ABSTRACT: Patient satisfaction with physiotherapy treatment is an important outcome measure that is often overlooked. The aim of this quality assurance activity was to assess patients’ satisfaction with the physiotherapy service provided in an intensive care unit (ICU). A questionnaire evaluating factors pertaining to patient satisfaction was specifically designed for use in this study. Questionnaires were distributed to patients who had spent a minimum of two weeks in the Royal Adelaide Hospital ICU, within a few days of transfer to a general ward. Thirty-five patients completed the questionnaire over the 15 month study period. Respondents reported a high degree of satisfaction with the personal characteristics of the physiotherapists seen and the physiotherapy service provided in ICU.

KEY WORDS: PHYSIOTHERAPY, PATIENT SATISFACTION, INTENSIVE CARE UNIT.

INTRODUCTION
In this era of evidence-based medicine, there is an increasing onus on physiotherapists to base their interventions on evidence whenever possible, and to use outcome measures to evaluate the effectiveness of treatment. The sorts of outcome measures that may be used to assess the effectiveness of physiotherapy intervention range from ‘physiological’ data (eg goniometric range of movement, dynamometric measurement of strength) to patient reported parameters (eg quality of life, pain, satisfaction).

Patient satisfaction with physiotherapy is a relatively under-utilised outcome measure in physiotherapy, although it has been evaluated for some patient groups (eg patients with cystic fibrosis, out-patients with low back pain, patients attending private practices). In those studies that evaluated patients’ satisfaction, issues that were considered important included the physiotherapist’s personal and professional manner (eg friendliness, empathy, consideration of privacy), explanation of assessment and treatment, and adaptation of treatment to suit the patient (Goldstein et al, 2000; May 2001a, b; Monnin and Perneger, 2002; Potter et al, 2003), but also from the physiotherapists’ perspective, as patient satisfaction can have such a major influence on compliance with treatment.

Thus, the aim of this quality assurance activity was to assess the degree of patients’ satisfaction with the physiotherapy service provided to them in the Royal Adelaide Hospital (RAH) ICU.

METHODS
Inclusion criteria for the study were those patients who spent a minimum of two weeks in the RAH ICU and who were deemed by treating physiotherapists to be conscious and orientated for at least two weeks of this time. This decision was based on informal verbal/non-verbal communication between the physiotherapist and patient. Patients were withdrawn from the study if their questionnaire response indicated that they were unable to recall their ICU physiotherapist. The study was conducted over a 15 month period.

The RAH ICU is a 24 bed tertiary referral unit for adult intensive care patients with medical, surgical and/or traumatic conditions. The majority of patients in the RAH ICU are mechanically ventilated, and once they are spontaneously ventilating are usually transferred to a step down unit or general ward. It is routine practice in the RAH ICU that patients receive sedative medication to facilitate their management as deemed necessary by medical staff – sedation is weaned/ceased when considered clinically appropriate (ie sedation is not routinely interrupted on a daily basis). Patients in the RAH ICU at the time of the study did not routinely receive treatment from a physiotherapist outside of normal weekday working hours, except if there was a specific clinical indication (eg recent extubation, acute lobar atelectasis).

Each patient included in the study was provided with a questionnaire within a few days of transfer from ICU to a general ward. Patients were asked...
to complete the questionnaire independently, although they could seek assistance from relatives or carers if required. A questionnaire designed specifically for this study was used as the outcome measure, as a literature review was unable to identify any existing questionnaires which could be used or modified for our purposes. The content of the questionnaire was based on issues that had been raised in previous research into patient satisfaction and other topics we considered relevant and important to physiotherapy practice in ICU. Draft versions of the questionnaire were peer-reviewed by colleagues within the RAH Physiotherapy Department to improve the clarity and content of the questions. In an attempt to encourage honest responses, the questionnaire was distributed by the ward physiotherapist who was responsible for the patient’s care once they had left ICU, and the return address for the questionnaire was that of a neutral physiotherapist or ICU nurse who had not been involved in the patient’s care. If patients had received treatment from more than one physiotherapist, and their answers differed according to the physiotherapist involved, they were asked to make comments relevant to the physiotherapist seen most frequently or else to tick more than one box. The introductory paragraph of the questionnaire assured patients that responses would be treated confidentially. Results were analysed in a descriptive manner.

**RESULTS**

As can be seen from Figure 1, over the 15 month period of the study, a total of 1524 patients were admitted to the RAH ICU. Of this total, 143 (9.4%) stayed in ICU for two weeks or more. Of these 143 patients, 38 (26.6%) were deemed by the treating physiotherapist to be conscious and orientated for at least two weeks of this time and were given a questionnaire following their transfer from ICU to a general ward. Thus, of the total admissions to ICU during the 15 month period, 2.5 per cent of patients were included in the study.

All 38 patients who were included in the study returned their questionnaires. Of the 38 patients, three patients could not clearly remember their ICU physiotherapist and therefore, as instructed in the questionnaire, did not complete it. Of the 35 patients who did clearly remember their ICU physiotherapist and thus went on to complete the questionnaire, there were 19 females and 16 males, with a mean age of 56.1 years (SD 17.3 years, range 19 - 80 years). The reason for admission to ICU was a medical condition for 17 patients, postoperative complications for 12 patients and six patients were admitted after trauma. The mean length of stay in ICU for the 35 patients was 54.5 days (SD 54.2 days, range 15 - 320 days).

The questionnaire asked patients to state whether their ICU physiotherapist had explained the reasons he/she was assessing and treating them. Of the 35 patients who completed the questionnaire, 33 (94.3%) ticked the response indicating that their physiotherapist had provided this explanation, one patient (2.9%) indicated that an explanation had not been provided and one patient (2.9%) could not remember. Twenty nine of the 35 patients (82.9%) reported that this explanation was ‘very important’ to them and five patients (14.3%) said it was ‘somewhat important’. No patients indicated that an explanation was ‘not important’. One patient did not answer this question.

Patients were then asked to indicate terms that described their ICU physiotherapist, with questions addressing friendliness, courteousness, degree of caring and thoroughness. As can be seen from Table 1, all responses indicated satisfaction with these issues. Thirty three of 34 patients (97.0%) reported that the physiotherapist had respected their privacy and dignity all the time (see Table 1). Most patients reported that they had been pushed ‘just the right amount’ during physiotherapy (Table 1).

Patients were then asked to list three things they liked and disliked about the physiotherapy service they received in ICU. Six (17.1%) and nine (25.7%) patients respectively did not respond to these questions. Twenty patients (57.1%) wrote that there was nothing they disliked about the service. Table 2 shows selected and condensed paraphrased responses for both questions, with care taken to ensure the responses included in Table 2 were typical of those provided. Finally, patients were invited to make any other comments regarding their stay in ICU. Twenty three patients (65.7%) made no comment. Table 3 gives selected responses that were characteristic of the 12 patients who responded to this question.

**Figure 1: Screening process for inclusion in the study.**
Table 1: Patients' responses when asked to indicate terms which described their physiotherapist.

| Indicate which terms describe your physiotherapist | Number of responses | Percentage of responses |
|---------------------------------------------------|---------------------|-------------------------|
| Very friendly                                     | 31                  | 88.6%                   |
| Friendly                                          | 4                   | 11.4%                   |
| Unfriendly                                        | 0                   | 0%                      |
| Very unfriendly                                   | 0                   | 0%                      |
| Very rude                                         | 0                   | 0%                      |
| Rude                                              | 0                   | 0%                      |
| Courteous                                         | 11                  | 32.4%                   |
| Very courteous                                    | 23                  | 67.6%                   |
| Very uncaring                                     | 0                   | 0%                      |
| Uncaring                                          | 0                   | 0%                      |
| Caring                                            | 5                   | 14.7%                   |
| Very caring                                       | 29                  | 85.3%                   |
| Very thorough                                     | 29                  | 82.9%                   |
| Thorough                                          | 6                   | 17.1%                   |
| Slapdash                                          | 0                   | 0%                      |
| Very slapdash                                     | 0                   | 0%                      |

Did your physiotherapist respect your privacy and dignity?
- Yes, all the time: 33 (97.0%)
- Yes, most of the time: 1 (2.9%)
- No: 0 (0%)

Did your physiotherapist push you:
- Too hard: 0 (0%)
- Hard: 4 (11.4%)
- Just right: 31 (88.6%)
- Not enough: 0 (0%)

* One patient neglected to give responses for these sections of the questionnaire, hence n = 34

Table 2: Patients' responses regarding likes and dislikes of the physiotherapy service in ICU.

| Likes | |
|-------|------------------|
| • Genuine care, explanation of questions, very understanding |
| • Courteous, friendly and caring |
| • Didn’t push me too hard |
| • Ability to make me laugh when feeling down |
| • Individual care, friendly professional approach, progressive physio as needed |
| • Kindness and helpfulness |
| • Let me go at own pace, got me up on my feet |
| • Communication, explanations, availability |
| • Sitting out, respectful and caring |
| • One to one attention, good explanations, caring |
| • On time, great service |
| • Tailored to meet needs, thorough, felt positive and looked forward to each treatment |
| • Friendliness and continuity of care |
| • Calls a spade a spade, directness, humour, ability and professionalism |
| • Caring attitude, hospitable staff, specialised care |
| • Attitude, punctuality, thorough |
| • Constancy of visits and encouragement, made me feel confident about ability |
| • Quality, sameness, sureness |
| • Made me feel like I was making progress |

| Dislikes | |
|---------|------------------|
| • Lack of service on weekends |
| • Sitting out for too long |
| • Resented being pushed at first but realised it was for my own good |
| • Hard work but I realised I had to do it |
DISCUSSION

A small proportion of patients admitted to a tertiary ICU were able to complete a survey evaluating patient satisfaction with the physiotherapy service provided in the RAH ICU. For the sample of ICU patients included in this quality activity project, a high degree of satisfaction with the physiotherapists’ personal characteristics and the physiotherapy service provided in ICU was reported.

Examining the methodology and results of the current study, it is acknowledged that the sample size was small, both in terms of the absolute number of patients included and the proportion of all patients who were admitted to the RAH ICU over the study period. This is a limitation of the current study that could have been partly overcome by broadening the inclusion criteria to those patients who were oriented for less than two weeks. However, it was considered important that patients be oriented for at least two weeks to provide them with sufficient time to be aware of their physiotherapist as distinct from other ICU staff. Also, a two week period was deemed an appropriate length of time that would enable the patients to pass judgement on the standard of the physiotherapy service. Consideration was also given, prior to commencement of the study, to seeking opinions from patients’ visiting relatives or carers about the physiotherapy service. While this may also have increased the sample size, it was decided that this would have biased the responses, as in many instances relatives or carers may not have been present during physiotherapy interventions and thus may not have been able to give an accurate response. Another consideration regarding study design was whether to ask patients to comment on the content of their physiotherapy treatment. However, it was decided that patients would not have sufficient background knowledge of physiotherapy, in particular its role in ICU, to give an informed opinion. The design of the study, whereby confidentiality was assured and the questionnaire was returned to an uninvolved third party, aimed to minimise the potential for patients to merely report what they thought was the desired response. Nevertheless, the occurrence of biased responses cannot be ruled out. To minimise the chance of automated responses, the questionnaire was specifically designed so that the position of positive and negative responses varied from question to question (see Table 1). As the study was a quality activity project rather than a formal research project, testing of the questionnaire for reliability and validity was not performed.

Dyer (1995) discussed the mental characteristics of ICU patients, in particular drawing attention to the ICU syndrome. He described the ICU syndrome as being characterised by “… a wide variety of symptoms, including restlessness, fear, anxiety, fatigue, confusion, illusions, delusions, delirium, hallucinations and disorientation.” (page 130). Dyer (1995) then went on to make an analogy between the stress associated with care in an ICU, which can result in the ICU syndrome, and psychological torture. The important issues he highlighted in reducing the stress associated with a stay in ICU and thus the incidence of ICU syndrome, included provision of adequate information to the patient and a thorough explanation of their condition and any interventions required in its management. Equally important were involving the patient in decision making, demonstrating care and empathy with the patient, and avoiding depersonalisation by maintaining privacy and dignity. Thus, the questions used in the current study were based on a combination of these issues and others raised in previous studies that had discussed patient satisfaction (Goldstein et al, 2000; May, 2001a, b; Monnin and Perneger, 2002; Potter et al, 2003). The responses received in the present study supported the importance of these issues, in that patients rated the provision of adequate explanation as being very important, and the issues of empathy and care were frequently raised by respondents when asked to report things they liked about the physiotherapy service. In retrospect, the addition of a question(s) regarding the degree of each patient’s involvement in decision making would have strengthened the study’s design and is recommended for future studies.

From the personal perspective of the authors, as physiotherapists who were involved in providing the service to ICU during the study period, it was quite threatening to directly expose oneself to the possibility of criticism. The positive responses that were received were both unexpected and profoundly gratifying. In an ICU environment, physiotherapy is just one aspect of the complex and multifaceted care of critically ill patients, and thus it is difficult to assess the extent to which physiotherapy is of benefit. Patient satisfaction surveys have the potential to provide physiotherapy staff with valuable feedback to support aspects of the physiotherapist’s role in ICU. A potential explanation for the high degree of satisfaction is that, at least in the experience of the authors, physiotherapists working in a large tertiary ICU may often be one of the more consistent carers for patients, due to the relatively small number of physiotherapists compared to medical and nursing.

Table 3: Patients’ comments regarding their stay in ICU.

| Comments |
|---------------------------------|
| I cannot thank the physios enough for the care given to me. My time in ICU had moments that I do not wish to remember. [My physio] was the one person who got me through the day. I waited for [my physio] like you would never understand. |
| Wonderful, could not do enough for me |
| Physio service was friendly, flexible, accommodating |
| Very appreciative of all work done for me, can’t thank everyone enough, nicest friendliest hospital |
| Wished to thank all staff for support |
| Marvellous |
| Very caring and patient and always a smile to keep you going |
| Physio and staff worked well as a team – positive effect on treatment, great, caring and positive |

46 SA JOURNAL OF PHYSIOTHERAPY 2008 VOL 64 NO 1
staff. For example, in the RAH ICU, which consists of 24 beds, there are over 250 nursing staff and 25 medical staff. These staff frequently rotate not only through shifts to provide a 24 hour service to ICU, but also through other areas of the hospital. In contrast, the main weekday physiotherapy service is delivered by only two physiotherapists, who remain in the area for a minimum of eight months, and are therefore able to provide a greater continuity of service. As a result, a strong rapport may develop between the patient and physiotherapist, particularly for long term patients.

While it is undoubtedly important to recognise and measure the effect of physiotherapy on ‘objective’ parameters such as oxygenation, joint range, muscle strength and functional status, the impact of physiotherapy on the more ‘subjective’ outcomes, such as patient satisfaction, should not be neglected. These ‘subjective’ outcomes are equally important for the acutely ill in-patient and for the stable out-patient. Acutely ill patients find hospitalisation alienating and frightening and seek acknowledge-

ment and empathy from the health professionals that interact with them (Gurry, 2001; Gurry, 2002). This empathy and care can be communicated just as effectively non-verbally as verbally, through the use of eye contact and human touch (Gurry, 2002). Health professionals should acknowledge and incorporate these skills into all aspects of patient care to ensure that the art of healing is not overshadowed by the science of medical therapy.

**CONCLUSIONS**

This quality activity found that a proportion of ICU patients are able to provide information in the important and often neglected area of patient satisfaction with physiotherapy. A high level of satisfaction with the physiotherapy service in ICU was seen in this patient sample.

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