Abstract

Aim: To explore and investigate differences between the views of qualified nurses working in psychiatric intensive care units (PICUs) and acute care wards on which patients are appropriate for PICU care.

Background: Previous research on the area of psychiatric intensive care highlights the great differences that exist in all aspects of service provision, from unit size and staffing levels to treatment approaches and physical environment. One of the most common areas of controversy is the type of client behaviour that warrants admission to the PICU.
Method: Structured interviews of 100 qualified nursing staff (in the London area, England) working on either acute or PICU wards were used to gather data on appropriate and inappropriate referral to PICUs. Comments made during the course of the interviews were also collected and subjected to content analysis.

Findings: There was evidence to support the hypothesis that acute ward staff considered patients suitable for PICU care at a lower level of risk than PICU staff thought appropriate. In comparison to acute ward nurses, those working in PICUs attended to a broader range of factors when considering suitability for admission to PICU. Appropriate reasons for transfer fell into five groups: risk to others; risk of intentional harm to self; risk of unintentional harm to self; therapeutic benefit from the PICU environment; and legitimate acute ward care problem. Inappropriate reasons for transfer fell into four groups: low risk to others and/or self; illegitimate acute admission care problems; patient belongs elsewhere; policy issues.

Conclusion: The study opens up a range of issues not previously studied in relation to the use of PICUs and the intricate relationship of this use with the available acute care wards and other services. These findings and their implications for the care of acute and disturbed psychiatric patients are discussed.

Keywords
Psychiatry;
Intensive care;
Violence;
Absconding;
Self-harm;
Mental health policy;
Admission criteria

1. Introduction
The term ‘psychiatric intensive care unit’ (PICU) was first used in the United Kingdom in the early 1970s with the first designated PICU opening in Portsmouth in 1972 (Mounsey, 1979). Although the term became more widespread from the beginning of the 1970s, it is clear that many writers saw the benefits of a progressively managed ‘closed ward’ as early as the 1960s. One of the earliest references to this is Ryan (1962) who described the ‘therapeutic value’ of a closed ward. The general progression towards open (unlocked) acute wards at that time gave further stimulus to the creation of locked special care areas. It was recognised increasingly that a minority of acutely disturbed and behaviourally disordered clients’ treatment was compromised by the absence of a locked and secure environment (Basson and Woodside, 1981). A solution was sought in the form of psychiatric intensive care units as specialist environments for treating the most difficult and disturbed clients.

There are major differences in organisation, philosophy and treatment approaches of PICUs in the UK. This is reflected in a UK survey of PICUs by Beer et al. (1997) who found that the term itself is not used exclusively, with alternative names in use such as extra care wards, high dependency, special care, locked wards and low secure units. One area where major differences appear to exist is in admission criteria. Writers such as Hyde and Harrower-Wilson (1994, p. 287) describe how ‘admission policy may be the most important factor determining usage of the PICU’ and set out the options of direct admission from the community as opposed to transfer from other less intensive wards. In the clinical area, this decision and other dilemmas create a level of controversy reflected in PICU surveys by Smith (1997) and the UK survey by Beer et al. (1997). The latter discovered that nurses working on PICUs were commonly frustrated by the lack of control they had over admissions or the inconsistent adherence to an existing admission policy. Differences were also found in all aspects of admission criteria including the areas of informal client/detained client admission (the majority accepting informal clients if felt appropriate), forensic referral, direct admission from the community and assessment by PICU nursing staff before admission.

Four generalised nursing problems commonly appear as criteria for PICU care: externally directed aggression, internally directed aggression, absconding and unpredictability. Unfortunately these criteria are open to individual interpretation, which can lead to disputes amongst staff over appropriateness. Brown and Wellman (1998, p. 45), for example, raise the question ‘When are patients “very disturbed” and appropriately managed in the PICU?’ highlighting this point.

Typically, requests for transfer from acute to PICU wards originate from acute ward nursing staff, often (but not necessarily) following an incident of some sort involving the candidate patient. Medical staff are generally likely to be involved in the decision to refer a patient for PICU care, and in some places nursing staff from the PICU visit the patient and staff of the acute ward in order to make an assessment prior to acceptance. Local arrangements vary, and in emergency situations transfer can occur very quickly. Although writers generally acknowledge the need for some type of assessment procedure, few have investigated to what extent nursing staff agree with set criteria or
to what extent consensus exists as to an ‘appropriate referral’ to psychiatric intensive care. The authors experience is that disagreement regularly occurs between wards and individuals over what constitutes an appropriate referral, but this discrepancy does not appear to have been investigated in the past. These difficulties may in turn affect working relationships between wards and units and they therefore need to be highlighted in order for inpatient services to be run effectively and co-operatively.

2. The study

2.1. Aim

To explore and investigate differences between the views of qualified nurses working in PICUs and acute care wards on which patients are appropriate for PICU care. It was hypothesised that the two groups of nurses would:

- Have different thresholds of risk in determining when patients became suitable for PICU care, with acute nurses viewing patients as appropriate for PICU care at a lower level of risk than PICU nurses.

- Identify different factors as being relevant in judging whether a patient was appropriate for PICU care.

2.2. Methods

2.2.1. Data collection

Structured interviews were carried out with PICU and acute nurses about examples of appropriate transfers to PICU care, and of PICU nurses on inappropriate referrals or transfers to PICU care.

2.2.2. Sample
Seven PICUs were identified (all explicitly operating under that title in a similar way, that is catering for patients too difficult to manage in standard acute care wards) in the London area and their associated acute care units. Locations for the study were chosen on the basis of ease of access of the researchers. Once access had been gained following negotiation with managers, a week was spent in each location. During the week all available qualified nurses (i.e. on duty and able to take a few minutes away from other tasks) were interviewed. This sample comprised up to 10 qualified staff from each PICU, constituting the majority of the qualified nurses working there. Acute ward staff were recruited in a similar manner, and as staff on duty during the study week were not likely to have biased views on PICU care, the sample approximates a random one. A total of 50 PICU staff and 50 staff from acute admission wards were interviewed during 2000–2001.

2.2.3. Instruments

Lists of potential reasons for appropriate or inappropriate transfer to PICU care were generated by the researchers, from discussion with PICU staff, from the literature, and from discussion with representatives of the National Association of Psychiatric Intensive Care Units (NAPICU). From this, two checklists were devised consisting of lists of reasons for or against transfer. These were then piloted locally, resulting in further minor changes and additions.

Using these checklists, the interviewer asked all participants to identify former or existing clients who, in their opinion, were appropriately referred (whether or not that referral resulted in a transfer) to PICU care. As each case example was given, the interviewer asked for reasons why the patient was considered to be suitable for PICU care. These were matched to the predefined categories on the checklist and recorded. PICU nurses were also asked to provide two examples of inappropriate referrals or transfers, which were recorded on the second checklist in a similar fashion. The length of each interview was 10–20 min and the interview style was one of clarifying but not prompting responses. Respondents were not therefore asked ‘was this patient appropriate because of reason X’, but instead generated their own account and rationale, which was then recorded via the checklist. Once an item had been mentioned (for example, damage to property), the respondent was then asked for more detail about the location, nature, severity and frequency of that behaviour, which was then recorded on the checklist. Reports of self-harm were additionally assessed using the lethality scale (Bongar, 1991), which measures degree of suicidal intent. Also, details were taken on when and where the behaviour arousing concern about self-harm had occurred. When risk of absconding was given as a justification for transfer, respondents were asked to give details of previous absconding and of what type of negative outcome was feared if the patient absconded (for example, unable to feed or clothe self, risk of harm to others, etc.). Additional comments and extra details given by respondents during the interview were recorded (via note taking) for later qualitative analysis. Basic policy information was also sought from each PICU on areas such as bed numbers and admission practices for individual unit description and analysis.
2.2.4. Data analysis

Reasons for inappropriate and appropriate transfer were summarised using descriptive statistics. Differences between PICU and acute ward staff in reasons for appropriate referral were examined using Chi Square (for contingency table analysis of categorical data falling into more than two groups), Fisher's Exact (for contingency table data falling into two by two categories) or Mann–Whitney U tests (for ordinal data provided by the lethality scale) as required. Comments made during the interviews were subjected to simple content analysis, with frequency of theme occurrence being used as an index of importance and relevance. Additional details of the behaviours prompting referral or transfer were used to add depth to the understanding of the quantitative data.

3. Findings

Nurses gave 196 examples in total of appropriate transfers to PICU care, half of these examples were provided by nurses working in acute psychiatric wards, and the remainder by PICU nurses. For just over half of the examples there were six or more reasons given for transfer. PICU staff provided 97 examples of inappropriate transfers and referrals, 22.7% being inappropriate transfers, and the remainder inappropriate referrals that in the respondents view were correctly refused acceptance by PICU staff. As with the examples of appropriate transfers, usually more than one reason was given. The results are detailed in Table 1 and Table 2. Table 1 shows the frequency with which the various reasons for appropriate transfer were cited by respondents in connection with the 196 examples they provided, with data broken down by whether the reasons were provided by acute or by PICU nurses, and statistically significant difference flagged. Table 2 shows only the reasons for inappropriate transfers or referrals provided by PICU nurses, as acute ward nurses were not asked for examples of inappropriate referrals or transfers.

Table 1.

Rationales for cases considered appropriate for PICU care: frequency of reason by acute and PICU nurses
Violence as a reason for transfer was of variable severity, with examples being given by the interviewees ranging from an attack with a shoe wielded as a club, causing no injury, to repeated battering with a glass ashtray requiring treatment of the victim in hospital. Other examples of violent incidents prompting appropriate transfer were: slaps, scratches, punches, fire-setting, and attacks with cutlery, chairs and mops. Serious threats or indications of imminent violence were also considered appropriate as reasons for transfer. Examples given included threats to kill and decapitate nurses, threats with knives and petrol bombs. All violence, actual or threatened, was generally accompanied by verbal abuse.
A similar range of examples were given for the smaller number of cases for whom self-harm was quoted as an appropriate reason for transfer. These included patients who had rammed a spoon into their neck and ran into the wall, requiring medical treatment in general hospital before admission to PICU; set fire to their flat; continuously banged their head against the wall; and attempted to starve themself. Illicit drug use, seen as a form of self-harm, was also prominent, with nurses pointing particularly to sudden deterioration in previously improving psychotic patients.

Therapeutic and clinical reasons for transfer to the PICU were given, and included particularly the high staff numbers available for preventative measures, better facilities, more structure and activities. Some problems of acute ward care were also seen as appropriate reasons for transfer: ethical constraints in locking acute ward doors for long periods, ward design issues, and low staffing numbers.

The range of reasons for transfer supports the hypothesis that relevancy differs between the two groups of nurses, in that PICU nurses attend to a broader range of factors when considering suitability for transfer, in comparison to acute staff. This is further supported by the qualitative comments collected from staff in the course of the interviews, which demonstrated that:

• Local PICU policy could be problematic, blocking the transfer of informal patients for example (see Table 3), or mandating the acceptance of transfers from prison (or from other Trusts having a contract with the PICU service) that were not suitable on clinical grounds.

• Patients can be transferred to the PICU who belong in other specialist services. Examples given included a patient with chronic problems who required long-term placement, a deaf patient, a patient referred by the prison service with drug addiction, and a patient requiring medium secure care. Alternatively PICU nurses considered that some patients transferred to them, were not mentally ill and should have been prosecuted for their criminal actions.

• Acute care problems that were not, in the view of PICU staff, legitimate reasons for transfer, for example seeking immediate transfer rather than using de-escalation techniques, special observation, or higher doses of medication.
There were differences between Acute ward and PICU nursing staff in the examples of appropriate cases for PICU care. Verbal abuse ($\chi^2=3.32$, df=1, $p=0.05$, Fishers exact test, one-sided) and non-verbal intimidation ($\chi^2=4.89$, df=1, $p=0.022$, Fishers exact test, one-sided) were cited significantly more as a reason for transfer by acute ward staff. These findings, in conjunction with the fact that triviality of risk was cited as an inappropriate reason for transfer, support the hypothesis of a difference in risk threshold for transfer between PICU and acute ward staff. In the view of PICU nurses, violence too trivial to necessitate transfer included assaults that had occurred long ago, verbal abuse/threats unaccompanied by actions (both typically given as examples of this rationale), or transiently raised risk due to intoxication.

Severity of violence, threats, verbal abuse, property damage and self-harm were assessed by their frequency and outcome. Self-harm prompting transfer was additionally assessed using the lethality scale (Bongar, 1991). No difference was found between the examples given by acute and PICU staff on this measure ($\text{Mann–Whitney } U=47$, $p=0.238$, one-sided).

PICU staff did, however, give more weight in their examples to the off-ward suicidal behaviour of patients. It was possible to break down the figures provided in Table 1 on self-harm (n=24) into those cases in which the patient behaviour giving rise to concern had occurred before (n=10) or during (n=14) the current admission. Self-harm occurring before admission was mentioned more frequently by PICU staff as reason for an appropriate transfer ($\chi^2=5.53$, df=1, $p=0.019$, two-sided). They also quoted many more examples of appropriate transfers where absconding was a risk (n=78), but who had not absconded on this admission (n=10 in PICU nurses’ examples vs. n=1 in Acute nurses’ examples, $\chi^2=7.55$, df=1, $p=0.006$, two-sided), indicating more focus on patients’ past history in comparison to acute ward nurses. These findings support the hypothesis of a difference in relevant factors attended to by PICU staff in comparison to acute ward staff.

There was a trend (not reaching significance) for PICU staff to see medication refusal as an appropriate reason for transfer ($\chi^2=2.72$, df=1, $p=0.073$, Fishers exact test, one-sided), whereas acute ward staff were more likely to quote ‘medication increased without effect’ ($\chi^2=4.57$, df=1, $p=0.031$, Fishers exact test, one-sided). Medication issues are intricately involved in the transfer debate. A number of PICU staff referred to the reluctance of acute ward staff (medical and nursing) to use high doses of sedative and neuroleptic medication. Acute ward staff described how this was the first item reviewed on many PICU assessments and PICU staff often gave advice regarding an increase or change in medication. Similarly, PICU staff would sometimes refuse transfer if the client appeared to be compliant.
There was an intricate network of significant differences in the responses given by nurses at the different hospitals studied (for example hospital 3 staff more frequently mentioned absconding as an appropriate reason for PICU admission), and in the local policies surrounding PICU care (see Table 3). These did not fall into any particular pattern, and therefore underscore the diversity and variability of practice around PICU use in different localities. The findings do suggest that different criteria and processes for the selection of patients for PICU care operate in different places.

Comments made in the course of the interviews did, on occasion, evidence a high level of mistrust and incompatible perspectives between PICU and acute care nurses. Some PICU staff commented that acute staff fabricated or exaggerated levels of patient violence in order to get patients transferred. Some acute staff indicated that they saw PICU care as a form of punishment, in that it was unpleasant due to being locked and provided patients with a motive to improve their behaviour in order to be released.

4. Discussion

The list of reasons for appropriate admission to the PICU can be summarised under five headings: risk to others; risk of intentional harm to self; risk of unintentional harm to self; therapeutic benefit from the PICU environment; and legitimate acute ward care problem. These risk categories as criteria for transfer have been well described in the previous literature (Rachlin, 1973; Jeffery and Goldney, 1982; Allan et al., 1988; Hyde and Harrower-Wilson, 1994; Lehane and Rees, 1995; Dix, 1995), as has therapeutic benefit from the intensive nursing or low stimulus environment of the PICU. Legitimate acute care problems have not been described before as reasons for admission, and included understaffing, reluctance to lock the ward door for long periods, and poor ward design that prohibits effective patient supervision and care.

A large proportion (40.3%) of the appropriate examples for transfer were considered by staff to present a risk of absconding (the particular underlying risk varies). It would appear that if acute wards were locked, the necessity of PICU care for some patients would disappear. Locking doors of acute wards would change the nature of what is considered appropriate for the PICU. Some London psychiatric units already operate a policy of continuously locked acute wards, including one of the sample units in this study. Interestingly, in that unit, patients were still transferred to the PICU because of absconding risk, as the ward doors were seen as flimsy and unmonitored fire exits were present. Clark et al. (1999) showed that elsewhere, nurses were highly opposed to door locking as a strategy to reduce absconding.
Reasons for patients being considered inappropriate can perhaps be summarised under several headings: low risk to others and/or self; inappropriate acute admission care problems not requiring transfer; patient belongs elsewhere; policy issues. A range of problems faced by PICU nurses is illustrated by this data. Local operational policy prohibits the admission of some patients (for example, informal, female, etc.), but this varies from place to place (see Table 3) without any systematic empirical rationale. PICU nurses sometimes perceive patients as not mentally ill, and therefore more suitable for discharge or prosecution, and this may be linked to the acceptance of referrals from prison. However, they also find themselves caring for patients who they believe belong in other more specialist units such as forensic psychiatric care. Thus there appears to be an area of tension for PICU staff around the appropriate diagnosis and placement of disturbed mentally disordered offenders.

At times PICU staff feel that acute admission ward colleagues have not done all they could before seeking transfer, either in terms of seeking to manage, contain, or otherwise ameliorate the difficult behaviour of patients. One of the most contentious areas appears to be that of medication, with PICU staff frequently expressing the view that medication is underused by acute staff, or that compliance with medication means the patient did not require transfer and medication refusal was an indicator for transfer. If higher doses of medication are utilised on acute wards, this may decrease the demand for PICU beds. Some of the variation in neuroleptic daily doses between the acute wards of different hospitals may be explained by the differential availability of PICU care (Bowers et al., 2000).

This study provides some support for the hypothesis that risk thresholds for transfer are perceived differently by acute ward and PICU staff. In addition, it would appear that acute ward staff look more to the current state of the patient when assessing risk, rather than the full past history of the patient, as events prior to admission were more frequently quoted as appropriate reasons for transfer by PICU staff. This confirms work by Holzworth and Wills (1999) who studied decision-making by psychiatric nurses, and suggests that further training of acute ward nurses in risk assessment is required. This is underlined by the finding that acute ward nurses were more likely to seek transfer to the PICU citing verbally abusive behaviour as a reason. In contrast, Werner et al. (1983) found that the connection between verbal abuse and actual violence was not strong, with 68% of verbally abusive patients not proceeding to physical violence.

Differences between hospitals seem to have arisen in response to local ideas and perceived problems. In order to guide practice we need further research on what problems are most efficiently and effectively managed on the PICU. At present, variations in practice do not appear to have any systematic empirical basis. Such variations and the absence of evidence upon which to base them seem likely to feed disputes between different staff groups about which cases are suitable for PICU care.
4.1. Limitations of the study

The study is limited in its reliance on a convenience sample of seven PICUs and their associated acute care wards in London. However, the issues raised may be relevant to all PICUs in the UK, because existing evidence from other countries highlights the importance of the PICUs relationship with other units (Michalon and Richman, 1990).

The study was focused solely on qualified nurses, excluding other members of the multi-disciplinary team such as medical, occupational therapy and psychology staff. It would be interesting to investigate the responses of these professionals to see how they compare with this study's findings.

More issues than initially expected had a bearing on whether PICU transfer was considered appropriate or not. As a result, ‘other’ categories in the structured interviews were frequently used, but impossible to incorporate in the analysis because of their diversity. Longer and more descriptive in-depth interviews may also be useful in future studies.

4.2. The way forward

A number of issues were raised by this preliminary study, indicating that further research is required. However it is also clear that different PICUs are not readily comparable, as they operate under widely varying policies and local service contexts that dictate their modus operandi. Therefore future research should have as a priority the evaluation of PICU care for specific patient groups with specific problems. Data on the efficacy of PICU care can then be used to formulate polices and local arrangements.

In the interim, psychiatric services would probably find it helpful to develop a local concordat about criteria for transfer, and the process by which transfers are arranged. If possible, this agreement should include whether acute areas should be expected to give higher doses of medication, and to what extent. Ownership of this agreement should be ensured by both acute and PICU staff, and by all disciplines. Teamwork between the two care sectors is likely to be enhanced by PICU pre-admission nursing assessments, and by a PICU team that is prepared to give continued support to acute wards dealing with difficult patients. A readiness to reconsider decisions not to accept transfers is also likely to improve relationships. Furthermore, risk assessment policy and training shared between acute and PICU may be of assistance in reducing the ‘risk threshold difference’ described by this study.
4.3. Conclusion

The study has confirmed that relevancy in assessing the appropriateness for PICU care is different between the two groups of nurses, with different and additional reasons being mentioned by PICU staff. Perhaps this should be expected, as PICU care is the whole time occupation of PICU nurses, as opposed to being a smaller part of acute ward nurses’ concerns. It does, however, indicate that relationships between both groups of staff may be improved if they had a better understanding of each other’s viewpoint.

PICUs stand at the junction of an intricate web of problems in acute psychiatric care. Although many of these are clinical issues, such as the management of treatment of seriously disturbed and high-risk patients, others are not. Non-clinical issues involve how the PICU relates to other service sectors, such as prison care, medium secure units, pressures on beds, and local policies that vary widely.

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