tick box(es) to indicate problem(s) found

	1	2	3	4
Date				
No problems found				
Anxiety				
Depression				
Delusions				
Hallucinations				
Physical symptoms				
Daily occupation				
Social support				
Bizarre behaviour				
Slowness/underactivity				
Hostility				
Self neglect				
Incoherent speech				
Side effects of drugs				

## WORDS TO THE WISE

### Byzantine connections

*Faecolith* and *coprolite* are a fine Latin and Greek pairing. Faecoliths, of course, are those nasty, stony faecal concretions which are sometimes accused of causing appendicitis. Coprolites, the Greek equivalent, are another kind of faecal stones: the fossilised faeces of long dead animals, from which much can be learnt about the ecology of bygone ages. Both the *-lith* and *-lite* endings derive from Greek *lithos*, a stone, so that *faecolith* is one of the Latin and Greek hybrids to which Henry Fowler referred when he said, "... to create them is a grave misdemeanour."

*Faeces*, of which the useful singular is *faex*, is not the original Latin term. The Romans referred to *stercus*, which is still with us in *stercoral* ulceration, and used the word *faeces* to indicate the dregs left in their wine cups. It was with this meaning that the word first entered English, but the new usage gradually replaced the old during the course of the 18th century, and you can well imagine the fulminations of the linguistic purists of the time. *Faecula*, the diminutive of *faex*, has now taken over the job of designating wine sediment.

Greek *kopros* gives us many useful words, including *coprolalia* (obscene utterances) and *coprophagy*. The latter, considered to be a sign of psychiatric ill health in humans, is an unfortunate fact of life for the poor rabbit. Essential vitamin B-1 is produced by bacteria in the rabbit's caecum, and the creature is then obliged to reintroduce the excreted material to its small bowel for absorption. This it does in the privacy of its burrow, at dead of night.

*Coproporphyrin*, like the other porphyrins, takes its name from the Greek *porphyros*, purple, because of the bright reddish purple colour of these substances when crystallised. The colour to which the Greeks referred was a redder shade than our present day purple; this is evident in the rosy hue of the stone they named *porphyry*. The ancient coastal city of Tyre gained much of its livelihood from the manufacture of Tyrian purple, a dyestuff produced from the shellfish *porphyra*: the purple whelk. In the drab days before the advent of aniline dyes its crimson coloration was much prized and soon became the prerogative of kings and Roman magistrates. The phrase "the purple" later became synonymous with royalty and nobility. Which brings us, by devious routes, to the Byzantine connections: two Byzantine emperors, in fact.

Constantine VII was the son of Leo VI and his fourth wife, Zoe. This fourth marriage was vigorously opposed by the local patriarchs, jeopardising the legal succession to the throne of any children born to Zoe. Papal dispensation was applied for and eventually arrived when Constantine was 18 months old. He was triumphantly pronounced to be Constantine *Porphyrogenitus*, "born in the purple," a ringing title by which he is still known today.

Less fortunate was his predecessor and namesake, Constantine V, who was unflatteringly known (even during his lifetime) as Constantine *Copronymus*, apparently because of a trifling accident in the baptismal font.—GRANT HUTCHISON is a consultant anaesthetist in Dundee