Rural generalist nurses’ perceptions of the effectiveness of their therapeutic interventions for patients with mental illness

Chanelle Clark,1 Elizabeth Parker2 and Trish Gould2

1Queensland Health, Toowoomba, and 2School of Public Health, Queensland University of Technology, Brisbane, Queensland, Australia

Abstract

Objective: To explore generalist nurses’ perceptions of their efficacy in caring for mentally ill clients in rural and remote settings, and their educational needs in the area of mental health care.

Design: A self-administered questionnaire adapted from the Mental Health Problems Perception Questionnaire; a Likert scale used to rate the perceptions of nursing staff of their own ability to adequately treat and care for patients experiencing mental illness.

Setting: The Roma and Charleville Health Service Districts, Queensland, Australia.

Subjects: Nurses (Registered Nurses, Assistants in Nursing and Enrolled Nurses) in the Roma and Charleville health service districts (n = 163).

Main outcome measures: Generalist nurses’ perceptions regarding their therapeutic commitment, role competency and role support.

Results: Seventy per cent of respondents indicated that limited knowledge of mental health problems was an issue preventing nursing staff in rural and remote settings from providing optimum care to patients with mental illness. Twenty-nine per cent of respondents indicated that they had never received or undertaken training or education in relation to the care, treatment or assessment of patients with mental illness.

Conclusion: Rural nurses do not feel competent, nor adequately supported, to deal with patients with mental health problems. In addition, the nurses’ education and ongoing training do not adequately prepare them for this sphere.

KEY WORDS: mental illness, professional development, role competency, role support, therapeutic commitment.

Introduction

Nurses play an integral role in the delivery of health care services to people suffering from mental illness in rural and remote areas of Australia.1 Rural generalist nurses require knowledge, skills and networks in mental health that will enable them to provide effective mental health care. Hegney found that nurses believed the amount and type of support services available impacted upon their scope of practice. Nurses in more remote hospitals, with no resident medical officer, considered themselves more isolated from support services.2

A number of studies suggest that undergraduate nursing students are not specifically prepared for work in the mental health field.3–8 Accordingly, the Inquiry into Nursing (2002) recommended that undergraduate courses provide additional theory and practicum in mental health, aged care and cross-cultural nursing.3 In addition, rural and remote area nurses have limited access to ongoing education that is specifically orientated to rural and remote practice.9

There has been some independent research undertaken of the training needs of non-specialist nurses10 and of generalist nurses in rural areas.11 These studies investigated nurses’ perceptions of their own knowledge, confidence, skills and educational needs in the area of mental health care. Apart from Muirhead and Tilley’s study11 there has been no systematic study of generalist nurses in rural areas of Australia, with regard to these issues.

This paper examines rural generalist nurses’ perceptions of the effectiveness of their therapeutic interventions for patients with mental illness, and the nurses’ educational needs.

Method

A questionnaire was mailed to all nursing staff (n = 344) rostered for work within the Roma and Charleville health service districts (HSDs) during March 2003; 163 responded, giving a response rate of 47%.

Correspondence: Chanelle Clark, Cunningham Centre, Queensland Health, Toowoomba, Queensland, Australia. Email: chanelle_clark@health.qld.gov.au

Accepted for publication March 2005.
The questionnaire was based on the Mental Health Problems Perception Questionnaire (MHPPQ), a Likert scale used to rate nurses’ perceptions of their competence to treat patients experiencing mental illness. The MHPPQ was adapted by Lauder et al. from the Alcohol and Alcohol Problems Perceptions Questionnaire, developed by Shaw et al. in 1978. The MHPPQ is underpinned by an explicit theoretical framework in which therapeutic commitment, role support and role competency are core concepts. It is proposed that these variables influence the effectiveness of nurses working with people who have mental health problems. Therapeutic commitment is influenced by one’s self-perceived role competency and role support. Role competency is having the necessary skills, knowledge and understanding of whether patients come within one’s sphere of responsibility; role support is the perceived or potential level of contact with, and access to, specialist mental health workers.

The MHPPQ was adapted for this study to explore qualities of therapeutic interventions that were specific to the study population. Professor Lauder was consulted regarding changes made to the MHPPQ, which included the removal of three statements and the addition of 11 new statements.

The resultant questionnaire consisted of 35 statements, which were measured on a seven-point Likert scale. Part B of the questionnaire sought demographic, work setting and work satisfaction information and respondents’ experience with mental illness. The questionnaire was piloted with nurses from a range of clinical settings, all of whom have contact with people with mental illness.

The MHPPQ was psychometrically tested by Lauder et al. demonstrating it to be valid and reliable in the chosen population (rural generalist nurses who treat people with mental illness). Because the MHPPQ was modified for this study, Cronbach’s alpha coefficient and Pearson’s correlation coefficients were computed to demonstrate reliability and validity; the results were comparable to those obtained by Lauder et al.

Scores for items within each scale were summed so that scales could be treated as continuous variables. The mean and SD were calculated to provide an indication of the levels of therapeutic commitment, role competency and role support across the study population (Table 1). If the population tended towards the negative range (i.e. indicating lower levels of therapeutic commitment on average) then this would have been evident.

ANOVA, unpaired t-tests and Spearman’s rho correlation coefficients were used to examine the relationship between a range of variables and respondents’ perceived levels of therapeutic commitment, role competency and role support.

The participants’ demographic characteristics (Table 2) were similar to previous studies investigating rural and remote nursing workforce issues indicating that the respondents were representative of nurses working in rural and remote areas. Comparisons of respondents by nursing qualification with the total number of nursing staff in each HSD indicate that respondents were representative of the total population of nurses across the two HSDs.

The Queensland University of Technology University Human Research Ethics Committee (QUT Ref No. 2925H) and the HSD managers granted ethical approval in March 2003.

Results

Therapeutic commitment, role competency and role support

With regards to role competency, around 60% of nurses disagreed to varying extents with the statement ‘I feel I have the skills to assess and identify patients with mental health problems’. Respondents indicated that limited knowledge of mental health problems was an issue preventing nursing staff in rural and remote settings from providing optimum care to patients with mental illness.

Many respondents considered that situations such as limited support from other service providers, difficulty in communicating with mentally ill clients and difficulty in identifying a mental health problem, impeded their ability to treat patients with mental illness.
I can appropriately advise my patients about mental health problems. With regards to role support, only 12.2% of respondents agreed that they received adequate support from other mental health services outside their district when caring for patients with mental illness. Tables 3–5 provide a summary of responses to individual questionnaire items for each of the three scales.

**Factors influencing therapeutic commitment, role competency and role support**

The factors that influenced nurses’ levels of therapeutic commitment, role competency or role support are summarised in Table 6. The only factor that was significant in influencing all three scales was nursing qualification.

**Nursing qualification**

The ANOVA showed that nursing qualification had a significant effect on therapeutic commitment ($F_{2,150} = 5.5, P = 0.005$), role competency ($F_{2,150} = 6.6, P = 0.002$) and role support ($F_{2,150} = 6.9, P = 0.001$).

A Tukey post-hoc test showed Registered Nurses (RNs) to have higher levels of role competency ($M = 43.5, SD = 11.1$) than Enrolled Nurses (ENs) ($M = 37.2, SD = 10.7$), while ENs have lower levels of role competency than Assistants in Nursing (AINs) ($M = 46.1, SD = 8.7$). The mean difference in levels of role competency for RNs and AINs was not significant.

On average, AINs indicated higher levels of role support ($M = 27.6, SD = 5.7$) than RNs ($M = 21.9, SD = 5.8$) and ENs ($M = 21.9, SD = 4.9$). AINs also have significantly higher levels of therapeutic commitment ($M = 58.4, SD = 10.8$) compared with RNs ($M = 49.4, SD = 8.9$) and ENs ($M = 49.5, SD = 10.7$).

Whilst role competency was perceived to be significantly higher for RNs and AINs than for ENs, it is still inadequate for all three groups.

**Contact with patients with mental illness**

The frequency of treating patients with mental illness was significant in influencing levels of therapeutic commitment ($F_{3,150} = 6.3, P = 0.001$) and levels of role support ($F_{3,150} = 3.4, P = 0.018$). The ANOVA showed no significant effect of this factor on role competency ($F_{3,150} = 1.2, P = 0.317$).

A Tukey post-hoc test showed that nurses who treat patients with mental illness on a daily basis (18.8%) had significantly higher levels of therapeutic commitment ($M = 57, SD = 7.57$) compared with those who treated
**TABLE 3: Responses to therapeutic commitment scale items**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree n (%)</th>
<th>Quite strongly disagree n (%)</th>
<th>Disagree n (%)</th>
<th>Neither agree nor disagree n (%)</th>
<th>Agree n (%)</th>
<th>Quite strongly agree n (%)</th>
<th>Strongly agree n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am interested in the nature of mental health problems and the treatment of them</td>
<td>3 (1.8)</td>
<td>2 (1.2)</td>
<td>18 (11.0)</td>
<td>27 (16.6)</td>
<td>71 (43.6)</td>
<td>24 (14.7)</td>
<td>17 (10.4)</td>
</tr>
<tr>
<td>I feel that I am able to work with patients with a mental illness as effectively as other patients who do not have a mental illness</td>
<td>11 (6.7)</td>
<td>12 (7.4)</td>
<td>47 (28.8)</td>
<td>35 (21.5)</td>
<td>36 (22.1)</td>
<td>15 (9.2)</td>
<td>6 (3.7)</td>
</tr>
<tr>
<td>I want to work with patients with mental illness</td>
<td>7 (4.3)</td>
<td>7 (4.3)</td>
<td>49 (30.1)</td>
<td>56 (34.4)</td>
<td>28 (17.2)</td>
<td>9 (5.5)</td>
<td>5 (3.1)</td>
</tr>
<tr>
<td>I feel that there is nothing I can do to help patients with mental illness</td>
<td>21 (12.9)</td>
<td>8 (4.9)</td>
<td>77 (47.2)</td>
<td>44 (27.0)</td>
<td>8 (4.9)</td>
<td>0</td>
<td>4 (2.5)</td>
</tr>
<tr>
<td>I feel that I have something to offer patients with mental illness</td>
<td>7 (4.3)</td>
<td>3 (1.8)</td>
<td>20 (12.3)</td>
<td>49 (30.1)</td>
<td>69 (42.3)</td>
<td>9 (5.5)</td>
<td>5 (3.1)</td>
</tr>
<tr>
<td>I feel that I have a number of good qualities for working with patients with mental illness</td>
<td>6 (3.7)</td>
<td>2 (1.2)</td>
<td>17 (10.4)</td>
<td>53 (32.5)</td>
<td>69 (42.3)</td>
<td>10 (6.1)</td>
<td>4 (2.5)</td>
</tr>
<tr>
<td>Caring for people with mental illness is an important part of a rural nurses role</td>
<td>2 (1.2)</td>
<td>2 (1.2)</td>
<td>1 (0.6)</td>
<td>14 (8.6)</td>
<td>97 (59.5)</td>
<td>26 (16.0)</td>
<td>21 (12.9)</td>
</tr>
<tr>
<td>In general, one can get satisfaction from working with patients with mental illness</td>
<td>4 (2.5)</td>
<td>3 (1.8)</td>
<td>19 (11.7)</td>
<td>48 (29.4)</td>
<td>63 (38.7)</td>
<td>12 (7.4)</td>
<td>9 (5.5)</td>
</tr>
<tr>
<td>I often feel uncomfortable when working with patients with mental illness</td>
<td>8 (4.9)</td>
<td>4 (2.5)</td>
<td>37 (22.7)</td>
<td>30 (18.4)</td>
<td>63 (38.7)</td>
<td>11 (6.7)</td>
<td>8 (4.9)</td>
</tr>
<tr>
<td>In general, I feel that I can understand patients with mental illness</td>
<td>7 (4.3)</td>
<td>10 (6.1)</td>
<td>54 (33.1)</td>
<td>38 (23.3)</td>
<td>45 (27.6)</td>
<td>6 (3.7)</td>
<td>2 (1.2)</td>
</tr>
<tr>
<td>On the whole, I am satisfied with the way I work with patients with mental illness</td>
<td>8 (4.9)</td>
<td>9 (5.5)</td>
<td>52 (31.9)</td>
<td>46 (28.2)</td>
<td>39 (23.9)</td>
<td>7 (4.3)</td>
<td>1 (0.6)</td>
</tr>
<tr>
<td>In general I find working with patients with mental illness difficult</td>
<td>2 (1.2)</td>
<td>6 (3.7)</td>
<td>28 (17.2)</td>
<td>32 (19.6)</td>
<td>68 (41.7)</td>
<td>15 (9.2)</td>
<td>10 (6.1)</td>
</tr>
<tr>
<td>Statement</td>
<td>Strongly disagree n (%)</td>
<td>Quite strongly disagree n (%)</td>
<td>Disagree n (%)</td>
<td>Neither agree nor disagree n (%)</td>
<td>Agree n (%)</td>
<td>Quite strongly agree n (%)</td>
<td>Strongly agree n (%)</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>-------------------------</td>
<td>-------------------------------</td>
<td>----------------</td>
<td>---------------------------------</td>
<td>-------------</td>
<td>---------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>I feel that I know enough about the factors that put people at risk of mental illness</td>
<td>24 (14.7)</td>
<td>8 (4.9)</td>
<td>60 (36.8)</td>
<td>21 (12.9)</td>
<td>42 (25.8)</td>
<td>6 (3.7)</td>
<td>2 (1.2)</td>
</tr>
<tr>
<td>I feel that I know how to treat people with long-term (or chronic) mental illness</td>
<td>25 (15.3)</td>
<td>14 (8.6)</td>
<td>65 (39.9)</td>
<td>40 (24.5)</td>
<td>13 (8.0)</td>
<td>4 (2.5)</td>
<td>2 (1.2)</td>
</tr>
<tr>
<td>I feel that I can appropriately advise my patients about mental health problems</td>
<td>35 (21.5)</td>
<td>18 (11.0)</td>
<td>63 (38.7)</td>
<td>25 (15.3)</td>
<td>17 (10.4)</td>
<td>2 (1.2)</td>
<td>1 (0.6)</td>
</tr>
<tr>
<td>I feel that I have a clear idea of my responsibilities in helping patients with mental health problems</td>
<td>19 (11.7)</td>
<td>17 (10.4)</td>
<td>38 (23.3)</td>
<td>27 (16.6)</td>
<td>50 (30.7)</td>
<td>6 (3.7)</td>
<td>4 (2.5)</td>
</tr>
<tr>
<td>I feel I have the right to ask patients about their mental health status</td>
<td>12 (7.4)</td>
<td>9 (5.5)</td>
<td>26 (16.0)</td>
<td>37 (22.7)</td>
<td>72 (44.2)</td>
<td>4 (2.5)</td>
<td>3 (1.8)</td>
</tr>
<tr>
<td>I feel that my patients believe I have the right to ask them questions about their mental illness</td>
<td>12 (7.4)</td>
<td>10 (6.1)</td>
<td>46 (28.2)</td>
<td>48 (29.4)</td>
<td>46 (28.2)</td>
<td>1 (0.6)</td>
<td>0</td>
</tr>
<tr>
<td>I feel that I have the right to ask a patient for any information that is relevant to their mental illness</td>
<td>7 (4.3)</td>
<td>9 (5.5)</td>
<td>23 (14.1)</td>
<td>37 (22.7)</td>
<td>77 (47.2)</td>
<td>10 (6.1)</td>
<td>0</td>
</tr>
<tr>
<td>I have the skills to work with patients with mental health problems</td>
<td>18 (11.0)</td>
<td>20 (12.3)</td>
<td>58 (35.6)</td>
<td>36 (22.1)</td>
<td>25 (15.3)</td>
<td>4 (2.5)</td>
<td>2 (1.2)</td>
</tr>
<tr>
<td>I feel I have the skills to assess and identify patients with mental illness</td>
<td>26 (16.0)</td>
<td>19 (11.7)</td>
<td>59 (36.2)</td>
<td>31 (19.0)</td>
<td>24 (14.7)</td>
<td>2 (1.2)</td>
<td>2 (1.2)</td>
</tr>
<tr>
<td>I often have difficulty knowing how to communicate with patients with mental illness</td>
<td>5 (3.1)</td>
<td>4 (2.5)</td>
<td>24 (14.7)</td>
<td>36 (22.1)</td>
<td>74 (45.4)</td>
<td>13 (8.0)</td>
<td>6 (3.7)</td>
</tr>
<tr>
<td>I feel I know how to treat patients who present in crisis with signs of mental illness</td>
<td>18 (11.0)</td>
<td>11 (6.7)</td>
<td>63 (38.7)</td>
<td>23 (14.1)</td>
<td>38 (23.3)</td>
<td>4 (2.5)</td>
<td>1 (0.6)</td>
</tr>
<tr>
<td>I often have difficulty knowing how to assess patients with mental illness</td>
<td>2 (1.2)</td>
<td>4 (2.5)</td>
<td>13 (8.0)</td>
<td>27 (16.6)</td>
<td>91 (55.8)</td>
<td>12 (7.4)</td>
<td>11 (6.7)</td>
</tr>
</tbody>
</table>
patients with mental illness on a less frequent basis – more than weekly but less than monthly ($M = 47.73, SD = 10.83$), and monthly ($M = 48.39, SD = 8.28$). The frequency of contact also affected levels of role support, with nurses who treat patients with mental illness on a daily basis ($M = 25.07, SD = 6.1$) having higher perceived levels of role support compared with those who treat patients with mental illness on a weekly basis ($M = 20.73, SD = 5.75$).

**Specialist clinical experience**

The effect of specialist experience in caring for patients with mental illness on levels of role competency ($t(153) = 5.2, P = 0.0001$) and therapeutic commitment ($t(153) = 3.5, P = 0.001$) was significant. This factor had no effect on levels of role support ($t(153) = 0.24, P = 0.808$).

Nurses with specialist clinical experience in the area of mental illness generally had higher levels of therapeutic commitment ($M = 60.08, SD = 11.13$) than those without specialist clinical experience ($M = 49.68, SD = 9.67$). They also had higher levels of role competency on average ($M = 56.50, SD = 14.81$) compared with those without specialist experience ($M = 40.34, SD = 9.92$).

**Friend/family experienced mental illness**

The effect of having a close friend or relative who had experienced mental illness on levels of therapeutic commitment was significant ($t(153) = 2.1, P = 0.042$). This factor had no effect on levels of role competency ($t(153) = 1.7, P = 0.09$) or role support ($t(153) = -1.1, P = 0.269$). Nurses who identified as having had a close friend or relative who had experienced mental illness had slightly higher levels of therapeutic commitment on average ($M = 52, SD = 9.96$) compared with those who did not ($M = 48.68, SD = 10.05$).

**Education and training undertaken**

Because respondents in this study were able to select multiple categories, in order to reflect their entire history of education and training, data analysis could not be conducted to examine the effect of education and training on levels of therapeutic commitment, role competency and role support. Twenty-nine per cent of

### TABLE 5: Responses to role support scale items

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree n (%)</th>
<th>Quite strongly disagree n (%)</th>
<th>Disagree n (%)</th>
<th>Neither agree nor disagree n (%)</th>
<th>Agree n (%)</th>
<th>Quite strongly agree n (%)</th>
<th>Strongly agree n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>If I felt the need when working with someone with a mental illness I could easily find someone who would help me clarify my professional difficulties</td>
<td>16 (9.8)</td>
<td>10 (6.1)</td>
<td>43 (26.4)</td>
<td>23 (14.1)</td>
<td>56 (34.4)</td>
<td>7 (4.3)</td>
<td>7 (4.3)</td>
</tr>
<tr>
<td>If I felt the need I could easily find someone who would be able to help me formulate the best approach to a patient with a mental illness</td>
<td>10 (6.1)</td>
<td>12 (7.4)</td>
<td>49 (30.1)</td>
<td>23 (14.1)</td>
<td>59 (36.2)</td>
<td>4 (2.5)</td>
<td>6 (3.7)</td>
</tr>
<tr>
<td>When working with patients with mental illness, I receive adequate support from other agencies</td>
<td>7 (4.3)</td>
<td>7 (4.3)</td>
<td>30 (18.4)</td>
<td>45 (27.6)</td>
<td>60 (36.8)</td>
<td>6 (3.7)</td>
<td>6 (3.7)</td>
</tr>
<tr>
<td>When working with patients with mental illness, I receive adequate support from colleagues</td>
<td>11 (6.7)</td>
<td>8 (4.9)</td>
<td>47 (28.8)</td>
<td>49 (30.1)</td>
<td>40 (24.5)</td>
<td>2 (1.2)</td>
<td>2 (1.2)</td>
</tr>
<tr>
<td>When working with patients with mental illness, I receive adequate support from mental health services within my district</td>
<td>9 (5.5)</td>
<td>13 (8.0)</td>
<td>51 (31.3)</td>
<td>63 (38.7)</td>
<td>18 (11.0)</td>
<td>2 (1.2)</td>
<td>0</td>
</tr>
</tbody>
</table>
respondents \((n = 47)\) indicated that they had never undertaken training or education in relation to the treatment or assessment of patients with mental illness. A further 26\% \((n = 43)\) indicated that they had only ever undertaken a half-hour in-service/workplace training course on this topic.

**Discussion**

Nurses, who identified as AINs, worked in aged care, had more contact with patients with mental illness, were satisfied with their work, had specialist clinical experience in the area of mental illness, or had a family member or friend who had experienced a mental illness, had higher levels of therapeutic commitment and/or role competency.

**Role competency**

Of concern was the finding that most nurses perceive that they have low levels of role competency. Many nurses reported that they did not have adequate knowledge or skills to identify, assess and treat patients with mental illness; and a significant proportion of nurse respondents felt that they could not appropriately advise patients about mental health problems.

These findings are similar to those of Wynaden *et al.*’s study of 241 nurses from 43 health services in Western
In this study, approximately 58% of respondents lacked confidence in caring for a person with mental illness, while 62% of respondents felt that their relevant knowledge and skills were inadequate.10

Role support

Many respondents felt that they were inadequately supported when caring for patients with mental illness. There seemed to be a degree of neutrality with responses to some role support questions; possibly because some respondents considered that they received adequate support from mental health services within their district during working hours, while after hours, the reverse held.

Education and training

The extent of respondents’ education concerning mental illness is a factor that can influence their therapeutic commitment, role competency and role support. Shaw et al. suggested that deficiencies in training produces anxieties about role adequacy and role support and that this causes role insecurity or low levels of therapeutic commitment.14 Data could not be statistically analysed to examine the effect of education and training on levels of therapeutic commitment, role competency and role support; however, descriptive results indicate that respondents have not received adequate education or training regarding the management and care of patients with mental illness. Over half the respondents (n = 90) indicated that they had received little or no training.

These findings are similar to that of Wynaden et al., who reported that 76% of nurses (n = 241) do not receive regular in-service/education on mental health issues.10 In addition, Muirhead and Tilley found that many health workers in rural north Queensland had been providing services to patients with mental illness, with little or no mental health training.11

These results support studies that argue that the current three-year course do not allow sufficient time for the development of general knowledge nor specific clinical practice competencies and knowledge in a particular area of specialisation, such as mental health.3,18

Nurses who receive ongoing education and training for working with patients with mental illness in rural settings will develop higher-level competencies that will enable them to function in a manner that promotes safe practice. Furthermore, their enhanced skills and attitudes will ensure the best care of the patient/client by building and promoting systems of support and good relationships with patients.18

Nurses working in the rural and remote hospitals under study require skills in screening and monitoring mental health problems of patients. Training therefore needs to be comprehensive and provided at a number of levels, such as crisis management and care for acute illness (as part of a generalist workload).

Study limitations

Self-administered mail-out questionnaires are typically associated with low response rates. Only an average response rate was achieved (47%). In addition, the views of respondents may differ in some way from those who chose not to participate.

Conclusion

Participants in this study believe that they do not have adequate knowledge and skills to offer therapeutic help to patients with mental illness, nor do they feel adequately supported in this role. Given the perceived low levels of role competency and role support, and the associated low levels of therapeutic commitment, it could be concluded that considerable barriers exist that reduce the capacity of nurses in these HSDs to provide effective health care to people with mental illness.

Acknowledgements

We would like to thank Queensland Health, district managers and staff from Roma and Charleville HSDs, and Professor William Lauder for his permission to utilise the MHPPQ.

References

RURAL NURSES AND CARING FOR MENTALLY ILL CLIENTS


