# Self-assessment of clinical competence by general practitioner trainees before and after a six-month psychiatric placement

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*SUMMARY*

***Background.*** *General practitioners (GPs) are responsible for managing the majority of mental health problems. There is evidence that the recognition and management of mental disorders could be improved. Vocational training schemes including a placement in psychiatry should be a prime opportunity to develop the requisite skills.*

***Aim.*** *To determine whether GP trainees thought that a six-month psychiatric placement had improved their clinical competence.*

***Method.*** *Questionnaires were sent to 18 junior doctors in the south-west region entering a senior house officer placement in psychiatry. Trainees rated their perceived competency in 20 skill areas at the beginning and at the end of six months. Comparisons between matched trainees were made using ranking techniques.*

***Results.*** *There was a statistically significant improvement (P<0.05) in perceived efficacy for matched trainees in 19 of the 20 areas of clinical competency appraised. The exception was in the confidence to identify different types of eating disorders. On completion of training, ability to diagnose depression, take a psychiatric history, and examine mental state were ranked most highly. However, skill levels in dealing with problems such as prescribing in acute psychosis and managing psychiatric emergencies were generally ranked above those dealing with neurotic and psychological problems. Most trainees indicated a favourable impression of their training experience.*

***Conclusions.*** *Clinical competency appeared to improve in all but one of the areas appraised. However, skills were ranked more highly in dealing with hospital-based problems than those likely to be encountered in primary care. This may have implications for the focus of psychiatric training currently received.*

*Keywords: clinical competence; psychiatric assessment; mental health.*

## Introduction

THE joint campaign of the Royal Colleges of Psychiatrists and General Practitioners to defeat depression[1] emphasized the need for heightened awareness among family doctors of mental illness. The *Health of the Nation* document[2] targeted mental illness as one of its five main areas of focus. General practitioners (GPs) are under increasing pressure to develop their level of competence in the management of psychiatric problems.

General practitioners deal with the bulk of psychiatric morbidity.[3] Goldberg and Huxley[4] identified annual prevalence of psychiatric morbidity among community samples of around 260 to 315 per 1000, but found that it was detected in only 100 out of 230 consulting GP attenders. A recent survey of inner-city GPs[5] highlighted a broad range of mental health topics in which they felt they would like to receive further training. The skills of GPs in detecting mental illness could apparently be significantly improved. The joint statement on general practice vocational training in psychiatry[6] outlined recommendations for the training and experience that general practice trainees should receive. However, Gask,[7] commenting on training for GPs in psychiatry, noted that, while senior house officer (SHO) posts in psychiatry are an option in most training schemes, they do not necessarily prepare the doctor for their future work in primary care.

This survey aimed to test whether GP trainees' self-assessment of their own clinical competence was improved by a six-month psychiatric placement.

## Method

The surveys targeted all GP trainees working in psychiatric placements in the south-west region at the start of a six-month placement (in February 1996) and then just before completion. Permission was granted by supervising psychiatric tutors, who identified appropriate trainees. Postal questionnaires included basic demographic and professional data. Responders were asked to give their names, so that those questionnaires completed before and after training could be matched, but were assured of anonymity.

Attitudes to trainees' own level of competence in psychiatry were measured using a 20-item questionnaire, modified by the author (available on request), from an instrument developed by Purcell *et al.*[8] Items covered basic clinical skills such as the ability to take a psychiatric history, the management of neurotic and psychotic conditions, and appreciation of more advanced topics. Responses were made on a five-point interval scale ranging from no knowledge, skill or competence (scoring one) to complete confidence in the area (scoring five). In the post-training questionnaire, trainees were also asked to rate on a five-point scale how far their training had prepared them for the management of mental illness in primary care, and they were given the opportunity to make other comments regarding their posts.

## Results

Questionnaires were sent to 18 junior doctors. Thirteen were returned at post commencement and 17 on completion of the six months' training. Eleven of these could be matched (response rate of 61%).

Of the initial respondents, seven out of 13 were men, their mean age was 26.3 years (range 25 to 29 years). All were either trainees on a formal GP training scheme or junior doctors with no prior psychiatric experience.

The 11 matched responders are identified in Table 1 by alphabetical letters a to k, showing the ratings of trainees' perception of confidence in the 20 clinical areas at the beginning and at the end of their placements. Nine trainees were intending to pursue a career in general practice and two in psychiatry.

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**Table 1.** Trainee ratings of perceived competence before and after psychiatric training.

| Aptitudes before/after | a | b | c | d | e | f | g | h | i | j | k | Σ scores | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | Before | After |
| Taking a history | 2/4 | 3/5 | 2/4 | 3/5 | 3/5 | 3/5 | 3/4 | 3/4 | 3/5 | 3/5 | 4/5 | 32 | 51 |
| Mental state examination | 1/4 | 3/5 | 2/4 | 3/4 | 3/5 | 4/5 | 3/4 | 2/3 | 3/5 | 3/5 | 4/5 | 31 | 49 |
| Diagnosing depression | 2/4 | 3/5 | 3/4 | 3/5 | 4/5 | 4/5 | 3/5 | 3/4 | 5/5 | 4/5 | 5/5 | 39 | 52 |
| Assessing suicide risk | 1/3 | 2/5 | 3/3 | 2/4 | 3/4 | 3/4 | 3/3 | 3/4 | 3/4 | 4/5 | 4/3 | 31 | 42 |
| Managing alcohol dependence | 1/3 | 2/4 | 2/3 | 2/2 | 1/4 | 1/3 | 2/3 | 2/2 | 2/3 | 3/4 | 3/3 | 21 | 34 |
| Familiarity with Neuroleptic Malignant Syndrome (NMS) | 1/4 | 1/3 | 2/2 | 1/1 | 1/4 | 1/3 | 1/3 | 2/3 | 3/3 | 3/3 | 3/3 | 19 | 32 |
| Understanding the Mental Health Act 1983 | 1/3 | 3/4 | 2/4 | 2/3 | 2/5 | 2/3 | 1/4 | 2/4 | 3/5 | 2/5 | 4/5 | 24 | 45 |
| Psychosocial issues | 1/3 | 2/4 | 2/2 | 1/4 | 3/4 | 4/3 | 3/4 | 3/4 | 3/4 | 3/5 | 4/4 | 29 | 41 |
| Prescribing in acute psychosis | 1/3 | 2/4 | 2/4 | 3/4 | 2/5 | 1/4 | 2/4 | 2/4 | 2/4 | 3/5 | 4/5 | 24 | 46 |
| Understanding grief | 1/2 | 2/4 | 2/3 | 2/4 | 2/4 | 3/4 | 3/4 | 2/3 | 2/2 | 3/4 | 3/3 | 25 | 37 |
| Managing emergencies | 1/4 | 2/4 | 3/3 | 2/4 | 2/4 | 1/4 | 2/3 | 2/3 | 3/5 | 3/5 | 4/4 | 25 | 43 |
| Functional versus organic disorders | 2/2 | 2/3 | 2/4 | 2/3 | 2/3 | 2/4 | 2/4 | 3/3 | 2/4 | 3/3 | 4/4 | 26 | 37 |
| Treating major affective illness | 2/2 | 2/4 | 2/3 | 3/4 | 2/3 | 2/4 | 2/3 | 2/3 | 2/3 | 2/4 | 4/4 | 25 | 37 |
| Giving advice in agoraphobia | 2/2 | 1/3 | 1/2 | 2/3 | 2/3 | 1/3 | 3/3 | 2/3 | 1/2 | 3/5 | 3/3 | 21 | 32 |
| Treating schizophrenia | 1/3 | 1/3 | 1/4 | 2/4 | 3/3 | 2/3 | 2/4 | 2/3 | 2/4 | 3/5 | 3/4 | 22 | 40 |
| Complications of drug abuse | 2/2 | 1/3 | 2/2 | 3/4 | 3/4 | 2/3 | 3/4 | 2/3 | 2/4 | 2/4 | 4/4 | 26 | 37 |
| Eating disorders | 2/1 | 2/4 | 1/3 | 3/4 | 2/4 | 4/4 | 3/4 | 3/3 | 3/2 | 3/5 | 3/3 | 29 | 37 |
| Somatoform and dissociation | 2/2 | 1/3 | 1/2 | 1/3 | 1/4 | 1/3 | 1/2 | 2/2 | 1/3 | 2/4 | 3/4 | 16 | 32 |
| Managing depression | 1/3 | 2/4 | 3/4 | 2/3 | 2/5 | 2/4 | 2/3 | 3/3 | 3/4 | 4/4 | 4/4 | 28 | 41 |
| Familiarity with International Classification of Diseases-10 (ICD-10) | 1/4 | 2/4 | 2/2 | 1/2 | 1/3 | 1/4 | 1/3 | 2/4 | 2/4 | 2/4 | 4/4 | 19 | 37 |
| Cumulative scores before | 28 | 39 | 40 | 43 | 44 | 44 | 45 | 47 | 50 | 58 | 74 | | |
| Cumulative scores after | 57 | 78 | 62 | 70 | 81 | 75 | 71 | 65 | 75 | 89 | 79 | | |

There was a statistically significant improvement (Wilcoxon matched-pairs signed-rank test, $P<0.05$) in all aspects of perceived competence except in the identification of the different types of eating disorder ($P = 0.0619$; see Table 2).

A measure of competence in each skill area was calculated by summing the scores of each of the 11 trainees before and after training. The means of these scores were calculated. Ranking the means enabled a comparison of the different competencies (see Table 3). Trainees rated skills such as the ability to diagnose depression, take a psychiatric history, and conduct a mental state examination as their most competent area both before and after training. On completion of training, skills in prescribing in acute psychosis (mean score 4.18), understanding of the Mental Health Act 1983 (mean score 4.09), and managing psychiatric emergencies (mean score 3.91) were ranked above those of understanding psycho-social issues (mean score 3.73), recognizing the psychiatric complications of drug abuse (mean score 3.36), understanding the stages of mourning (mean score 3.36), identifying eating disorders (mean score 3.26), and managing alcohol dependence (mean score 3.09). The ranking of ability to give simple advice in agoraphobia and to diagnose a somatoform or dissociative disorder remained among the lowest both before and after training (both had means of 2.91 on completion of training).

**Table 2.** Comparison of perceived aptitude before and after training using the Wilcoxon matched-pair sign-rank test.

| Aptitude assessed | Z scores | P values |
|---|---|---|
| Taking a history | –3.0706 | 0.0021[a] |
| Mental state examination | –2.9938 | 0.0028[a] |
| Diagnosing depression | –2.7386 | 0.0062[a] |
| Assessing suicide risk | –2.3604 | 0.0200[a] |
| Managing alcohol dependence | –2.5649 | 0.0103[a] |
| Familiarity with NMS | –2.2323 | 0.0256[a] |
| Understanding the Mental Health Act 1983 | –2.9695 | 0.0030[a] |
| Psychosocial issues | –2.3604 | 0.0183[a] |
| Prescribing in acute psychosis | –3.0219 | 0.0025[a] |
| Understanding grief | –2.2717 | 0.0057[a] |
| Managing emergencies | –2.7185 | 0.0066[a] |
| Functional versus organic disorders | –2.4279 | 0.0152[a] |
| Treating major affective disorders | –2.7617 | 0.0057[a] |
| Giving advice in agoraphobia | –2.5981 | 0.0094[a] |
| Treating schizophrenia | –2.8769 | 0.0040[a] |
| Complications of drug abuse | –2.5981 | 0.0094[a] |
| Eating disorders | –1.8667 | 0.0619[a] |
| Somatoform and dissociation | –2.7235 | 0.0065[a] |
| Managing depression | –2.5649 | 0.0103[a] |
| Familiarity with ICD-10 | –2.8070 | 0.005[a] |

[a]Significant at the 5% level.

Individual trainees' cumulative ratings of perceived competency were compared before and after training. All showed an overall numerical improvement. With k, scores increased only from 74 to 79. Four trainees had lower competency scores in one particular area on completion of training. In two cases, this was the ability to identify different types of eating disorders (a and i); in another, the identification of psycho-social issues (f); and in the last, the ability to assess suicidal risk (k).

At the end of their six months' training, responders were asked to rate their satisfaction with the training they had received and invited to offer written comments (Table 4). Most trainees were at least moderately satisfied with the training they received. Written comments were received in seven cases. Two trainees supported the relevance of their training to general practice, two praised their attachment highly, one felt that six months was not long enough to gain skills in the management of psychiatric problems, and two trainees criticized the lack of teaching.

## Discussion

Purcell *et al*[8] developed a survey of clinical competency expectation, which they submitted to faculty and residents in the Department of Psychiatry at the University of California. They looked at the dimensions of skill expectations over the four years of training. They were surprised to find lower expectations of

**Table 3.** Ranking of skill competencies before and after post.

| Perceived aptitude assessed | Mean score (before) | Rank (before) | Mean score (after) | Rank (after) |
|---|---|---|---|---|
| Taking a history | 2.91 | 2 | 4.64 | 2 |
| Mental state examination | 2.82 | 3 | 4.45 | 3 |
| Diagnosing depression | 3.53 | 1 | 4.73 | 1 |
| Assessing suicide risk | 2.82 | 3 | 3.82 | 7 |
| Managing alcohol dependence | 1.91 | 10 | 3.09 | 11 |
| Familiarity with NMS | 1.73 | 11 | 2.91 | 13 |
| Understanding the Mental Health Act 1983 | 2.18 | 8 | 4.09 | 5 |
| Psychosocial issues | 2.64 | 4 | 3.73 | 8 |
| Prescribing in acute psychosis | 2.18 | 8 | 4.18 | 4 |
| Understanding grief | 2.27 | 7 | 3.36 | 10 |
| Managing emergencies | 2.27 | 7 | 3.91 | 6 |
| Functional versus organic disorders | 2.36 | 6 | 3 | 12 |
| Treating major affective disorders | 2.27 | 7 | 3.36 | 10 |
| Giving advice in agoraphobia | 1.91 | 10 | 2.91 | 13 |
| Treating schizophrenia | 2 | 9 | 3.64 | 9 |
| Complications of drug abuse | 2.36 | 6 | 3.36 | 10 |
| Eating disorders | 2.64 | 4 | 3.36 | 10 |
| Somatoform and dissociation | 1.45 | 12 | 2.91 | 13 |
| Managing depression | 2.55 | 5 | 3.73 | 8 |
| Familiarity with ICD-10 | 1.73 | 11 | 3.36 | 10 |

**Table 4.** Trainee ratings of satisfaction on completion of training.

| Trainee | Satisfaction rating on completion of training | Comments on training |
|---|---|---|
| A[a] | 3 | Complained of little structured teaching. |
| B | 4 | Enjoyable and highly relevant to GP. A must for GP trainees. |
| C | 4 | |
| D | 4 | |
| E | 4 | Now feels confident in diagnosis. Six months not long enough for management. |
| F | 4 | |
| G | 3 | |
| H | 4 | |
| I | 4 | Very useful and enjoyable. |
| J | 5 | Difficult to be a GP without the training. |
| K[a] | 5 | |
| L | 5 | |
| M | – | Excellent. |
| N | 4 | |
| O | 4 | |
| P | 5 | |
| Q | – | Teaching lacking. Training inadequate. |

[a]Not a GP trainee. Scale: 1, very dissatisfied; 2, moderately dissatisfied; 3, neutral; 4, moderately satisfied; 5, generally satisfied.

resident's competency among faculty (teachers) than among residents (students/junior doctors). In adopting the scale, slight modification was needed for application to British trainees, with contraction of the original 36 items to 20.

While primarily aimed at GP trainees, this study included junior doctors new to psychiatry but not intending a career in general practice. The response rate was reasonable for a survey of this type, although caution is required in interpretation because of the small numbers. It is also important to recognize that measuring self-efficacy gives no indication of actual skill; rather, it is the level of competency perceived by the individual. One study has shown that measures of perceived competence in medical students were no substitute for actual knowledge.[9]

Finally, owing to the non-parametric nature of the interval scale, comparisons of competencies on completion of training were made on the basis of mean and rank order rather than by formal statistical testing.

Despite methodological limitations, some interesting findings emerged. Only the ability to identify different types of eating disorders showed no significant improvement after training, implying that education was deficient or that some areas of training require a longer term, more specialized focus than is possible on a six-month placement. The perceived skills of diagnosing depression, taking a psychiatric history, and examining mental state were ranked most highly both before and after six months' training. However, trainees ranked their perceived skill in areas of special relevance to community psychiatry, such as assessing suicidal risk (mean score 3.82), identifying psycho-social issues (mean score 3.73), and managing depression (mean score 3.73), below their skills in managing psychiatric emergencies (mean score 3.91) and prescribing in acute psychosis (mean score 4.18).

These findings imply that the training received as a psychiatric SHO tends to be weighted towards problems commonly encountered in hospital, at the expense of skills relevant to dealing with neurotic and other primary care issues. Gask[7] recognized that the needs of psychiatric and GP trainees are different and that training received by many GP trainees does not necessarily prepare them for future work in primary care. She commented that the

course attended by trainee psychiatrists is often inappropriate for GP trainees, with its heavy emphasis on psychopathology and other more specialized areas of psychiatric training. These findings add weight to that view.

The Royal College of General Practitioners and Royal College of Psychiatrists[6] addressed GP vocational training in psychiatry in a joint statement. They reported that around 40% of doctors completing training for general practice had experience in psychiatry. They recognized the considerable overlap at this stage of training between those planning a career in general practice and psychiatry and recommended the development of joint training programmes with a core curriculum essential for both groups. They recommended that, for general practice trainees, there might need to be a reorientation of some hospital posts so that there is a greater community element to them. The findings of this survey would endorse the latter view, with a psychiatric placement being a prime opportunity to develop requisite skills.

In this survey, assessing suicide risk received a relatively low rating among the perceived skills acquired. Given that reducing suicide is an area targeted in the *Health of the Nation*[2] document, this finding is of concern. The Gotland study[10,11] showed that a programme of postgraduate education significantly improved the ability of GPs to detect depression and reduced expected suicide rates.

Similarly, trainees rated relatively lower skills in dealing with drug and alcohol problems. A Royal Australian and New Zealand College of Psychiatrists study[12] found similar results. The ability to diagnose somatoform and dissociative disorders was ranked joint last relative to other skills. Gask *et al*[13] developed a teaching package involving video role play to improve the management of somatization disorders by GP trainees, which could be incorporated into postgraduate psychiatric training: creative new approaches may help to address these more complex areas of training.

Thirteen out of 15 (87%) trainees who responded indicated at least moderate satisfaction with their training. However, of written comments received (7/17), two indicated dissatisfaction and criticized the lack of teaching.

In summary, this pilot study has shown that, while trainees show a significant improvement in nearly all areas of perceived clinical skills, this appears to be weighted towards hospital rather than community practice. If confirmed by further research, there may be important implications for the focus of psychiatric training received by GP trainees.

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